OECD Reviews of Regulatory Reform

BRAZIL

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Brazil

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Foreword

The OECD Review of Regulatory Reform in Brazil *is one of a series of country reports carried out under the OECD's Regulatory Reform Programme, in response to the 1997 mandate by OECD Ministers.*

Since then, the OECD has assessed regulatory policies in 23 member countries, and in Russia, the first non-member country to be reviewed. The review of Brazil is a first for a country involved in the OECD Enhanced Engagement Strategy. The reviews aim at assisting governments to improve regulatory quality – that is, to reform regulations to foster economic growth and attain important social objectives. This review draws on the 2005 Guiding Principles for Regulatory Quality and Performance, *which brings the recommendations in the 1997* OECD Report on Regulatory Reform *up to date, and builds on the 1995* Recommendation of the Council of the OECD on Improving the Quality of Government Regulation.

The country reviews follow a multi-disciplinary approach and focus on the government's capacity to manage regulatory reform, including regulatory frameworks in specific sectors.

Taken as a whole, the reviews demonstrate that the implementation of a well-structured programme of regulatory reform can make a significant contribution to better economic performance, boost opportunities for future investment and enhance social welfare. Economic growth, job creation, innovation, investment and new industries are boosted by effective regulatory reform, which also helps to lower prices and increase choices for consumers. Comprehensive regulatory reforms produce faster results than piece-meal approaches and help countries to adjust more rapidely and easily to changing circumstances and external shocks. At the same time, a balanced reform programme must take into account social concerns. Adjustments in some sectors have been painful, but experience shows that costs can decrease if reform is accompanied by support measures, including active labour market policies.

While reducing and reforming regulations are key elements of a broad programme of regulatory reform, experience also shows that in more competitive and efficient markets, new regulations and institutions may be necessary to ensure compatibility of public and private objectives, especially in the areas of broad services to the public. The challenges faced by sectoral regulatory authorities are discussed at length in this report. Sustained and consistent political leadership is another essential element of successful reform, and a transparent and informed public dialogue on the benefits and costs of reform is necessary to build and maintain broad public support.

The policy options presented in the reviews may pose challenges for each country. However, the in-depth nature of the reviews and the efforts made to consult with a wide range of stakeholders reflect the emphasis placed by the OECD on ensuring that the policy options presented are relevant and attainable within the specific context and policy priorities of the country.

This review includes three parts. Part I presents the overall regulatory framework, assessing government capacity to assure high-quality regulation. Part II introduces current trends and regulatory frameworks in selected sectors, including power, private health insurance, land transport

and telecommunications. Part III discusses regulatory governance issues in these sectors, including independence and accountability, horizontal institutional architecture, powers for high-quality regulation and performance assessment. The report concludes with an overall assessment and policy options for consideration which seek to identify areas for further work and policy development in Brazil.

Acknowledgements. *The country reviews on regulatory reform are co-ordinated by the Directorate for Public Governance and Territorial Development. This report was produced by the Regulatory Policy Division, under the responsibility of Josef Konvitz.*

The Review of Brazil reflects contributions from all participants in Brazil, including the Civil House of the Presidency of the Republic, the various Ministries and Regulatory Agencies involved, the OECD Working Party on Regulatory Management and Reform of the Public Governance Committee and the OECD Group on Regulatory Policy.

Stéphane Jacobzone, Principal Administrator, supervised the report and drafted the general sections. Delia Rodrigo, Administrator, prepared Part I on Government Capacity to Assure Hiqh-Quality Regulation. Caroline Varley, Consultant at the time, prepared the sections related to power. Angela Garcia Calvo contributed substantially to the section on telecommunications. Vivian Figer contributed substantially to the sections on private health insurance and transport, and also provided substantial support in relation to the overall Brazilian institutional system. The documentation was prepared by Jennifer Stein.

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Executive Summary

Brazil has now entered a more advanced phase of economic development, with the need to strengthen the institutional foundations for a market-based economy. After a long period of state intervention, the country experienced a move towards liberalisation and privatisation in the early 1990s. The Real Plan (Plano real) created a more favorable environment for regulatory reform with greater economic openness, institutional reforms and stable inflation. The competition framework was modernised with the 1994 Law. In this context, a number of regulatory authorities were established.

Access to core services such as transportation, telecommunications, energy, and water significantly improves the human development index, and also lays the ground for future economic growth. These are critical inputs in the provision of goods and services and they significantly affect the productivity, cost and competitiveness of the economy. In Brazil, the hope was that further private sector participation in infrastructure would help to increase investment, improve performance and coverage, and facilitate access to services in a market context. Two key roles for the economic regulator in the Brazilian context are to minimise regulatory uncertainty, which can reduce investor confidence, and to stand out as an impartial and autonomous manager of the market players. Significant portions of the busiest highways were offered as concessions, improving conditions on those roads. The private sector took control of large portions of the telecommunications infrastructure which was modernised.

Regulatory authorities and the challenges of economic and social regulation

The new regulatory agencies (ANEEL, for the electric energy sector, and ANATEL, for the telecommunications sector) were created after 1996, inspired by international experience. Since 1996, ten federal regulatory agencies have been created: ANEEL (1996), ANATEL (1997), ANP for Petroleum (1997), ANVISA for Food and Drug Admission to the Market (1999), ANS for private health insurance (2000), ANA for water (2000), ANTAQ for ports (2001), ANTT for land transport (2001), ANCINE for the movie industry (2001) and ANAC for civil aviation (2005). In addition, the Administrative Council for Economic Defense (CADE) created in 1962, was transformed into an independent governmental body, with clear powers for competition policy enforcement with the new Law 8 884/94.

This review takes a closer look at regulatory governance in four sectors: Power with ANEEL, transport with ANTT, private health insurance with ANS, and telecommunications with ANATEL. These bodies are part of the framework for indirect administration, but are subject to specific legal regimes aimed at ensuring a greater level of independence. The power sector, where the State still has a major shareholder responsibility, differs from

other markets that are largely run by private operators. The private health insurance market is also different as it does not involve essential facilities or a network infrastructure.

Agencies have often contributed to improved economic and social outcomes. The private health insurance sector has been regulated, offering improved conditions for consumers, compared with the previous lack of regulation. Similarly, railroad transport and bus transport have improved. In the energy sector, corrections made to the regulatory framework and effective management of the new framework have helped to address the 2001 crisis. In terms of telecommunications, Brazil's achievements are largely consistent with its relative development, and it can boast significant penetration of mobile services.

However, the challenges of raising the rate of investment remain. In the energy sector, stronger economic growth may imply further pressures in terms of energy supply in the future. In this context, clear and stable priorities for diversifying power technologies will serve to offer a predictable signal for investors, particularly in relation to natural gas. An increased contribution of natural gas to energy supply depends on further major efforts to improve security and diversity of gas supply, but also in ensuring that corresponding efforts are made to the regulatory framework. The rationing of natural gas for some users has reappeared in the Southeast of Brazil, due to the sustained growth experienced in recent years. This illustrates the challenges of building infrastructure for diversified power supplies. Another issue which has emerged in this report is environmental licensing, as it can delay, sometimes for many years, authorisation for a new power facility. Providing true universal service is also a challenge in some sectors, such as telecommunications, where access to services remains an issue for significant groups of the population.

In terms of transport, Brazil is one of the world's top exporters of a number of agricultural and primary products that must be carried to the coast, but its domestic transport infrastructure is currently overloaded and unbalanced, which increases the costs of logistics. Many of these issues go beyond the pure mandate of the agency or its regulatory framework. A broader perspective is required, integrating the whole transport sector. Much of the hesitation around the new highway concessions reflected how difficult progress has been in this field and the agency faced the difficult task of resolving conflicting interests. The recent auction for highway concessions will apparently benefit Brazilian consumers through reduced tariffs. It is important that the result should not be undermined by further renegotiations.

Modernising the institutional framework for a market-based economy

In broader terms, after ten years of institutional experience, the macroeconomic situation has improved and the progress made by the sectoral regulatory agencies has also paid off. Regulatory risk has tended to decrease. There is also more widespread agreement on the need for further private capital, as was illustrated for the first time in a decade by the highways concession in 2007. However, ministries have lost some of their staffing resources, with implications for the institutional framework. The lack of consensus on the institutional design has also had significant implications on the perception of regulatory risk.

The issue of choosing the best institutional options for regulatory governance in a market-based economy remains open. The new Law 3 337 has stimulated the policy debate related to agencies in the last three years. Brazil still has to improve its capacities for regulatory quality and increase transparency and accountability for public governance. Choosing the right balance between independence and accountability while delegating regulatory competences reflects strategic public policy choices. While the main focus was initially on privatisation, as well as on balancing the public budgets, institutional design issues are now receiving broader attention, together with the need to establish a government-wide regulatory policy.

This shifts the focus towards the broader context of quality regulation in a modern market-based economy. The debates over a new bill on agencies discussed in Congress reflect the variety of views in the country. If Brazil is to further close the gap with OECD countries, there is a need to ensure that the agencies will be "put to work", fulfilling the mission for which they were originally created, with stable resources and staff, clear objectives paying attention to both investors' and consumers' needs and to less political interference.

Broader regulatory policy challenges

While much of the focus of the policy debate is still on agencies, a broader policy perspective is emerging reflecting trends in OECD countries. Improving the legal system of a country as a whole and its different instruments are key to ensure sustained economic growth and to provide a clear framework for citizens and private sector stakeholders. While relatively structured frameworks exist for preparing core laws, with informal consultations and some quality control procedures, Brazil however lacks a systematic use of different regulatory quality tools. Consultation could be more fully utilised. Beyond ensuring access through electronic means, effective participation of citizens in consultation procedures remains a challenge. Social participation is low as civil society can be difficult to represent. There is also a need to build up a voice for consumers. Other issues include compliance, relations with the judiciary, as well as further efforts for administrative simplification. Simplifying the legal framework requires intensive work to improve the quantity and the quality of the regulation currently in force.

A systematic strategy is required, with a framework for regulatory review that will ensure transparency, social participation and economic efficiency, with explicit responsibilities at both political and administrative levels. The discussion over a standardised process for preparing new regulations including impact assessment is starting to take place. There is a need to build regulatory capacities inside the administration in the medium and long term. The Brazilian government, through the Civil House and in conjunction with the Ministry of Finance and the Ministry of Planning, Budget and Management, is setting up a Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG) to contribute to the improvement of the regulatory system and increase co-ordination among the institutions that participate in the regulatory process. In addition, PRO-REG envisages the establishment of an oversight body for regulatory quality and the introduction of Regulatory Impact Analysis (RIA) as a policy tool to support decision making. The implementation will take time.

Strengthening capacity for quality regulation

The first challenge for Agencies has been to operate as autonomous bodies within the policy environment to promote confidence and transparency for the private sector and civil society. Establishing autonomy in the broader policy debate has been fraught with many discussions and contradictions. Some of them were linked with the issue of separating broader policy design and planning, which should remain a ministerial remit, from enforcement and execution which are tasks delegated to the agencies. On the whole, agencies have been operating at arms' length from government and have been fulfilling their mission since they were created. They have a different status and some of them leave less room for autonomy than others

A middle income country such as Brazil has to build and consolidate public service institutions while facing resource constraints in terms of staffing. These have at times affected the ministries and agencies. In general, agencies have built a reputation for integrity and have generally contributed to significant improvements of the regulatory framework in their sectors. Several of the agencies examined in this report are regarded among the best in Brazil in terms of perception by potential foreign investors and consumers, as well as according to World Bank assessments. These include, ANEEL and ANTT. ANTT faces a more difficult challenge in terms of co-ordination as it is more recent. Until recently, its resources were not consistent with its broad regulatory responsibilities.

This report has identified a number of issues which deserve attention. Securing autonomy may be an issue in terms of resources and governance, to ensure that Brazilian regulators have the capacity and technical competence to carry out their functions without being challenged. Guaranteeing resources and clarifying the implications of the new Law 3 337 is a necessary first step. Recently, significant resource increases have been observed for some agencies such as ANTT or ANS. A proposed constitutional amendment, PEC 81, may help to further consolidate the position of the agencies in the future. Similarly, regulators need to operate in an institutional environment where ministries can play their role. In this regard, the recent strengthening of the capacity of Brazilian ministries through an increase in the administrative and engineering staff is welcome. It will help set the debate at a technical level, and reduce the scope for ideological disputes.

Ensuring accountability is crucial, if regulators are to perform their mission and enjoy some independence in their relations with their parent ministry. Clear gaps exist in the current framework, in terms of ensuring broader accountability in the social sense, and reassuring citizens that regulators will defend the public interest, consumers' needs and the individual citizen. In such a large country, where social access to essential goods remains somewhat diffuse and uneven, the perception exists that some regulators may not have paid sufficient attention to the needs of individuals, such as those who have private health care insurance, or those unable to understand the clauses of their mobile phone contracts. While other regulators have less to do with the public directly, ANS and ANATEL are facing challenges in consolidating their legitimacy and balancing their approach between individual consumers and service providers. While it has been demonstrated that consultation did allow ANATEL to integrate the consumer perspective, processes for ANS are lagging behind. While the agency's work does benefit consumers, the public perception in Brazil that the relationship between health insurers and the privately insured is often so

imbalanced, a situation similar to that observed in many OECD countries, may have generated the impression that more could be done.

At present, Brazil seems well positioned to address currnent challenges. A broad consensus tends to emerge among political actors, the different parts of government and businesses and academia, that the country requires changes to improve its capacities for regulatory quality. There is a growing understanding of the need to increase transparency and accountability in the system, to introduce new tools for regulatory performance and to make necessary adjustments to the judiciary. There is also, in spite of all the recent political debate, a growing domestic consensus as well as understanding of main trends across OECD countries, of the functions and roles of regulation.

Closing the gaps with a forward looking perspective

While the new bill helps to address a number of challenges in terms of closing the social gap and improving conditions for consumers, some aspects have also been a matter of concern. The debates over the last year have led to significant modifications of management contracts that had been proposed initially. Over the years, the policy perspective has also been modified. The current environment has been one of reduced regulatory risk, as illustrated by the recent auctions for highways in October 2007. Other issues still remain at stake: clarifying the economic and social consequences of the concessionary power transfers to respective ministries. This may have different implications for the different sectors depending how it is envisaged and taken forward.

The diversity of experience offered by OECD countries provides a wide range of possible solutions that could be adapted to the Brazilian context. They offer both broad general directions in terms of setting up a framework, balancing independence with accountability, but also illustrates cross country variations in terms of powers delegated to agencies and the range of options for universal service.

Brazil is now confronting its economic and social challenges with strengthened regulatory institutions and a more consistent approach to its framework. The need for a broader perspective, increasing social inclusion, involving consumers and building trust in the regulatory framework has met with an intense domestic policy debate on the regulatory frameworks and the agencies. If Brazil is to continue to take advantage of the benefits of globalisation, it also needs to further modernise some of its core infrastructure, as well as ensure adequate future supply of core services. Setting up a clear regulatory framework, and drawing the lessons from OECD countries in terms of quality regulation and performance, will help to further adapt domestic institutions. This may only represent the start of a long process, given the size of the country and its unique geographical, economic and social diversity. The progress made in recent years bodes well for the future. Consolidating the fundamentals of a market-based economy is very important if Brazil is to build on its current achievements and increase economic opportunities for all its citizens. Transparency, consultation and evidence-based decision making will all help to improve the conditions of the public debate and help the country to better serve the needs of its citizens. This will also help to develop the institutional capacity for sustained long term economic growth that will increase economic resilience and maintain appropriate incentives for investments in core infrastructures.

Introduction

The evolving debate in Brazil

The debate on regulatory agencies in Brazil emerged in the second half of the 1990s as part of the reforms then under way. Talks on regulatory reform focused mainly on governance issues, such as achieving a proper balance between independence and accountability. One issue that has been viewed as being in contradiction with core aspects of the Brazilian state is that of delegating regulatory competencies, especially at a time of significant macroeconomic fluctuations and a lack of consensus on the exact role of the state in the economy.

The vast move towards liberalisation, privatisation and the consolidation of a competition-based economy that took place through the 1990s required a new institutional setup. Significant steps were taken in terms of competition policy. Other action included the rapid establishment of a number of regulatory authorities for newly privatised and/or liberalised sectors. These regulatory frameworks were often in place prior to privatisation of the sector. This was the case for energy and telecommunications for example, but not for transport. However, the main policy focus was on privatisation, which created a number of economic opportunities, contributed to balancing public budgets, and facilitated the modernisation of key infrastructures, *e.g.* in the fields of telecommunications and railroads. The hope was that this move would suffice to attract investment, trigger further incentives for growth, and resolve some of the long-standing deficiencies of public provision. The regulatory design of the agencies received less attention.

The positive impact of investment in core infrastructure on long-term economic growth is documented in a wide number of studies.[1] Access to core services such as transportation, telecommunications, energy and water significantly improves the human development index, and also lays the ground for future economic growth. These are critical inputs that significantly affect the productivity, cost and competitiveness of the economy.

Traditionally, the provision of infrastructure services in Brazil – as well as in many other middle-income and even developed countries – was ensured by state-owned enterprises. However, the boundaries between these enterprises and the public administration remained unclear, which opened opportunities for political patronage. In the past, these companies had not always received proper incentives, as management also had to be responsive to short-term policy objectives. In addition, the severe macroeconomic crises had limited the financial resources of public authorities, which had to cut down on major investments, *e.g.* in the road transportation infrastructure.

The hope was that bringing about private sector participation in infrastructure would help increase investment, improve performance and coverage, and facilitate access to services in a market context. Large sections of the busiest highways were offered as

concessions, which resulted in rapidly improving road conditions. However, a recent assessment by the World Bank (2007)[2] suggested that private financing in Brazil was raised mainly for asset transfer during the 1990s, and was not directed to the general expansion of infrastructure stock.

In addition, less attention was given to governance issues, including the setting up of regulatory bodies and their institutional implications. Ministries suddenly lost great numbers of qualified staff, as more attractive options were opened in the private sector, and were no longer in a situation to provide strategic policy goals. Compared with ministries, agencies were relatively better staffed, although budget constraints and differences in appreciation led to conflicting views. This tended to affect the institutional framework in place, and had significant implications as to how regulatory risk was perceived.

Across OECD countries, regulatory agencies are generally set up to protect decision making and enforcement in sectors from short-term policy intervention, to shield the regulated entities from private interests. Ideally, they are meant to balance the interests of the diverse players (government, the business sector, consumers), while reassuring private investors. However, this is a challenging task in Brazil, where social participation is low. In some sectors, decision making is often seen as paying more attention to the interests of the regulated entities than to those of consumers, and that some rebalancing is necessary. This perception led to political interventions that exerted explicit or implicit pressures on some of the agencies, for example, when readjusting the price of core telecommunication services was an issue following the devaluation of the currency and its resulting inflation.

After ten years of institutional experience, this debate has entered a new phase, addressing the broader context of quality regulation in a modern market-based economy. Regulatory risk seems to have decreased. The improved macroeconomic situation[3] as well as progress made by the agencies has paid off. There is wider social participation in the assessment and improvement of the regulatory framework, as illustrated by the engagement of consumers in the debate on regulatory issues in core infrastructure sectors. There is also more widespread agreement on the need for further private capital. One illustration of this is the highway concession of over 2 000 kms in October 2007 – the first such concession in a decade. It came, however, after a period of tense negotiations over the implicit rate of returns and pricing for the concession, to ensure that the public interest would be met. The debate has now shifted towards institutional fine-tuning. The new bill on agencies discussed in Congress reflects a variety of views on how these institutions should be designed. If Brazil is to further close the gap with OECD countries, there is a need to ensure that the agencies will be "put to work" fulfilling the mission for which they were originally created, with stable resources and staff, clear objectives and attention paid to both investors' and consumers' needs and to reducing political interference.

A broader policy perspective, following the the experience of some OECD countries, is now emerging in Brazil, even though much of the focus of the policy debate is still on agencies. This will require a framework for regulatory review, ensuring transparency, social participation and economic efficiency, with explicit responsibilities at both political and administrative levels. Discussion of a standardised appraisal system for regulation making and a regulatory review process is starting to take place.

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The economic reforms of the 1990s

The Brazilian economy was greatly transformed during the 1990s, through an historical move towards privatisation and deregulation that ended a long period of uninterrupted state intervention in the economy. Economic openness, institutional reforms and the stabilisation of inflation allowed by the Real Plan (*Plano Real*) created a more favourable environment for regulatory reform. The first stages of regulatory reform involved modernising competition law – for example with the 1994 Law – and setting up a number of regulatory agencies to oversee newly deregulated sectors. However, this move arose so suddenly that there was no corresponding effort toward consensus building or communication about the new economic order. Social participation remained low. The new regulatory agencies began to operate in a relative vacuum, without strong social networks, and with an attitude of distrust and fears. They were perceived by many as an addition to the Brazilian institutional context, contrary to the historical culture of the Brazilian executive, marked by a tradition of ministerial responsibility. The situation was exacerbated by the relative loss of capacity observed in the Brazilian ministries during that period of private market transition, when it was believed that deregulation was all and no state intervention was needed for new markets to work. The dismantling of planning capacity in the sectors of energy and transport may be seen as an illustration of that trend. Regulators were often called upon to compensate the shortcomings and lack of analytical capacity in some ministries.

These trends signalled a major shift away from a century-old increase in state intervention in the economy. At the beginning of the century, in line with trends observed in North America, the state had its core functions reduced to security, justice and essential services in terms of contracts, private ownership and free enterprise. Its intervention increased in the 1930s, mirroring trends observed in Europe after the economic crisis, and also in the United States with the New Deal and the aftermath of the recession. The concept of the social function of enterprises and social rights grew stronger. The state started to play a more active role in the economic environment, which meant increased intervention. This was even more pronounced after the Second World War, with the policy of import substitution.

Large industries were created during this period, for steelmaking, engines, hydroelectricity and mining: *Companhia Siderúrgica Nacional* (CSN), *Fábrica Nacional de Motores, Companhia Hidrelétrica de São Francisco* and *Companhia Vale do Rio Doce* (CVRD).[4] The period of strong state intervention lasted from 1945 until the 1980s. President Getúlio Vargas, elected in 1950, adopted a policy of development nationalism. The state became a monopolist in infrastructure and strategic industries, responsible for long-term investments in these industries. Foreign companies were involved for the sectors intensive in technology and assets. In 1956, President Juscelino Kubitscheck formulated the Targets Plan (*Plano de Metas*), which resulted in short-lived economic growth at a very high cost; the Plan ended with the military putsch of 1964. The military government brought a more rigorous monetary policy, with lower inflation rates and a recession. A heterodox and still military government came to power in 1967, with a more expansionist policy associated with tight price controls.

From then on, state companies began to be established, particularly during the 1970s. In 1981 there were 530 public federal legal entities.[5] Price control policies continued until the mid-1990s, not unlike trends observed in some European countries. However, the shift

to competition policy and a market-based approach was adopted probably one or two decades later than some of the European countries that experienced a similar shift, such as France or Italy. In Brazil, this shift was associated with significant inefficiencies in the public sector.

Major changes were introduced at the end of the 1980s and the early 1990s with the aim of relieving the state from high investment in and high expenditure on infrastructure industries. These changes included:

- Abolition of some restrictions on foreign capital.
- Greater flexibility for the state monopolies, as the Constitutional Amendments 5, 7, 8 and 9 of 1995 gave Brazil's states the possibility to give the concession of some public services to private companies in several sectors.
- Privatisation of public companies providing services. The 1990 Law 8 031 introduced the National Privatisation Programme (*Programa Nacional de Desestatização* – PND), which aimed to increase competitiveness and restrain the role of the state in the economy.

There was new understanding of the limits of state-led expansion. The public sector, constrained by a fiscal crisis and the need to stabilise public finances, had to reduce capital transfers to state-owned enterprises. The government was facing clear limits on its ability to invest. This led to the search for private investors who could provide infrastructure with fresh investment.

This in turn required a new regulatory framework, with changes of a magnitude probably not been fully anticipated at the beginning. The initial objectives of regulatory reform and privatisation were to facilitate the environment for and attract new private investment, including from abroad, to increase efficiency and reduce the public debt. However, there was some tension between the short-term budgetary objective and the need to facilitate future investment and offer a growth-oriented setting.

In the older model, regulation and supervision had been entrusted to departments in the sectoral ministries that controlled the corresponding state-owned enterprises. Tariffs in the past were mostly regulated by the Ministry of Finance in accordance with macroeconomic objectives, particularly that of controlling inflation.[6] There was even a situation, similar to that in many European countries, where the same entity was in charge of supplying services and regulating the market (telecommunications). This framework could no longer be called market-based; there was no longer a situation where the state had to distinguish its function as a regulator protecting the consumer's interest from its role as owner of services, offering a neutral framework with a level playing field for all market stakeholders. As in developed economies, this forced Brazil to change its institutional approach towards large infrastructure sectors. It created a new set of political and technical challenges to be met as part of the country's governance model. However, these changes did not alter the public nature of the services for which the state is responsible as stated in Article 175 of the Constitution. The state transformed itself from a main player into provider of a strategic framework, holding mainly regulatory and supervisory functions, in accordance with Article 174 of the Constitution.

The evolving international and regulatory context

The changes in Brazil also reflect broader trends occurring at the international level. These trends were observed in many European countries, where the framework for large infrastructure sectors is rapidly changing. European directives set clear standards for

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regulation of the sectors covered by the study, and even for the establishment of independent decision-making and regulatory bodies. In Europe, directives also concerned private health insurance.

It is important for Brazil to ensure that changes to its regulatory environment keep pace with more general trends at the international level. One dimension was and remains the international commitments taken on as part of the GATS. In this context, telecommunications is one of the most engaged of all sectors. One hundred and five WTO members (counting the EC member states individually) have made specific commitments concerning some aspect of the sector. In basic telecommunications these concern 98 governments, 90 of which committed during or since the negotiations on basic telecommunications that took place after the end of the Uruguay Round. Their suppliers account for well in excess of 90% of the world's basic telecommunications revenues. In the area of value-added telecommunication services, 89 governments have made commitments. It should be recognised, however, that these commitments may imply very different levels of access depending on the limitations scheduled. The situation differs for other sectors; for example, only 17 commitments were made on energy distribution.

This varied situation is due to a combination of factors. First, the introduction of competition in the telecommunications sector has been relatively straightforward compared to other sectors, and has led to significant price decreases and improved service worldwide. In addition, unlike the other sectors, telecommunications services were negotiated by WTO members as a separate sector during or following the Uruguay Round. This process led to the development of an Annex on Telecommunications, which sets out pro-competitive obligations in the sector for all WTO members. The Reference Paper on Basic Telecommunications (hereafter the "Reference Paper") also emerged in separate negotiations. It consists of a set of guidelines for a pro-competitive regulatory framework for basic telecommunication services that WTO members can voluntarily adhere to, in whole or in part. To date, 78 members have adopted at least some elements of the Reference Paper.

The Reference Paper states: "The regulatory body is separate from, and not accountable to any supplier of basic telecommunications services. The decisions of and the procedures used by regulators shall be impartial with respect to all market participants." The principle is linked to that of non-discrimination – that is, the regulatory body should result in a fair, level playing field. However, the Reference Paper allows each country considerable scope as to how it implements liberalisation and regulatory reform. For example, the requirement for an independent regulator does not specify whether the regulator should be separate from the ministry that formulates telecommunication policy, or whether it should be a sector-specific regulator of telecommunication services or a body operating under the general competition laws.

Other sectors in this report are less subject to international agreements, even if some commitments have been made in the energy sector.

The challenge of establishing independent regulatory authorities

The setting up of independent regulators is a challenge faced by many OECD countries as they modernise their regulatory framework for network utilities and basic services with universal access or special social functions. The establishment of independent authorities, operating outside the chain of command of executive power, is part of a trend aimed at

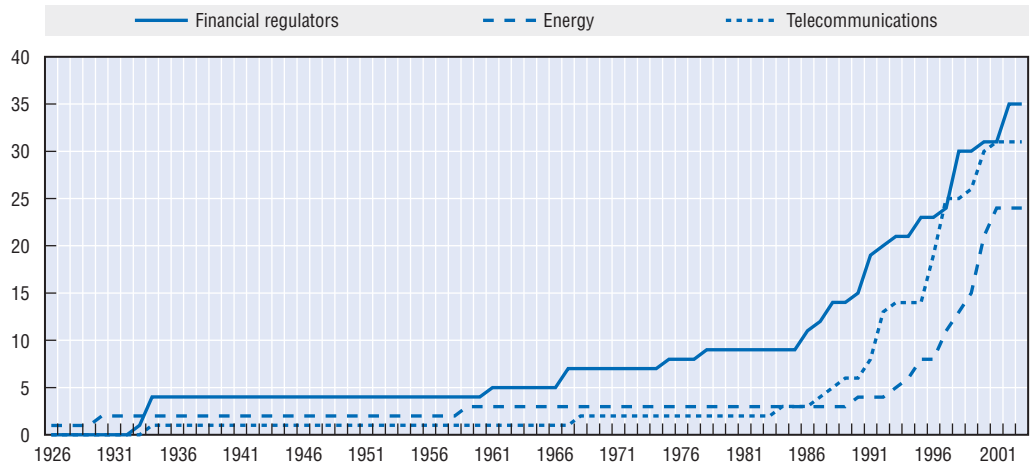
clarifying the functions of the central government, since its regulatory function must be distinct from its public strategy and ownership functions. The goal is to ensure independent regulatory decision making that is protected from specific private interests and short-term political considerations. Independent regulatory authorities have been established for network industries such as telecommunications, energy and transport. Many European countries have been influenced by Europe's regulatory framework, which facilitated introduction of competition into monopoly sectors such as energy and telecommunications, and the opening of the capital of state-owned enterprises. Another issue was the specific prudential supervision needed in sectors such as financial services, including insurance.

From the perspective of public governance, independent regulatory authorities are agencies endowed with significant powers that have a certain degree of autonomy in their decision making. This corresponds to a further stage in the decentralisation of public management, promoted through *New Public Management*. However, independent regulators differ significantly from decentralised agencies because of this decision-making power, which is greater than that of decentralised management, and because of other delegated powers they enjoy, which are traditionally a prerogative of the Executive.

The advantage of independent regulatory authorities is that they can insulate regulatory activities from short-term political considerations and the influence of special private or public interests, in particular those of the regulated enterprises. If they are to be effective, their structures must be introduced in conjunction with coherent and timely structural reforms. Independence is a guarantee of the transparency, predictability and quality of decision making. It is in those sectors in which independent regulators have been established that the economic benefits of more open markets have often been most evident, in terms of both investment and lower relative prices for consumers, *e.g.* telecommunications. Regulatory structures have unquestionably contributed to technological progress and innovation in a number of sectors.

Independent regulators with their specific powers do raise specific issues, since these agencies differ considerably from decentralised government administration. They pose governance challenges, for in many democratic systems it is a very sensitive matter to

Figure 0.1. **Independent regulatory authorities (IRA) in OECD member countries**



Source: Data from the OECD inventory on independent regulatory authorities (OECD, 2005).

establish "non-majoritarian institutions" under the responsibility of the Executive but not necessarily under the direct hierarchical supervision of ministries. Furthermore, these agencies must have specific governance and institutional structures as well as an appropriate framework for accountability. An approach based on regulatory quality can provide an adequate analytical framework – see the OECD's *Guiding Principles for Regulatory Quality and Performance* (OECD, 2005).

However, establishing very specific independent regulatory authorities within a narrow sector might interfere with intersectoral governance and lead to a fragmented approach.[7] There is also a risk of "capture" of regulatory agencies by the operators of specific sectors that they are supposed to regulate, which might cause them to lose their overall perspective of the market. This is particularly true when the supervision is limited to one aspect or segment of the market. Also, their relations with the competition

Box 0.1. **The OECD's work on independent regulatory authorities**

The OECD has examined independent regulatory authorities from a number of different standpoints.[1] Its 1997 recommendations advised governments in particular to "create effective and credible mechanisms inside the government for managing and co-ordinating regulation and its reform". In its reviews of regulatory quality (2002), the OECD "welcomed the move to establish independent bodies" since, in many respects, it is the best way of improving regulatory efficiency. There is every reason to expect that specialised and more autonomous regulatory authorities will make faster and higher-quality regulatory decisions, and that they will operate more transparently and accountably. In cases where they have proved to be most effective and credible, their independence and role were determined by specific legislation clearly defining their mission and objectives. However, it is essential to solve the key problems of institutional architecture in order to fully reap the benefits of establishing independent regulators, given the risks mentioned above. These issues have led the OECD to call for comprehensive reviews of the functioning of the independent regulatory bodies to identify problems and develop consistent solutions. More work by the OECD to monitor and assess best practices in the design of these important regulatory institutions would further assist countries in ensuring that they yield the expected benefits in terms of market performance while respecting norms of transparency and accountability.

More recently, the OECD has conducted *Regulatory Reviews* of Norway, Mexico and Switzerland. Specific workshop was also organised on this topic in 2005.[2] The new OECD recommendations adopted in 2005 stipulate that steps must be taken to "ensure that regulations, regulatory institutions charged with implementation, and regulatory processes are transparent and non-discriminatory", specifying that it is necessary to "establish regulatory arrangements that ensure that the public interest is not subordinated to those of regulated entities and stakeholders" and to "ensure that regulatory institutions are accountable and transparent, and include measures to promote integrity."

1. OECD (2002), "Improving the Institutional Basis for Sectoral Regulators", *OECD Journal on Budgeting*; OECD (2002), "Distributed Public Governance: Agencies, Authorities and Other Government Bodies", OECD *Journal of Competition Law and Policy*, No. 1, 3, pp. 169-246; "Relations between Regulators and Competition Agencies", Competition Policy Roundtables, No. 22; OECD (2000), "Telecommunications Regulations: Institutional Structures and Responsibilities", DSTI/ICCP/TISP(99)15/Final, 25 May. Also see TISP: DSTI/ICCP/TISP(2005)6, "Telecommunication Regulatory Institutional Structures and Responsibilities".
2. OECD (2005), *Designing Independent and Accountable Regulatory Authorities for High Quality Regulation*, Proceedings of an Expert Meeting in London, United Kingdom, 10-11 January.

authorities must be fine-tuned so as to avoid fragmentation of government policies and measures, with corresponding dysfunctions due to the lack of co-ordination.

For independent authorities to provide the benefits expected of an optimal regulatory system, there must be a well-thought-out institutional design. The political, institutional and administrative implications of independence are not always grasped fully. This independence must go hand in hand with a number of procedural conditions and a system of checks and balances. An effective appeals system, but one that does not paralyse the action of regulators, is an important element for responsibilities to be exercised properly. For all these reasons, it seems essential to give the utmost attention to the design and implementation of these bodies, and to conduct performance evaluations and reviews periodically. That will be discussed throughout this review, in conjunction with a general analysis of how these agencies do interact with their sectors.

The institutional framework of regulation in Brazil

The legal framework of Brazil's "New Regulatory State" is defined by the country's Constitutional Amendments 5, 6, 7, and 8. These established the legal regime of natural gas exploitation by the states; research and extraction of mineral resources; air, aquatic and terrestrial transportation; and telecommunications services. Amendment 9 eliminated the legal oil and natural gas monopolies and defined the creation of a regulatory agency for the oil and gas sector. Amendment 19 introduced the efficiency principle into the organisation and action of the public administration, establishing that public participation mechanisms should be created in the administrative processes.

Under the new constitutional system, cases of public monopoly are exceptions to the principle of free competition (Article 170). State involvement in economic activities concurrently with private enterprise must be considered equally exceptional. This kind of state activity is allowed "only when necessary to defend national security or a vital collective interest, as defined by law" (Article 173). Public sector corporations, legal entities of mixed ownership, self-governing and self-financing entities, autarkies and government foundations, as well as the subsidiaries of all these, may be created or authorised only by a specific law in each case (Article 37, XIX and XX). Acquisition by any such entity of an interest in a private sector company must also be authorised by law, on a case-by-case basis (Article 37, XX *in fine*).

A number of other laws provide important background: general ones such as the Consumer Law Code (Law 8 078/90) and the Brazilian Competition Law (Law 8 884/94); and more specific ones such as the Public Services Concession Law (Law 8 987/95); the Federal Administrative Process Law (Law 9 784/99); the Brazilian Telecommunications Law (Law 9 472/97) – which created the National Telecommunications Agency; the Brazilian Electric Energy Law (Law 9 427/96) – which created the National Electric Energy Agency; and the Brazilian Oil and Gas Law (Law 9 478/97) – which created the Brazilian Oil Agency, renamed the Agency for Oil, Natural Gas and Biofuels after in accordance with the Law 11 097/2005. The competition law was analysed in a separate review of the OECD, and is mentioned as part of the relationship between agencies and competition authorities.

The general framework for quality regulation in Brazil

The broader international regulatory reform agenda addresses the way governments set up a comprehensive regulatory management system. That system is meant to ensure

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the quality of new as well as existing regulations, and involves specific institutions. It employs a diverse set of regulatory instruments (economic, social and administrative) by which governments set requirements for businesses and citizens. In the Brazilian case, reform goes beyond the institutional design of regulatory authorities, on which much of the national debate has concentrated to date. The aim is to improve the country's legal system as a whole and its different instruments, so as to ensure sustained economic growth and provide a clear framework for citizens and private sector participation. This concerns all regulations – not just those established at federal level, but also those specific to the states, which are crucial in Brazil. Multi-level regulatory issues therefore deserve special attention, since co-ordination mechanisms between the Federal Government and the states, clear definition of roles and responsibilities between levels of government, and capacities for regulatory quality at sub-national levels all have a direct impact on the attractiveness and economic performance of the regions.

Even if the debate on regulatory issues has mainly concentrated on regulatory agencies, recent discussions have highlighted the need to build regulatory capacities inside the administration in the medium and long term. The Brazilian government, through the Civil House and involving the Ministry of Finance and the Ministry of Planning, Budget and Management, is setting up a Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG), with the purpose of helping to improve the regulatory system and co-ordination among the institutions that participate in the regulatory process. The PRO-REG envisages, among other objectives, the establishment of an oversight body for regulatory quality and the introduction of a Regulatory Impact Analysis (RIA) as a policy tool to support decision making.

Regulatory reform also refers to improving regulatory processes, and making them more structured. Laws in Brazil are not necessarily prepared in accordance with quality control mechanisms, although formal procedures are used to prepare new laws. The accessibility of laws and regulations to citizens has improved with electronic portals. Even if consolidation instruments have been introduced to reduce the number of existing laws, the legal framework remains complex and uncertain. Simplifying it and making the process more transparent, effective and accountable are challenges requiring real effort. In the same way, legal certainty is needed to improve compliance and reduce the involvement of the judiciary.

Regulatory bodies and the framework for indirect administration

The new regulatory agencies (ANEEL for electricity and ANATEL for telecommunications) were created after 1996. They were inspired by international experience, especially the North American institutional model of independent regulatory agencies. That model ended up being reproduced for the most part in the other agencies. Its main elements are public autonomous entities under a special system; it is therefore part of the indirect administration. Since 1996, ten federal regulatory agencies have been created: ANEEL (1996), ANATEL (1997), ANP for petroleum (1997), ANVISA for food and drug admission to the market (1999), ANS for private health insurance (2000), ANA for water (2000), ANTAQ for ports (2001), ANTT for land transport (2001), ANCINE for the movie industry (2001) and ANAC for civil aviation (2005).[8] In addition, the Administrative Council for Economic Defence (CADE), which had been created in 1962, was transformed into an independent governmental body, with clear powers for competition policy enforcement with the new Law 8 884/94.

These bodies are part of the framework for indirect administration, but they are subject to specific legal regimes aimed to ensure a greater level of independence (Part I contains a discussion of direct *versus* indirect administration). Indirect administration otherwise includes a wide range of heterogeneous institutions, such as the Institute for National Artistic and Historical Heritage (IPHAN), the National Institute for Environment and Renewable Natural Resources (IBAMA), the National Department of Mineral Production (DNPM), and the Brazilian Tourist Board (EMBRATUR). However, as in many other countries, the general framework for decentralised administration does not provide sufficient guarantees of independence and decision making to sectoral regulatory authorities. Therefore, a general attempt has been made since 2003 to reshuffle the approach towards sectoral regulators. Much of that attempt is influenced by a desire to strengthen the social accountability of the regulators. There has been progressive acknowledgement that increased accountability had to be granted for these bodies to perform, and to reduce uncertainty in the exercise of regulatory activity. This has taken place in a context where ministries were also attempting to strengthen their grip, and to increase their capacity for planning.

The issue of independent regulation, which is aimed at clarifying the relationship between the state's roles as regulator and shareholder, may similarly require a new approach and clear rules of governance for publicly owned enterprises. The approach can include strategic objectives assigned by supervisory authorities, a clear attention to competitive neutrality issues, and goes hand in hand with the full exercise of its shareholder rights by the State. The issue has arisen in other OECD countries – such as France, where much thought has been given to clarifying the conditions of management of state-owned enterprises and a formal solution has been developed through planning contracts since the beginning of the 1980s. In Brazil this will be discussed mainly in the context of the energy sector (see the energy section). In the other sectors, there are no major commercial publicly owned companies at federal level.

A brief summary of the authorities covered

The authorities covered by this study have key responsibilities in infrastructure sectors in Brazil. The electricity power sector, where the state still has a major shareholder responsibility, differs from the other markets that are largely left to private operators. The private health insurance market is also quite different, as it does not involve essential facilities or a network infrastructure. Private health insurance is also not a universal service, but interaction with the National Health Service (SUS) is a key element in this sector. Each of the regulatory agencies studied in this report is connected with a specific ministry, which will be noted in a sectoral introduction to each. The electricity agency (ANEEL) was the first to be created, while the supplemental private health insurance authority was only set up in 2000 and the Land Transport Authority (ANTT) in 2001. Many of these agencies are still in their early years. They can be compared to the first independent authorities to be established in Brazil, which include CADE, the Competition Council, which was first established as early as 1962 but under a different institutional status. Establishment of these authorities has generated a wide policy debate in Brazil. While this study does not cover all the regulatory authorities in Brazil, it offers a significant sample, covering a number of sectors and illustrating the key governance challenges facing the country.

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Notes

1. See references in ECMT (2007), "Transport Infrastructure Investment and Economic Productivity", Roundtable No. 132, European Conference of Ministers of Transport, OECD, Paris.
2. World Bank (2007), "Brazil: How to Revitalise Infrastructure Investments in Brazil", Vol. II, *Background Report*, World Bank, Washington DC.
3. Economist Intelligence Unit (2007), Brazil, Country Profile 2007.
4. CSN and CVRD are nowadays private enterprises; Fábrica Nacional de Motores no longer exists.
5. Barroso, Luis Roberto (2005), "Constituição, ordem econômica e agências reguladoras", Revista eletrônica de direito administrativo econômico, No. 1, February/March/April, Bahia, Brazil.
6. Pinheiro, Armando Castelar (2001), *Economia e Justiça: conceitos e evidência empírica*, Instituto Futuro Brasil.
7. *Cf.* recent work on the subject: "Regulatory Asymmetry, Substitute Services and the Implications for Regulatory Policy", Competition policy roundtables, DAF/COMP/WP2(2005)3.
8. More historical details about these agencies can be seen in: Pó, Marcos Vinicius and Fernando Luiz Abrucio, "Desenho e funcionamento dos mecanismos de controle e accountability das agências reguladoras brasileiras: semelhanças e diferenças" (Design and work on the control and accountability mechanisms of Brazilian regulatory agencies), Rev. Adm. Pública Vol. 40, No. 4, Rio de Janeiro, July/August 2006, *www.scielo.br/scielo.php*.

PART I

Overall Regulatory Framework

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Chapter 1

Government Capacity to Assure High-quality Regulation in Brazil

The national setting for regulatory reform

The administrative and legal environment

In the past 25 years, few reforms of the public sector in OECD countries have received more attention than those made to regulation making and regulatory management. Today, all 30 member countries have regulatory management programmes. These programmes are focused on the regulatory management system in place and on ensuring the quality of new as well as existing regulation (Box 1.1). Regulatory policy, as with other core government policies, such as a monetary or fiscal policy, is dynamically focused and founded on the view that ensuring the quality of the regulatory structure is a permanent role of government. This means that governments are taking a pro-active role in implementing regulatory quality assurance systems.

Box 1.1. **What is regulation?**

In OECD work, regulation refers to the diverse set of instruments by which governments set requirements on businesses and citizens. Regulations include laws, formal and informal orders and subordinate rules issued by all levels of government, and rules issued by non-governmental or self-regulatory bodies to whom governments have delegated regulatory powers. Regulations fall into three categories:

- *Economic regulations* intervene directly in market decisions such as pricing, competition and market entry or exit. Reform aims to increase economic efficiency by reducing barriers to competition and innovation – often through deregulation – and by improving regulatory frameworks for market functioning and prudential oversight.
- *Social regulations* protect public interests such as health, safety, the environment and social cohesion. Their economic effects may be of secondary importance and even unexpected, but they can be substantial. Reform aims to verify that regulation is needed, and to design instruments, such as market incentives, that are simpler, more flexible and more effective at lower cost.
- *Administrative regulations* are paperwork and administrative formalities through which governments collect information and intervene in individual economic decisions. They can have substantial impacts on private sector performance. Reform aims at eliminating those no longer needed, streamlining and simplifying those that are, and improving the transparency of application.

Source: OECD (1997), *OECD Report on Regulatory Reform*, Paris.

With more than 185 million inhabitants and 8.5 million km^2 of territory, Brazil is the largest country in South America in population and the fifth largest in the world in area. It contributes around 3% to world GDP (more than USD 1.7 trillion in PPP in 2006), which makes Brazil one of the largest world economies as well.

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The country's economy is a diversified one, increasingly open and market-oriented. Agriculture accounts for just over 8% of GDP (USD 796.1 billion in 2007)[1] industry's share is 35% (mainly an extensive and diversified industrial base that ranges from heavy engineering to consumer goods) and the services sector 56%.

The administrative and legal environment for regulatory reform is one in which government and administrative decisions are taken by authorities and agencies affiliated to the Executive. The Federal Constitution, promulgated in 1988 and a milestone for the consolidation of the democratic process, laid down a classical tripartite division of powers – the Executive, the legislative and the judiciary – under a checks-and-balances system. In the Brazilian presidential system, however, the Executive has extensive powers, as it is the central figure for putting forward law proposals and passing regulations.

The executive branch is headed by the President of the Republic, supported by ministers of state. There are in effect two arms of federal administration: A "direct" and an "indirect administration" following Law Decree 200 from February 1967. The "direct administration" comprises the administrative structure of the President of the Republic and the ministries. The executive branch is organised into ministries and ministerial-level secretariats that are located within the Office of the President. The internal structure of the ministries is established by presidential decree and tends to follow a uniform pattern: They are each divided into an "executive secretariat" (*Secretaria Executiva*), directly attached to the minister's office, and a number of functional "secretariats" (*secretarias*). In some ministries, the executive secretariat has a general role of overseeing the functional secretariats. In others, the former focuses on policy formulation and the latter on implementing those policies. The senior level of the executive secretariat is generally staffed with presidential appointees, as they are the heads of each functional secretariat.

In addition, the structure of the Federal Government involves a number of other units or bodies, corresponding to the "indirect administration"; these have a heterogeneous legal status, as they are created by laws. They include public enterprises, *autarquías*, mixed economy societies, and public foundations.[2] In general, these other units or bodies are federal entities implementing policies on the instruction of their "parent" ministries. Some have a very long history, often predating the creation of their parent ministry. In 1999, a presidential decree established that there should be a split between policy making and the agency in the context of the law on the national health surveillance.[3] However, this separation is only confirmed in the laws creating some of the regulatory agencies; the need for clarification remains in some sectors. This administrative model was also to introduce a contractual approach to management, while ensuring accountability between the ministries and the agencies, a system that has not been put into practice in most of the cases.[4] Several reasons appear to explain the limited use of this model. The functional secretariats within ministries already enjoy distinct identities. The new model did not relax any central input controls; quite the contrary, it introduced a new layer of controls, without necessarily reinforcing accountability.

A notable feature of the Federal Government's administrative structure is the prevalence of "consultative councils". There are often several of these councils attached to each ministry. They consist of representatives of the respective government ministries, other levels of government and non-governmental organisations. These councils typically have no decision-making roles, but are rather a forum for policy development and for identifying areas where government action is needed or in need of improvement.[5]

Box 1.2. **The evolution of the public administration in Brazil**

The foundations of the modern Brazilian administration go back to the 1930s, when the industrialisation process and the modernisation of the country required more complex administrative capacities for the state. In that period, the number of ministries, organisms in charge of formulating public policies, and bodies expanding the state's entrepreneurial role increased considerably.

The decentralisation and simplification efforts during the Kubitschek (1955-1960) and Goulart (1961-1964) years were substituted by increased centralism during the military regime that followed (1964-1985). During this period, centralisation implied the concentration of powers and resources at federal level, but a decentralisation at administrative level, which led to the consolidation of a highly qualified technocratic bureaucracy in some areas of government. The military regimes consolidated state intervention in the economy through the expansion of the "indirect administration" through Law Decree 200 from 1967, which today is still partly in force.

The return of democracy in 1985 stimulated changes in the administrative model. The 1988 Constitution established a unique legal regime for civil servants, with a common salary scale and equal costs of living adjustments between military personnel in government and civil servants, the requirement for accountability for any single assignment of resources originating in the budget, the inclusion of all agencies' detailed budgets in the federal budget.

The Guiding Plan to Reform the State Apparatus (*Plano Diretor da Reforma do Aparelho do Estado*) presented in 1995 by the Ministry for Public Administration and State Reform (*Administração Federal e Reforma do Estado, MARE*) identified a series of bottlenecks, following a systematised analysis based on a New Public Management framework. Among them were the increasing costs of bureaucracy and of bureaucratic and legal controls over the public administration; the loss of autonomy of the agencies in charge of providing services; and ministries' reduced capacity to formulate policies and to control the central units of the administration. The Plan proposed a reorganisation of state's responsibilities: separation between the policy formulation, regulation and control and service delivery. Administrative autonomy was fundamental for those activities in the hand of the public administration. The Plan envisaged setting up executive agencies and regulatory agencies; the latter would be in charge of the operation of services, while the former would be responsible for the control of the markets.

This reform proposal, however, was not fully implemented. Constitutional Amendment 19 from 1998 came into force and ended the single legal regime for public servants, which opened up the possibility of different alternatives of reorganisation of civil servants in the federal, state and municipal administration.* The Fernando Henrique Cardoso administration tried to implement the "regime of public employment" in the regulatory agencies, but the Supreme Court decided that it was not applicable in the case of the agencies (ADI No. 2 310 from 19 December 2000), since the Constitution requires special job tenure for the civil servants responsible for state duties. The increasing number of regulatory agencies was driven by the privatisation of infrastructure sectors.

* A recent decision of the Brazilian Supreme Court (ADI No. 2.135) declared it unconstitutional to introduce different labour regimes in the direct administration, autarkies and public foundations once the constitutional amendment was found not to follow the constitutional requirements for its validation.

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Brazilian law has its sources in Roman-Germanic traditions as opposed to the Common Law system. Although most of Brazilian law is codified, non-codified statutes are still a substantial part of the system. The Federal Constitution is the fundamental law for the whole system. As Brazil is a federal republic, states also adopt their own constitutions, but these cannot contradict the federal one. Municipalities and the Federal District adopt organic laws. There is no hierarchy between federal, state, municipal and district laws. Laws touching on a subject or competence reserved for laws from another legislative house, or that run directly counter to provisions established by the Federal Constitution, are unconstitutional.

Regulatory reform efforts started in 1990s in Brazil, when the country embraced a vast privatisation programme that was accelerated after 1994 with the Plan Real (*Plano Real*). The privatisation process for major infrastructure was characterised by the granting of concessions rather than a permanent transfer of assets.[6] Administration of the concession contract was entrusted to special regulatory institutions (or line ministries in a few cases), modifying the institutional setting and the culture of public sector management in the country.

Box 1.3. **State reform and privatisation in Brazil: Milestones of the process**

State reform in Brazil was twofold: there were reforms in public administration, and economic reforms involving structural transformations. These measures complemented each other and had to be preceded by constitutional amendments which would be followed by the adoption of corresponding legislation and administrative decisions by the Executive. The most notable transformations were:

- First, elimination of certain restrictions on foreign capital (Constitutional Amendments 6 and 7, from 1995).
- Second, introduction of flexibility into state monopolies, which modified key aspects of the Brazilian economic order (Constitutional Amendments 5, 8 and 9 from 1995).

The third transformation was the introduction of the framework for privatisation, through Ordinary Law 8 031 from 1990; this was later replaced by Law 9 491 from 1997, establishing the National Programme for Privatisation.

Over time, the whole privatisation process entailed different regulations, in particular on economic matters; this led to a modernisation of competition law. Law 8 884 from June 1994 (Competition Law) granted the Administrative Council of Economic Defence (*Conselho Administrativo de Defesa Econômica, CADE*) the status of independent government agency, and legislated on the prevention and repression of infractions against the new economic order. Another OECD report has analysed the competition law framework in Brazil, which is currently being reformed in the light of its recommendations.[7] (See also discussion on the Brazilian system for the defence of competition in the section on horizontal co-ordination with agencies.) Law 8 987 from February 1995 (Law of Grants) established a legal framework regulating the conditions for entrance, exit and operation of private initiative in infrastructure sectors. This Law was in relation to the decision of ending monopolies of the public sector in the area of infrastructure, contributing to boost the Programme.

Discussions about privatisation and regulation were often focused towards specific sectors. This led to the creation of regulatory authorities to accompany the privatisation process and redefined the action of the Brazilian state in economic sectors (see Annex 1.A1, Tables 1.A1.1). These regulatory authorities are discussed at length in Chapter 2, with the focus on four major federal-level agencies.

However, while these reforms have initiated the debate on regulatory matters, the broader agenda for regulatory reform in Brazil goes beyond the institutional design of regulatory agencies, even if these have been the focus of much of the recent debate. Improvement of the country's legal system as a whole and its different instruments (see Box 1.4) is key to ensuring sustained economic growth and providing a clear framework to citizens and private sector stakeholders. While Brazil has a relatively structured framework for preparing core laws, with informal consultations and some quality control procedures, it lacks a comprehensive regulatory quality assurance system to assess the content of its policies, as well as that of related laws, regulations, practices and procedures. This also has important implications for the related decrees and sub-regulations, which are less stringently controlled than laws. The federal structure reinforces this complexity.

Box 1.4. **The legal instruments in Brazil**

According to Brazil's Constitution (Article 59), the legislative process comprises the preparation of different legal instruments:

I) Amendments to the Constitution.

II) Supplementary laws.

III) Ordinary laws.

IV) Delegated laws.

V) Provisional measures.

VI) Legislative decrees.

These legal instruments also reflect the hierarchy of normative acts of the Brazilian system. They are above other instruments such as resolutions, *portarias*, contracts and sentences.

With an important number of legal instruments produced yearly, Brazil today has more than 3.5 million norms at federal, state and municipal level, which were issued after the promulgation of the Federal Constitution in 1988.[8] More than 68% of the stock of federal regulations was abrogated with the Constitution, but the remaining legal instruments are still a reason for legal confusion because there are texts that are obsolete, partially outdated or superimposed on other legal norms. This has led to legal uncertainty and conflict, creating unnecessary costs for businesses and citizens. Since 1998 Supplementary Law 95 has been in force, establishing that the presidential secretaries and ministries and indirect administration entities would adopt necessary measures to make the selection and consolidation of decrees and other legal instruments in their areas of responsibility. However, a few proposals for legal consolidation have been made since then.

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Table 1.1. **Legal regulations in Brazil adopted after the 1988 Constitution**

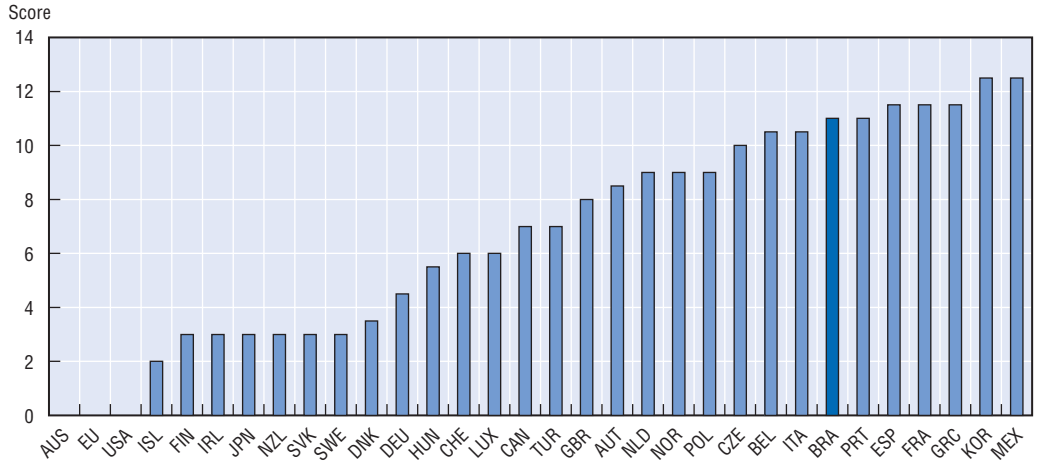
Federal norms	No. of general federal norms	
Federal Constitution	1	
Constitutional amendments of revisions	6	
Constitutional amendments	52	
Delegated laws	2	
Supplementary laws	63	
Ordinary laws	3 701	
Original provisional measures	940	
Re-edited provisional measures	5 491	
Federal decrees	8 947	
Supplementary norms	122 568	
Total	141 771	
State norms	**No. of general state norms**	**Average per state**
Supplementary ordinary laws	206 202	
Decrees	296 124	
Supplementary norms	388 786	
Total	891 112	33 004
Municipal norms	**No. of general municipal norms**	**Average per municipality**
Supplementary ordinary laws	418 088	
Decrees	467 464	
Supplementary norms	1 592 368	
Total	2 477 920	446

Source: Jornal do Senado, Brasília, 9-15 April 2007, p. 8, and Amaral, Gilberto *et. al.* (2007), *Quantidade de normas editadas no Brasil: 18 anos da Constituição Federal de 1988*, Instituto Brasileiro de Planejamento Tributário, Curitiba.

Even within this administrative framework, considerable progress has been made in recent years toward achieving macroeconomic stability and restructuring the economy. The macroeconomic stabilisation of the mid-1990s and the implementation of a series of structural reforms have facilitated the increase of productivity. But Brazil's GDP growth performance (about 2.5% per year on average since 1995) needs to improve to close a widening income gap relative to the OECD area. The full benefits of stabilisation in terms of faster growth will be only reaped after consolidating macroeconomic adjustment, boosting innovation in the business sector, and stepping up formal labour utilisation.[9]

To this end, in January 2007 the current government put in place the Growth Acceleration Programme (*Programa de Aceleração do Crescimento, PAC*) with the aim of boosting investment. One of the challenges to reaching this objective is to implement the various structural reforms that would be needed to promote greater competitiveness. Brazil's requirements in the sphere of private sector investment are more likely to be met if the country removes barriers to competition and entrepreneurship, and if it reduces regulatory uncertainty by clearly defining the role of government in planning and service delivery.[10] Even if significant efforts have already been made towards facilitating licences, permits and administrative requirements (see Figure 1.1), legal barriers to competition remain and government's special voting rights in firms within the business sector represent a constraint on private investment. In addition, administrative burdens and permits are significant at the local level. Environmental permits are also a significant hurdle in relation to the effort of investment in the energy sector.

Figure 1.1. **Facilitating licences, permits and administrative requirements**



Notes: The above figure presents an aggregate of the results of countries' responses to a range of related questions on the topic of facilitating licences and permits. The questions included whether a "silence is consent" rule was used at all, whether administrations were obliged to provide the names of their contacts, whether there where "one-stop shops" for getting information and also for accepting notifications and issuing licences, whether there was a programme underway to review licences and permits at national and also at sub-national level, whether a clear decline had been observed in the aggregate number of licences and permits, whether a complete count of the number of permits and licenses had been done. Weighted scores were applied according to possible responses, with higher scores applied to more elaborated programmes for facilitating licences and permits.
The figure is intended to illustrate, with a two-year lag, the general position of regulatory quality management systems in Brazil relative to OECD member countries. It is based on comparing responses received from Brazil in 2007 to a questionnaire of indicators on regulatory quality management systems with those provided by OECD member countries in 2005. A higher score means that a number of tools have been used towards facilitating the granting of licences of permits. However, it may not reflect the actual practicality in obtaining a licence. The current position of OECD countries may have changed in the intervening period.

Source: Jacobzone, S., G. Bounds, Ch.-W Choi and C. Miguet (2007), "Regulatory management systems across OECD countries: indicators of recent achievements and challenges", OECD Working Papers on Public Governance, No. 74.

Recent and current regulatory reform initiatives

Regulatory reform in Brazil has mainly been driven by the need to establish an institutional framework for regulating economic sectors – that is to say, establishing regulatory agencies (*agências reguladoras*). Establishing regulators in Brazil has generated a significant domestic debate, discussed in Chapter 2. This concern was made even more acute by the fluctuations of the Real in the context of the economic crisis, when some aspects of utility regulation, including prices, were affected by the external exchange rate, such as telecommunication price adjustments. (See section on telecommunications).

Regulatory agencies in Brazil have been the subject of intense controversy since their conception. In 1995, the government, and in particular the Ministry of Public Administration and State Reform (*Ministério da Administração Federal e Reforma do Estado, MARE*) – which was dissolved in 1998 and whose functions were included under the Ministry of Planning, Budget and Management (*Ministério do Planejamento, Orçamento e Gestão*) – presented a broad programme of reforms, mainly related to decentralisation of public services and the strengthening of a strategic core of public policies and new regulatory roles. The Civil House of the Presidency of the Republic played a leading role in proposing the creation of regulatory agencies. The Congress also participated in the debate, which was centred on the degree of political and administrative independence and autonomy in relationship to the ministries concerned. These issues are discussed at length in the rest of the report; this chapter will focus on the more general aspects of regulatory reform, which have arisen

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more recently in the domestic debate in efforts to bring Brazil closer to the mainstream of OECD countries.

The PRO-REG (Programa de Fortalecimento da Capacidade Institucional para Gestão em Regulação)

In 2007 the Civil House, working with the Ministries of Finance and of Planning, Budget and Management, proposed to set up the Programme for the Strengthening of Institutional Capacity for Regulatory Management (PRO-REG). This programme has been developed with the support of the Inter-American Development Bank (IADB); its purpose is to help improve the regulatory system and co-ordination among the institutions that participate in the regulatory process. The programme aims at introducing new mechanisms for accountability, participation and monitoring by civil society and at strengthening the quality of market regulation. The following objectives are included in the framework of PRO-REG:

- To strengthen the regulatory system so as to facilitate the full exercise of functions by all actors.
- To strengthen the capacities to formulate and analyse public policies in regulated sectors.
- To improve co-ordination and strategic views between sectoral policies and the regulatory process.
- To strengthen autonomy, transparency and performance of regulatory agencies.
- To develop and improve mechanisms for social accountability and transparency during the regulatory process.

The PRO-REG, through the activities of a Management Committee and a Consultative Committee, should serve to mobilise the different institutions inside the administration that are involved in the regulatory process. The programme would be responsible for co-ordinating and promoting research analysis and the formulation of concrete proposals to be implemented by regulatory bodies. It should also provide technical support to the different bodies concerned with implementation, and establish a model of excellence for regulatory management.

In order to implement the PRO-REG, two bodies have been created: a Management Committee (*Comitê Gestor do PRO-REG, CGP*) and a Consultative Committee (*Comitê Consultivo do PRO-REG, CCP*), co-ordinated by the Civil House of the Presidency of the Republic:

- *Management Committee*. Composed of representatives from the Civil House, the Ministry of Finance and the Ministry of Planning, Budget and Management, the Management Committee is responsible for defining the strategic guidelines of the PRO-REG, for setting up priorities inside the programme, for co-ordinating with the different institutions involved in the implementation phase, and for presenting reports on improvements. The co-ordinator of this Committee could invite representatives from private and public institutions, the Legislative and the judiciary to participate in meetings. The Committee could set up temporary specific working groups or commissions to deal with concrete proposals.
- *Consultative Committee*. Composed by representatives from regulatory agencies, ministries linked to these agencies, the Ministry of Justice and the Administrative

Council for Economic Defence (CADE), the Consultative Committee is responsible for putting forward proposals to improve the PRO-REG, providing assistance, support and consultancy to the Management Committee, and improving the technical level of the actions undertaken.

The Office for Analysis and Follow-up of Governmental Policies (*Subchefia de Análise e Acompanhamento de Políticas Governamentais*) from the Civil House would be responsible for providing technical and administrative support to PRO-REG, preparing their meetings, and following up the implementation of the measures adopted. One of the controversial aspects of recent policy developments is establishing a regulatory quality oversight body, which will be discussed in detail below.

Drivers of regulatory reform: National policies and institutions

Regulatory reform policies and core principles

The 2005 OECD *Guiding Principles for Regulatory Quality and Performance* recommended that countries adopt broad programmes of regulatory reform at the political level that establish principles of "good regulation" and clear objectives and frameworks for their implementation. Regulatory policy may be broadly defined as an explicit, dynamic, continuous and consistent "whole-of-government" policy to pursue high-quality regulation.[11] It is an integral part of the process that links a policy goal, a policy action, and regulation to support the policy action.

Experience in OECD countries suggests that an effective regulatory policy has three basic components that are mutually reinforcing: it should be adopted at the highest political levels; contain explicit and measurable regulatory quality standards; and provide for continued regulatory management capacity.[12] In Brazil, different sub-elements of such a policy exist in several initiatives and programmes that intend to create a framework for regulatory quality. These elements, however, are fragmented across the administration; they have not been integrated into a whole-of-government approach to promote regulatory policy.

While the discussion about regulation concentrates mostly on the design of regulatory agencies, many other areas are relevant for Brazil: the improvement of the quality of legislation; the continued efforts toward legal consolidation and codification; increased transparency and public consultation; integration of a systemised use of impact assessments; promotion of alternatives to regulation; etc. These elements would improve the framework for preparing new regulations, and so shift the focus from the agencies towards a broader perspective. The transformation of the Brazilian state and consolidation of its regulatory functions imply a new definition and implementation of public policies. But they also imply a different form of decision – making – a move away from the traditional channel in which the central administration of the Executive exercised power in a vertical way, and toward giving powers to regulatory agencies and introducing mechanisms to broaden public participation (civil society and stakeholders) in defining the content of regulation.

Important aspects of regulatory reform policies already in place are described in the following legal documents:

- *Federal Constitution of Brazil*. Promulgated in October 1988, the Federal Constitution is the fundamental law of Brazil, and it rules the system. Federation is based on five fundamental principles: sovereignty; citizenship; dignity of the people; social value of

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Box 1.5. **Good practices for improving the capacities of national administration to assure regulatory quality and performance**

The 2005 OECD *Guiding Principles for Regulatory Quality and Performance* capture the dynamic and ongoing whole-of-government approach towards achieving regulatory quality. Based on the 1995 Recommendation of the OECD Council on Improving the Quality of Government Regulation on the Report on Regulatory Reform welcomed by ministers in May 1997, and on the OECD work of 20 country reviews and new monitoring exercises reviewed in *Taking Stock of Regulatory Reform: A Multidisciplinary Synthesis* (OECD, 2005d); the Guiding Principles form the basis of the analysis undertaken in this report. These principles state that governments should:

1. Adopt at the political level broad programmes of regulatory reform that establish clear objectives and frameworks for implementation.
2. Assess impacts and review regulations systematically to ensure that they meet their intended objectives efficiently and effectively in a changing and complex economic and social environment.
3. Ensure that regulations, regulatory institutions charged with implementation, and regulatory processes are transparent and non-discriminatory.
4. Review and strengthen where necessary the scope, effectiveness and enforcement of competition policy.
5. Design economic regulations in all sectors to stimulate competition and efficiency, and eliminate them except where clear evidence demonstrates that they are the best way to serve broad public interests.
6. Eliminate unnecessary regulatory barriers to trade and investment through continued liberalisation, and enhance the consideration and better integration of market openness throughout the regulatory process, thus strengthening economic efficiency and competitiveness.
7. Identify important linkages with other policy objectives and develop policies to achieve those objectives in ways that support reform.

Source: OECD (2005c), *Guiding Principles for Regulatory Quality and Performance*, Paris.

labour and freedom of enterprise; and political pluralism. The Constitution, which was promulgated after years of military dictatorship, did not explicitly provide for state reform or economic transformation. Only through amendments and other legal norms did unclear provisions undergo revision; the Constitution now reflects the economic changes the country has experienced in the last few decades. It is very detailed, which requires frequent amendments to update the constitutional framework when significant reforms are envisaged.

- *Law 9 784 from 29 January 1999* regulates the administrative procedures within the federal public administration.
- *Supplementary Law 95 from 26 February 1998* lays down principles for elaboration, editing, amendment and consolidation of laws, according to Article 59 of the Federal Constitution. It also establishes guidance for consolidation of normative acts prepared by the Executive.
- *Law 9 986 from 18 July 2000* and *Law 10 871 from 20 May 2004* lay down norms for management of human resources inside the regulatory agencies.

- *Decree 4 176 from 28 March 2002* establishes norms and guidelines for the elaboration, editing, amendments, consolidation and sending of normative act projects elaborated by the competent bodies of the executive branch. A particularity of this decree is that it contains very detailed indications about the form and style to use for the law text.
- *Decree 6 062 from 16 March 2007* institutionalises the Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG).
- *Manual for Law Drafting in the Executive branch (Manual de Redação da Presidência da República)* provides guidelines on how to draft legal instruments and official communications.
- *Guidelines for Parliamentarian Acting (Manual de Atuação Parlamentar)*, published for the first time by the Federal Parliament in 2002, is a guiding tool for each parliamentarian. It provides information not only on the role of the Congress, but on its legal activity, including definition of terms, ways to draft initiatives, differences between legal documents, and use of tools to simplify the drafting of legislation.
- *Manual for Drafting* (*Manual de Redação*), published since 2004 by the Federal Parliament, provides a comprehensive view of the legislative process for those responsible for drafting laws in the legislative branch. The objective of this document is to present common rules for drafting and communication. It is divided in three sections: general considerations for law drafting, use of the Portuguese language for legal purposes and indications for drafting administrative norms.

Many laws deal with the regulation of specific economic sectors. They are listed in Tables 6.A1.1, related to the creation of regulatory agencies.

Mechanisms to promote regulatory reform within the public administration

Mechanisms for managing and tracking reform inside the administration are needed to keep reform on schedule and avoid a recurrence of overregulation. However, it is often difficult for ministries to reform themselves in many countries, given countervailing pressures. Maintaining consistency and systematic approaches across the entire administration is necessary if reform is to be broad-based.

In Brazil, responsibilities for regulatory reform and quality control of law drafting are shared among several ministries and agencies. Brazil does not have a central body for co-ordination and control of regulatory quality, even if the President plays a strong role as the centre of government. The country lacks a body connected with this centre of government, one that would dedicate systematic efforts to the supervision, promotion, co-ordination and monitoring of the quality of the regulatory activity across ministerial departments and regulatory agencies.

In the Brazilian institutional model, the legislative power establishes the legal framework while the executive branch formulates policies through the ministries. Ministries have the authority to exercise the guidance, co-ordination and supervision of bodies and entities of the federal administration in their area of competencies (Article 87 of the Federal Constitution); each and every body of the direct and indirect federal administration is subject to the supervision of the appropriate minister. Regulatory agencies, which are autonomous, are still supervised by the ministries to which they are linked.

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Box 1.6. **The law-making process in Brazil**

The elaboration of a law is a complex process, defined in Articles 59 to 69 of the Federal Constitution, according to the different possible legal instruments that complete the *legal corpus* of the Brazilian system. The law-making process in Brazil follows different stages:

Initiative. Laws in Brazil can be submitted by the National Congress (Chamber of Deputies and Federal Senate), the President, the Supreme Court, Superior Courts, the General Prosecutor of the Republic and citizens. Depending on its origins, law proposals go first either to the Chamber of Deputies or to the Senate.

Initiative from the Executive. Those normative acts issued from the Executive can be elaborated by the ministries or any entity within the Presidency structure, according to its competency. Ministries have legal departments with experts who prepare the pre-law proposal for analysis and comments from the different internal bodies concerned. Procedures and design for the elaboration, wording, alteration and consolidation of normative acts sent by the President are defined in detail in Decree 4 176 of 28 March 2002. Once the projects are sent to the Presidency, the Civil House is responsible for analysing the proposal for its legality, merit and political convenience. Inside the Civil House the proposal goes through a process of revision and adjustments when needed, and the Civil House can co-ordinate with the agents involved. In case of controversy regarding the constitutionality or legality at the consolidation stage, the project is submitted to the Federal General Attorney. It is at the Civil House's discretion to open the process for public consultation, choosing the appropriate means. Then, the final version of the consolidated project goes to the National Congress. When the proposal concerns the administrative organisation of the federal administration and does not increase expenses, it does not need to be approved by Congress and is published as a Presidential Decree.

Discussion. Once the law proposal is submitted either to the Chamber of Deputies or to the Federal Senate, the chosen chamber will conduct a technical analysis, formal and legal, performed by its corresponding commissions.

Voting. Once the competent commissions of one of the chambers have approved it, the proposal will be sent to the plenary of the chamber for voting. If the proposal is rejected, it will be filed.

Approval. If the proposal has been approved, it will be sent to the revising chamber – that is, the one that did not put forward the proposal. Approval can be given by a committee, without a plenary session, unless there is a recourse. If the committee rejects it, the proposal will be filed; the amendments made will send the proposal to the chamber where the project was initially submitted. If the chamber approves it, the proposal will be sent to the President of the Republic for sanction or veto.

Sanction or veto. Once the law proposal has been received, the President can approve it or veto it – either fully, or partially with regard to specific paragraphs or sections. In case of veto, it has to come within 15 days and to be explicitly stated because of the unconstitutionality or prejudice to the public interest. The presidential veto can only be rejected by absolute majority. If there is no veto, the law can be promulgated.

Promulgation. It is a competence of the President of the Republic (or the President of the Federal Senate in case the former cannot do it) to promulgate the law, which takes effect either at a specific date indicated in the law, or 45 days after promulgation.

Publication. Promulgation is transmitted for publication in the Official Gazette (*Diário Oficial*). Once published, the law is in force.

The following institutions deal with different issues of regulatory quality inside the Brazilian administration:

- *Civil House* (*Casa Civil*). Created in 1938, the Civil House is a key body of the Presidency of the Republic, responsible for assisting and guiding the President in his functions related to co-ordination and integration of government action. The Civil House has actively participated in some regulatory discussions; it took a leading role during the creation of an inter-ministerial workgroup that put forward a proposal on regulatory agencies and co-ordinating the management of the PRO-REG initiative. Among the bodies that provide direct support to State Ministers are:
  - *Office for Analysis and Follow-up of Governmental Policies (Subchefia de Análise e Acompanhamento de Políticas Governamentais)*. This department is responsible for:
    - *i)* Monitoring the formulation and execution of governmental programmes and projects, carrying out the merit analysis of subjects related to states and municipalities, and carrying out the analysis of merit, adequacy, and compatibility with government guidelines of the proposals and projects submitted to the President, as well as those going through Parliament.
    - *ii)* Executing, in co-ordination with the Office of Articulation, Co-ordination, Monitoring, and integration of governmental actions.
    - *iii)* Requesting information and carrying out analyses and studies on projects, proposals and matters related to public policies under its responsibilities.
    - *iv)* Participating in the monitoring and evaluation of management contracts of public entities, according to decisions by the state minister.
    - *v)* Co-ordinating studies and measures aimed at carrying out the restructuring of the federal regulatory agencies.
  - *Office of Legal Affairs (Subchefia para Assuntos Jurídicos)*. The main responsibilities of this body are the following:
    - *i)* To advise the state minister in matters of a judicial nature.
    - *ii)* To pre-examine the constitutionality and legality of presidential acts.
    - *iii)* To co-ordinate with the ministries and respective juridical advising services, or equivalent bodies, on subjects of a legal nature.
    - *iv)* To examine the legal foundations and forms of the acts proposed to the President, and to send them back to the generating bodies in case of disagreement with the effective norms.
    - *v)* To carry out studies as to the legality of the acts, projects, processes and other documents, issuing reports.
    - *vi)* To monitor the elaboration of projects and normative rules by the Executive.
    - *vii)* To give legal advice to the bodies of the Presidency of the Republic.
  - *Office of Articulation and Monitoring (Subchefia de Articulação e Monitoramento)*. This body is mainly responsible for the evaluation and monitoring of governmental action. Its current subject is the Programme for Accelerated Growth (*Programa de Aceleração do Crecimento*), which intends to increase investment in infrastructure, stimulating different economic sectors in several Brazilian regions.

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- *Ministry of Justice* (*Ministério da Justiça*). The Ministry of Justice is responsible for, *inter alia*, defending the legal order, political rights and constitutional guarantees, as well as the economic order and consumer rights. Two institutions work on these issues:
  - *Secretary of Economic Law (Secretaria de Direito Econômico – SDE)*.[13] This institution is responsible for formulating and co-ordinating policies in the area of competition (Department of Economic Protection and Defence – *Departamento de Proteção e Defesa Econômica*) and consumer protection (Department of Consumer Protection and Defence – *Departamento de Proteção e Defesa do Consumidor*). It is in charge of overseeing free competition in the Brazilian market, preventing infringements, and controlling those economic activities that could lead to abuse of dominance. It performs investigative functions and some preliminary enforcement functions. It is also responsible for planning, elaborating and executing a National Policy for Consumer Protection, promoting activities and disseminating information on consumer rights.
  - *Secretary of Legal Affairs (Secretaria de Assuntos Legislativos)*. This body is divided into two different departments: The Department of Legal Drafting (*Departamento de Elaboração Normativa*) and the Department of Legal Process (*Departamento do Processo Legislativo*). The main responsibilities of these institutions are to co-ordinate the legal opinions of all legal acts presented by the Ministry of Justice to the President of the Republic, to oversee their constitutionality, and to contribute to the consolidation and good drafting of all legal acts.
- *Ministry of Planning, Budget and Management (Ministério do Planejamento, Orçamento e Gestão)*. This Ministry is in charge of, *inter alia*, the evaluation of socio-economic impacts of policies and government programmes at federal level. It also participates in the elaboration of special analyses to formulate public policies.
  - *Secretariat for Management (Secretaria de Gestão – SEGES)*. This institution has the authority to simplify and optimise the internal regulations and processes of bodies and entities of federal public administration, as well as to co-ordinate the implementation of plans to regulate and deregulate their activities.
- *Ministry of Finance (Ministério da Fazenda)*. This institution deals with the formulation and the execution of the economic policy in Brazil. One of its bodies deals with regulatory issues, mainly concerning regulatory agencies:
  - *Secretariat for Economic Monitoring (Secretaria de Acompanhamento Econômico – SEAE)*. This body is responsible for monitoring implementation of the regulation and management models developed by regulatory agencies, sectoral ministries and other similar bodies. It issues opinions, whenever deemed necessary or requested, on, *inter alia*:
    - *i)* Adjustments of and revisions to utility rates and public prices.
    - *ii)* Bidding processes that involve the privatisation of companies belonging to the Union, with the aim of guaranteeing maximum conditions of competition. It analyses rules for setting initial rates of utilities and public prices, as well as for devising parametric formulas of adjustments and the conditions that affect the revision processes.
    - *iii)* Market evolution, especially in case of utilities subject to the privatisation processes or to administrative decentralisation. It recommends measures that stimulate competition and economic efficiency in the production of goods and in service delivery. The secretariat also has the authority to co-ordinate the

implementation of plans to regulate and deregulate the activity of bodies and entities of the federal public administration.

- *Federal General Attorney (Advocacia-Geral da União – AGU)*. Besides being the legal representative of the executive branch, the Federal Attorney has an important function in providing legal assistance and consultancy to the federal bodies of the executive branch. A legal advisory office of the Federal General Attorney is assigned to the different ministries and sectoral institutions of the federal administration. Its main responsibilities are:
  - *i)* To advise the state minister in matters of a juridical nature.
  - *ii)* To co-ordinate the activities of the juridical bodies of the entities connected with the ministry.
  - *iii)* To define the interpretation of the Constitution, laws, treaties, and other normative rules to be uniformly followed, when there is no normative orientation from the Federal General Attorney.
  - *iv)* To support the state minister in the internal control of the administrative legality of acts to be performed by him/her or that have already been performed, and of those of bodies or entities under his/her juridical co-ordination.
- *Federal General Comptroller (Controladoria Geral da União – CGU)*. This institution is responsible for supporting the President of the Republic in issues related to the use of public funds and for ensuring transparency in management and performance through internal control, auditing, prevention and fighting corruption. The CGU carries out regular performance and management evaluations of regulatory authorities.
- *Administrative Council for Economic Defence (Conselho Administrativo de Defesa Econômica – CADE)*.[14] CADE is an independent federal agency, associated with the Ministry of Justice for budgetary purposes. CADE's role in competition law enforcement is to adjudicate alleged violations of the law and to impose appropriate remedies and fines.

In the legislative branch, the Brazilian Parliament also has an important role in promoting regulatory quality. Law proposals are discussed at different stages of the process; specialised commissions are in charge of revising their legality and proportionality. The Commission of Constitution, Justice and Citizenship (*Comissão de Constituição e Justiça e de Cidadania*) is responsible for looking at constitutional and legal technical aspects of law proposals and amendments sent to the Chamber of Deputies and its commissions. The Group for Legal Consolidation of the Chamber of Deputies is in charge of different measures to improve the quality of regulations, such as identification of obsolete legislation, revocation of laws no longer in force and those in contradiction with the Federal Constitution, and consolidation and codification by topic.

Promoting regulatory quality with a "whole-of-government" approach

Discussion about the institutional setting for regulatory quality in Brazil has mainly focused on sectoral issues, and especially on the institutional design of regulatory agencies. If this has been a constant in the political debate, the dialogue between core institutions at the centre of government and regulatory agencies remained more limited, especially in the early years of the deregulation and privatisation process. This has led to a fragmentation of a process "strongly driven by the conceptions of the ministries and by the bureaucracy of each sector, and not by a general directive guideline, which impacted the formal and operational

conditions of the the agencies that were created".[15] That fragmentation of regulatory reform has so far resulted in sub-optimal outcomes, and a lack of policy coherence.

Most of the debate has consequently focused on the design of regulatory agencies, with less attention placed on the need to integrate a "whole-of-government" approach for regulatory quality that could involve setting up an oversight body responsible for regulatory reform (see Box 1.7).

Box 1.7. **Central oversight bodies for regulatory quality: The OECD experience**

Many OECD countries have explicitly adopted a "whole-of-government" approach for regulatory policy, with permanent co-ordination mechanisms and bodies that address the need for policy coherence and strategic commitment in the long term (Annex 1.A1, Tables 1.A1.2). Experience across OECD countries suggests that central oversight units are most effective if they:

- Are independent from regulators (*i.e.* they are not closely tied to specific regulatory missions).
- Operate in accordance with a clear regulatory policy, endorsed at the political level.
- Operate horizontally (*i.e.* cut across government).
- Are staffed by experts (*i.e.* they have the information and capacity to exercise independent judgement).
- Are linked to existing centres of administrative and budgetary authority (centres of government, finance ministries).

Note: See table on regulatory oversight bodies across OECD countries in Annex 1.A1, Table 1.A1.2.

It is only recently that the Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG), supported by the Decree 6 062 from 16 March 2007, envisaged, as one of its key components, the conception and set-up of a Unit of Co-ordination, Monitoring, and Evaluation of Regulatory Issues in the executive branch. This unit, on a par with its peers in other OECD countries, would be responsible for improving regulatory quality inside the Brazilian administration. It would be supported by a collegial independent body, composed of government representatives, businesses, academics, consumer associations and other stakeholders; this body would support, and provide advice to, the Federal Government on regulatory issues and good practices.

According to PRO-REG, such a unit would be responsible for the following issues:

- Design and implementation of a government network for regulatory quality, composed of officials from ministries, agencies and academia, and in charge of databases and information on regulatory issues.
- Design of a strategy to introduce Regulatory Impact Analysis (RIA), as a tool to improve regulatory quality.
- Development of management tools to build consensus and agreements on strategic objectives of sectoral policies, to support the role of regulatory agencies, and to ensure their financial autonomy.
- Technical assistance to implement those tools, and training for government officials from ministries and agencies.

Box 1.8. **Oversight bodies in OECD countries: Examples of key functions**

Central oversight units can carry out three distinct roles. First, bodies may be advisory, *i.e.* increasing regulatory capacities by publicising and disseminating guidance and providing support for regulators. The second role, advocacy, refers to the promotion of long-term regulatory policy considerations, including policy change, development of new and improved tools, and administrative change. Third, bodies promoting regulatory quality may have a challenge function *vis-à-vis* new regulatory proposals. Such a challenge may be in the form of an assessment putting pressure on the proponent regulatory body to improve performance in accordance with a set of given criteria. Or it may be in the form of a "veto", where the reviewing body acts as a gatekeeper in the regulatory process.

Experience suggests that most regulatory policies have relied primarily on advocacy and advice. Advisory and advocacy functions are helpful preconditions for creating a fruitful and non-confrontational environment for regulatory quality. However, leadership – in the form of regulatory oversight bodies challenging as well as setting and enforcing targets for regulatory quality – may be needed to go beyond the limits of reforms that are primarily driven by self-assessment.

The co-ordination and advisory role

In *Korea,* a Regulatory Reform Committee has been set up by law with a "general mandate to develop and co-ordinate regulatory policy and to review and approve regulations". Its main functions are to give the regulatory reforms some strategic perspective, to undertake research, to monitor the improvement efforts of each agency, and to make sure there is coherence between the agencies' actions. The prime minister, a significant group of experts; and six ministers participate in this body; it is one of the cases where more power has been given to this kind of institution, multiplying the "engine of reform" effect.

The "challenge" function

In the *United Kingdom* there were changes in the regulatory reform framework following approval of the Budget in 2005. The Better Regulation Task Force was replaced by the Better Regulation Commission; the BRC provides independent advice to government from business and other external stakeholders about new regulatory proposals and the government's overall regulatory performance. The Commission will continue the challenge role carried out by the Better Regulation Task Force, as well as take on new responsibilities following the announcements in Budget 2005, including vetting departmental plans for simplification and administrative burden reduction.

Australia's Office of Best Practice Regulation (OBPR) is located within the Productivity Commission, which was established in 1998 as the government's principal advisory body on all aspects of microeconomic reform. The OBPR vets and reviews draft regulations to ensure that they are properly formulated and include assessments of, *inter alia*, administrative compliance.

Advocacy and support to regulators

In *Japan*, the Administrative Evaluation Bureau promotes the appropriate implementation of policy assessments by regulators, and co-ordinates and publishes reports on the progress of that implementation. At the same time it provides government-wide training in regulatory policy evaluation.

Box 1.8. **Oversight bodies in OECD countries: Examples of key functions** *(cont.)*

Advocacy and support to regulators

In *Mexico*, one of the primary and permanent responsibilities of COFEMER (the Federal Regulatory Improvement Commission) is to organise training seminars on Regulatory Impact Analysis. From October 2001 to February 2004, COFEMER chaired 33 seminars, attended by more than 740 public employees. The objectives of the seminars were: to teach public servants how to put together a RIA and how to use online RIA systems; to improve the relationship and communications between COFEMER and public servants in charge of regulatory proposals; to develop skills in quantifying the effects of regulation and of regulatory and non-regulatory alternatives; to disseminate knowledge about RIA; and to clarify the review criteria that COFEMER employs.

* See table on regulatory oversight bodies across OECD countries in Annex 1.A1, Tables 1.A1.2.

Source: OECD (2006), Background Document on Oversight Bodies for Regulatory Reform, Paris, available at: *www.oecd.org/dataoecd/4/41/36785272.pdf*.

Co-ordination between levels of government

Regulatory systems are composed of complex layers of regulation stemming from sub-national, national and international levels of government. Complex and multi-layered regulatory systems are characteristically the subject of concern with respect to the efficiency of national economies and the effectiveness of government action. High-quality regulation at one level can be undermined or reversed by poor regulatory policies and practices at other levels; conversely, co-ordination can vastly expand the benefits of reform.

Brazil is a federal republic characterised by important regional differences. Some states have per capita incomes above those found in some European economies, while others rank among the world's poorest regions. The already striking economic disparities between the North and the South seem more acute in a country that has many small municipalities with limited administrative capacities.[16] The long-standing debate between centralism and decentralisation came to an end with the promulgation of the Federal Constitution in 1988, in which different levels of government were granted extensive powers.[17] This legal division of responsibilities and powers is facing in practical terms, the way in which public policies are implemented between the different levels of government and the co-ordination mechanisms established for such purposes.

According to Article 18 of the Federal Constitution, the political and administrative organisation of the Federative Republic of Brazil comprises the Union, the states, the Federal District and the municipalities, all of them autonomous. The federalism is protected by the Constitution, which forbids any kind of amendment that could abolish this form of state (Article 60, § 4º, I). The Federal Constitution established the powers and competencies of these different political entities, assigning them political, administrative and tax autonomy.

In terms of legislative powers for the different levels of government, the Constitution establishes:

i) Exclusive powers for the Union (Article 22).

ii) Common powers between the Union, the states and Federal District (Article 23).

iii) Concurrent powers between the Union, the states and Federal District (Article 24).

Within the scope of concurrent legislation, the competence of the Union is limited to the establishment of general rules; its legislation of these rules does not exclude the supplementary competence of the states. If there is no federal law or general rules, the states exercise full legislative competence. Municipalities have also the right to legislate upon matters of local interest and supplement federal and state legislation when pertinent (Article 30).

This division of responsibilities is not without conflict. In particular, common responsibilities – understood as those areas in which joint action from different entities (Union, states or municipalities) should be envisaged to put in practice fundamental social policies – are difficult to implement. According to the Constitution, a supplementary law shall establish ways of co-operation between the Union, the states, the Federal District and municipalities. This has not been issued for each of the different policy fields, creating legal uncertainty about the action of the different levels of government. There are, however, positive examples of co-operation between levels of government in different common policy areas, such as health.[18] In some cases, federal regulatory authorities also co-operate with state regulatory authorities for enforcement and supervision; such is the case, for example, with ANTT and ANEEL.

In some economic sectors, responsibilities and competencies for each of the political entities involved are not always clearly defined, which creates ambiguities and reduces the effectiveness of the appropriate government action. Issues of concern for the better functioning of the federal system concerning regulatory powers in Brazil are:

- The limits of the legal competency of the Union, in particular for concurrent powers, to establish general norms.
- The legislative and regulatory competence of the Union and its relationship with the other federal entities.

The quality of regulation at sub-national level is also linked to the capacities of different levels of governments to respond to changing environments and to produce laws and regulations following quality standards. States and municipalities also produce laws and regulations not systematically subject to quality controls, even if major differences exist between more developed entities than others. This exacerbates a tendency toward litigation between different levels of government, an issue not unique to Brazil. Conflicts between federal and state laws are frequent and have to be solved through judiciary review, not only because of the uncertainty of the level of competence, but also because of poor drafting and the complexity and deficiencies of the legal system.[19]

Even if mechanisms for co-ordination among institutions at different levels of government exist, they are not frequently exercised; this is due to the division of powers established by the Constitution. The case of regulatory agencies at sub-national level is paradigmatic. The decentralisation and privatisation processes, as well as divergences between the Union and the states, have led to the creation of a large number of regulatory agencies at state and municipal level (see Tables 1.A1.1).[20] This has created a situation in which there are competing authorities, exclusive authorities and complementing authorities. In most cases, sub-national agencies have been created only after the privatisation of the service took place, which has reduced the consolidation of their governance structures. This contrasts with what happens at national level, where agencies tend to be multi-sectoral: 56.5% of them regulate different services and are not specialised.[21] In that, they are more similar to the US Public Utilities Commissions.

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Box 1.9. **Institutional forms of co-ordination mechanisms across levels of government in OECD countries**

In *Spain* the relations between the central government (General State Administration) and the Autonomous Communities are based on the essential principle of co-operation between public administrations. This co-operation is implemented by a series of instruments, such as administrative agreements, sectional conferences and bilateral co-operation commissions, as well as various bodies that debate and take decisions on important issues concerning all public administrations.

Canada has an extensive set of institutional arrangements for managing relations between federal and provincial governments. Central to this are the "First Ministers' Meetings", which are called by the prime minister as the need arises rather than according to a set timetable. The meetings constitute a forum for promoting inter-jurisdictional co-operation, and a substantial number of inter-governmental agreements have been signed on these occasions, many related to regulatory harmonisation and co-operation.

In *Switzerland*, there are a number of forums facilitating dialogue between federal and cantonal (as well as municipal) authorities and offering settings for debate of proposals of cantonal authorities and the possibility to transmit them to federal authorities. The most relevant are the following: *a) Conferences of Cantonal Directors*, composed of the directors of the 26 cantons in 13 policy areas, serving to two purposes – *i)* co-ordination between the cantons and *ii)* co-ordination between cantonal and federal authorities. Although officially run by the cantonal governments, the relevant members of the Federal Council and high-ranking federal public officials are invited to these meetings. Federal authorities present plans and proposals for new laws/regulations, which are discussed with the cantonal ministers. The cantonal ministers on the other hand present proposals, or requests, or point to problems in federal-cantonal relations; *b)* the *Conference of Cantonal Governments*, created in 1993, serves as a co-ordinating organism among cantons and as a lobby group of cantonal interests in all matters that go beyond the range of the 13 policy-oriented "conferences of cantonal ministers" or the conference of cantonal chancellors. The Conference of Cantonal Governments thus discusses institutional matters of overall importance; highly important matters (mostly of cross-sectional character); and those matters that transcend a single policy domain (*e.g.* foreign policy with regard to European integration); *c) Federal Dialogue* is a forum in which a delegation of the Federal Council and a delegation of the "Conference of Cantonal Governments" biannually discuss questions and projects of overall importance; *d)* the *Tripartite Agglomeration Conference* assembles representatives at the federal, cantonal and municipal level. It serves to streamline policies for the metropolitan areas and urban centres of Switzerland.

In *Italy*, the new constitutional balance of powers among different levels of government resulted from the 2001 constitutional amendments; co-ordination mechanisms have a fundamental role to play in regulating the relationship between national, regional and local levels. The main mechanism in Italy for this purpose is the so called "conference" system, based on three specific co-ordination bodies: 1) the *Conference of State-Regions*; 2) the *Conference of State-Municipalities and other Local Authorities*; and 3) the *Unified Conference of State-Regions-Municipalities and Local Authorities*. The three Conferences are held in the prime minister's office and constitute the most important co-operation instrument to co-ordinate the different levels of government. A law proposed in December 2006 aiming at unifying the three Conferences into one institutional body is pending in Parliament.

Administrative capacities for making new regulations

This section reviews how current processes for making legislation and subordinate regulations support applications of core principles of good regulation. It describes and evaluates systematic capacities to generate high-quality regulation, and to ensure that both processes and decisions are transparent to the public.

Administrative transparency and predictability

Transparency of the regulatory system is essential to a stable and accessible regulatory environment that promotes competition, trade and investment, and helps insure against undue influence by special interests. Transparency reinforces the legitimacy and fairness of regulatory processes. It involves a wide range of practices, including standardised processes for making and changing regulations; consultation with interested parties; plain language in drafting; publication; and codification. Transparency thus serves to make rules easy to understand and helps make the implementation and appeals processes predictable and consistent.

Transparency of procedures for making new laws and regulations

Transparent and consistent processes for making and implementing legislation are fundamental to ensuring confidence in the legislative process and to safeguarding opportunities to participate in the formulation of laws.

In the Brazilian system, law proposals that require presidential sanction must be submitted to the Civil House for analysis; that analysis should follow the requirements established in Decree 4 176 from 28 March 2002, which establishes norms and guidelines for the elaboration, wording, consolidation and preparation for the normative acts of authority of the bodies of the federal executive branch.

Concerning administrative procedures, there is no standardised elaboration of new regulatory acts foreseen by specific laws. The infra-legal level of regulations (ordinances, resolutions, etc.) is developed under the sole responsibility of the concerned body.

Transparency as dialogue with affected groups: use of public consultation

Public consultation gives citizens and businesses the opportunity to make a contribution in regulatory decisions. A well-designed, well-implemented consultation programme can contribute to higher-quality regulations, identification of more effective alternatives, lower costs to business and administration, better compliance, and faster regulatory responses to changing conditions. Just as important, consultation can improve the credibility and legitimacy of government action, win the support of groups involved in the decision-making process, and increase acceptance by those affected.

Consultation procedures during the law-making process

Consultation with affected parties is not compulsory in Brazil, but in general every draft of a regulatory act that has an important impact on consumers or users is submitted for consultation and/or to a public hearing. The objectives of this procedure are to acquire useful information for the decision-making and better understanding of relevant aspects of the issue to be regulated, and to publicise the regulatory act.

Decree 4 176 from 2002 establishes that it is the responsibility of the Civil House of the Presidency of the Republic to decide about promoting greater awareness of the basic text of

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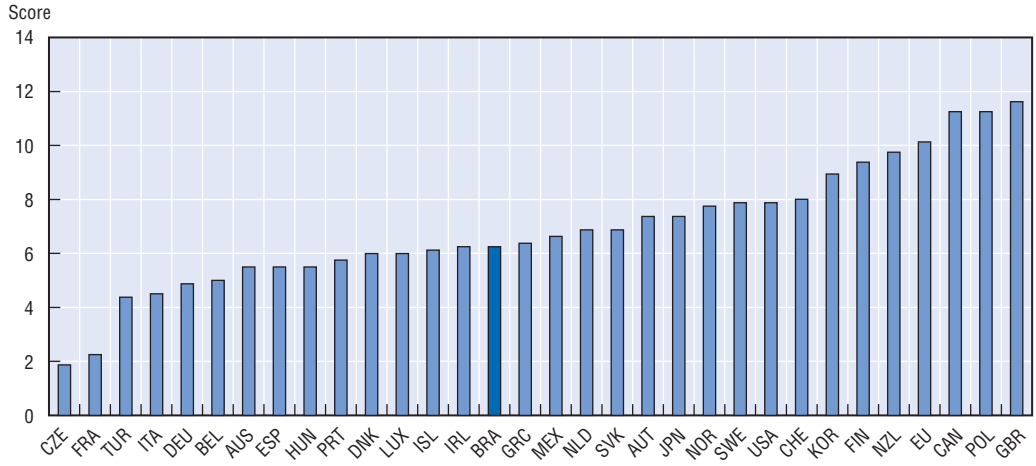
Figure 1.2. **Quality of the consultation process**



Notes: The above figure presents an aggregate of the results of countries' responses to a range of related questions on the topic of consultation procedures. The questions included whether consultation was a routine part of developing primary and subordinate regulation, the variety of consultation methods routinely used, the length of time that is allowed for public responses, whether the views collected are included in RIA and whether there is a process for reviewing the quality of the consultation processes. Weighted scores were applied according to possible responses, with higher scores applied to more elaborated consultation processes.

The figure is intended to illustrate, with a two-year lag, the general position of regulatory quality management systems in Brazil relative to OECD member countries. It is based on comparing responses received from Brazil in 2007 to a questionnaire on indicators on regulatory quality management systems with those provided by OECD member countries in 2005. A higher score means that consultation processes are more formally structured and should in theory offer more opportunities for input. The current position of OECD countries may have changed in the intervening period.

Source: Jacobzone, S., G. Bounds, Ch.-W Choi, C. Miguet (2007), "Regulatory management systems across OECD countries: indicators of recent achievements and challenges", OECD Working Papers on Public Governance, No. 74.

the project of normative acts of special political and social relevance. This can be done by putting the law proposal on the website (*www.planalto.gov.br/ccivil_03/Consulta_Publica/consulta.htm*) or by holding public hearings, always with the objective of receiving suggestions from bodies, entities or people.[22] However, the Civil House only participates in the actions that come under the authority of the President of the Republic (provisional measures, laws and decrees). Overall, when assessed against the general background of consultation practices in OECD countries, Brazil appears to be close to the OECD average in terms of formal provisions for consultation, on a par with countries such as Greece, Mexico, Portugal and Denmark. However, the size of the country and its multiple economic centres, reinforce the challenge of consultation and co-ordination.

Forward planning

Forward planning has proved useful for improving the transparency, predictability and co-ordination of regulations. It fosters the participation of interested parties as early as possible in the regulatory process, and can reduce transaction costs through giving more extended notice of forthcoming regulations. A number of OECD countries have established mechanisms for publishing details of the regulation they plan to prepare in the future.

Brazil does not have a consolidated process or document that indicates the most important regulatory actions that the executive power intends to issue, whether at the level of the central administration or at that of regulatory agencies. The information

containing current proposals of different legal instruments made by the Executive is available for information in a website maintained by the Office of Legal Affairs of the Civil House: *www.planalto.gov.br/ccivil_03/Projetos/Quadros/principal2003.htm*.

Transparency in the implementation of regulation: communication

Another dimension of transparency is the effectiveness of communication and accessibility of the rules for regulated entities. Regulatory transparency requires that governments effectively communicate the existence and content of all regulations to the public.

According to Article 5 of the Constitution on fundamental rights and guarantees, access to information is ensured to everyone and the confidentiality of the source shall be safeguarded. Article 37 of the Federal Constitution establishes that "the direct and indirect public administration of any of the branches of the Union, States, Federal District, and Municipal Districts shall obey the principles of legality, impersonality, morality, publicity and efficiency, among others".

Due to this provision, several laws call for the publication and communication of the decisions and acts of public authorities. Among them, Law 9 784/1999 (Law of the Administrative Process) is relevant, establishing that "in the administrative processes, there shall be the following, *inter alia*, of the criteria of (…) official publication of administrative acts, except in the case of the hypothesis of confidentiality established in the Constitution".

The National Printing Office (*Imprensa Nacional*) has been publishing (since 1862) the official gazette *Diário Oficial*, in which are included all administrative acts by the Brazilian government. The electronic version (*www.in.gov.br/imprensa/jsp/destaque.jsp*) has been available since 1994, and contains three sections: *i)* publication of laws, decrees, resolutions, normative instructions and other legal acts; *ii)* publication of acts of interest for civil servants; and *iii)* publication of contracts and other public announcements.

Concerning dissemination of the legal framework, there are several websites (Presidency of the Republic – *www.presidencia.gov.br*, the Brazilian Parliament – *www.camara.gov.br* and the Brazilian Senate – *www.senado.gov.br*) with databases that cover the whole federal administration. The government has made available a database (*base da legislação federal*) at the following address: *www.presidencia.gov.br/legislacao*; it contains all normative acts at a high level since the proclamation of the Republic in 1889. It is responsibility of the Office for Legal Affairs of the Civil House to update it regularly.

The Secretary for Legal Affairs of the Ministry of Justice is establishing Sisnorma (*Sistema de Acompanhamento de Normas*), a system that makes available the heritage of the Legal Documentation Co-ordination (*Coordenação de Documentação Legislativa, CDL*), which is composed by around three million documents and 370 000 reference files. The system contains all constitutional amendments, supplementary laws, provisional measures, legislative and presidential decrees, and ordinary laws with their respective discussions in the National Congress, indicating the proposed changes, revocations and codification. Sisnorma is available at: *http://sisnorma.mj.gov.br*.

However, contrary to some European countries, such as France with the Commission for Access to Administrative Documents (*Commission d'Accès aux documents administratifs, CADA*), or Mexico with the Federal Institute for Access to Information (*Instituto Federal de Acceso a la Información Pública, IFAI*), Brazil has not until now felt the need to create a specific federal authority in charge of transparency. On the whole, practices towards transparency

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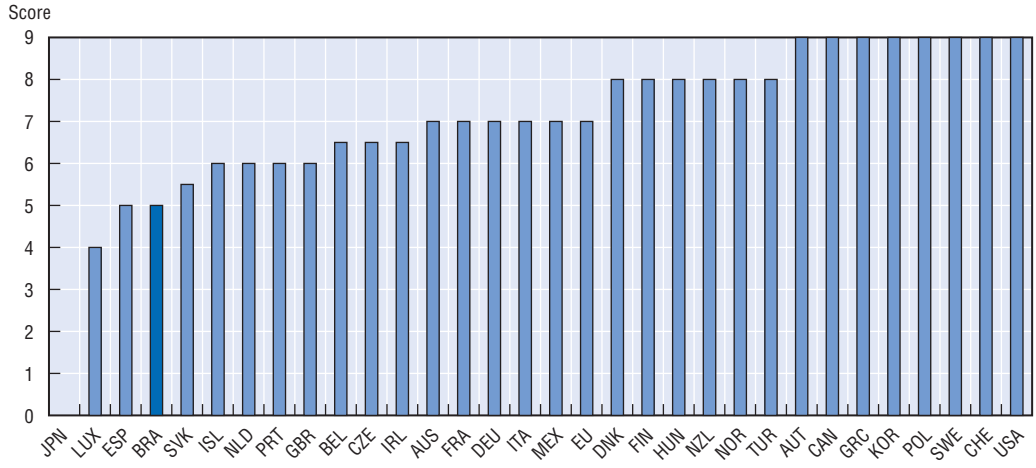
Figure 1.3. **Transparency and easy access to regulations**



Notes: The above figure presents an aggregate of the results of countries' responses to a range of related questions on the topic of transparency and easy access to regulations. The questions included whether there were systematic procedures for making regulations known and accessible to affected parties, whether this included codification of primary laws, with possible regular updates, publication of a consolidated register of all subordinate regulations currently in force, with a possible provision that only those regulations in the registry be enforceable, public access to the Internet of either primary laws or subordinate regulations, and existence of a "plain language" drafting policy, with possible corresponding guidance. Weighted scores were applied according to possible responses, with higher scores applied to more elaborated processes for transparency and easy access.

The figure is intended to illustrate, with a two-year lag, the general position of regulatory quality management systems in Brazil relative to OECD member countries. It is based on comparing responses received from Brazil in 2007 to a questionnaire on indicators on regulatory quality management systems with those provided by OECD member countries in 2005. A higher score means that more mechanisms are in place to ensure transparency and easy access to regulation. The current position of OECD countries may have changed in the intervening period.

Source: Jacobzone, S., G. Bounds, Ch.-W Choi, C. Miguet (2007), "Regulatory management systems across OECD countries: indicators of recent achievements and challenges", OECD Working Papers on Public Governance, No. 74.

and access to regulations appeared less developed than in most OECD countries in 2005. For example, consolidation of all the sub-legal regulations remains unfinished. Similarly, there are no provisions that only the official regulations mentioned in public registries are enforceable, and a lack of systematic codification and update.

Plain language

Decree 4 176 of 28 March 2002 stipulates that normative texts should be written with clarity, accuracy, and logical order. To enhance clarity, words and expressions in common use should be preferred, unless the topic corresponds to a technical matter. Sentences should be clear and precise, avoiding redundancies and neologisms. Accuracy can be reached by using a simple language that expresses the intended objectives, the content and the scope of the normative act. Instructions on how to convey the logical order of a law are also stipulated.

The Manual for Law Drafting in the Executive Branch constituted the first attempt by the government to set up and standardise the editing rules for acts and official communications, simplifying the administrative language. The Manual has been followed by all the organs comprising the Brazilian public administration, standardising the language and the structure of the official communications and the normative acts enacted in the federal executive, providing both a style code and legislative drafting manual.

Transparency in the implementation of regulation: compliance, enforcement and appeal

Design, adoption and communication of regulation are not sufficient. To achieve its intended objective, a regulation must be implemented, enforced and complied with. A mechanism of appeal should also be in place, not only as a democratic safeguard of a rule-based society, but also as a feedback mechanism to improve regulations, as mentioned in the OECD 2005 *Guiding Principles for Regulatory Quality and Performance*.

Compliance and enforcement

In Brazil there is no specific policy to assess the possibility of compliance with regulations. In OECD countries, *ex ante* assessment of compliance is increasingly part of the regulatory process, although the level of resources and attention focused on it varies significantly (Box 1.10).

Box 1.10. **Initiatives of *ex ante* assessment of legislative proposals' enforceability in OECD countries**

In the *Netherlands*, the "Table of Eleven" is used both to guide reviews of compliance and enforcement relating to existing legislation and as an analytical tool in the development of new regulation. The Table is structured in three parts: *spontaneous compliance dimensions*, *control dimensions* and *sanctions dimensions*. This "checklist" approach can help regulators consider compliance issues in detailed, systematic fashion, and also provide a useful review and quality control tool. In the *United Kingdom*, government policy and guidance on the preparation of regulations include explicit considerations on securing compliance. Policy makers are encouraged to consider a variety of compliance factors, including taking a balanced approach between high compliance and (over-)active enforcement. In *Canada*, implementation and compliance strategies are also required to be explicitly and publicly discussed as part of the preparation of a regulatory proposal.

Source: OECD (1999), *Regulatory Reform in the Netherlands*, Paris; OECD (2001), *Regulatory Reform in the United Kingdom*, Paris; OECD (2002), *Regulatory Reform in Canada*, Paris.

Compliance problems in Brazil are inevitable, as authorities and institutions sometimes lack precise definitions of functions and responsibilities during the regulatory process, and co-ordination among bodies and levels of government is missing.[23] Limited analysis of the impact of regulations cannot be used as empirical evidence about the way citizens and business could cope with the effects of the proposed law or regulations. Effective checks on the application of regulations are not systematically undertaken.

Government capacity to apply and enforce regulations can also be supported by knowledge and understanding of the regulatory requirements imposed on businesses and citizens, as well as their willingness to comply with them. In Brazil, however, legal and institutional uncertainty is sometimes generated by conflicts and unco-ordinated behaviour. The prevalence of the informal economy also imposes compliance and enforcement constraints for government action.

Compliance is facilitated by different methods of supervision and control. One of the responsibilities of the Federal General Attorney (*Advocacia-Geral da União, AGU*) is to minimise the risk of complaints by making legal control of law proposals *ex ante*. This institution also contributes to conciliation, as the legal representative of the executive

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power. Recent initiatives envisage creating a body responsible for conciliation that could support *ex ante* analysis of legal and constitutional issues.

The bodies and entities of the federal executive branch, subject to accountability and responsibility, should on a regular basis provide a management report to the Federal Court of Accounts (*Tribunal de Contas da União, TCU*), together with an auditing certificate, an opinion from the internal control body, and a statement of the state minister supervising the area. The institution has to make the report public thirty days after it is delivered. The TCU, which is accountable to the federal parliament, has also accomplished several comprehensive operational audits of public policies. Those audits evaluate the government capacity to reach results as a whole and the public policies during formulation and drafting. The TCU has been critical in these reports, showing that results are sometimes neither achieved nor justified. The Federal General Comptroller (*Controladoria-Geral da União, CGU*), as part of its responsibilities for auditing and comptroller, has recently assessed the quantitative and qualitative management results of regulatory agencies in relation to efficiency of compliance with objectives.

The Public Prosecutor

The Public Prosecutor *(Ministério Público, MP)* in Brazil is an extremely active watchdog of political actors. This institution does more than prosecute, acting in the name of the State, those who commit crimes. Due to changes that began in 1985, when a legal instrument known as the "public civil suit" (*ação civil pública*) was created, the Public Prosecutor can, in addition, take to court any person or entity doing harm to the environment, consumer rights, or the artistic, cultural, historical, tourist or landscape patrimony of the nation. These public civil suits can be initiated by states, municipalities, public companies and civil society, but in practice it is the Public Prosecutor that takes the initiative or is invoked to do so.

The 1988 Constitution amplified the scope of these public civil suits by stating that it is the institutional role of the Public Prosecutor to "promote civil inquiries and public civil suits for the protection of public and social patrimony, or the environment and of other diffuse and collective interests" (Article 129-III). With this decision, the Constitution established that issues of a political nature could be also brought into the judicial arena.[24] The Constitution also granted this institution the instruments to carry out its role: Autonomy in terms of isolation from interference and in terms of budget; resources such as highly competitive salaries for its staff; and powerful legal and judicial instruments, such as the capacity to impose fines or to ask for free advice from the police or other governmental organisations in order to investigate a given issue. This has contributed to make the Public Prosecutor a body that actively participates in policy making: As "the advocate of society", it defends many diffuse and collective interests and has an impact on other political actors. It can constrain political action, but also serve as arbitrator, mediator, co-ordination mechanism and notary. The Public Prosecutor also plays an important role in ensuring consumer protection, including in the regulated sectors.

The Brazilian system of ombudsmen

In Brazil, the function of the ombudsman (*ouvidor*) arises from constitutional principles by which the direct or indirect public administration shall obey the principles of lawfulness, impersonality, morality, publicity and efficiency (Article 37). *Ouvidor* is a professional that is present in almost all public and private entities in Brazil. The main

function of the *ouvidor* is to defend citizens whose rights were damaged or threatened by acts from the public administration. Any citizen has the right to present a direct complaint to the *ouvidor*, orally or in written form. The *ouvidor* has no decision power; his/her work is based on persuasion methods and recommendations to reformulate decisions in case they have been against the client and user.

These same orientations guide the General Ombudsman of the Republic (*Ouvidoria Geral da República*), an institution linked to the General Comptroller of the Union (*Controladoria-Geral da União, CGU*). It is responsible for collecting, revising and forwarding any complaint, suggestion or praise related to the procedures and actions of agents, agencies or entities of the federal executive. The General Ombudsman is also competent to co-ordinate all other *ouvidorias* across agencies of the Federal Government and to produce quantified data and an annual report[25] on the user's level of satisfaction of public services offered by the public administration.

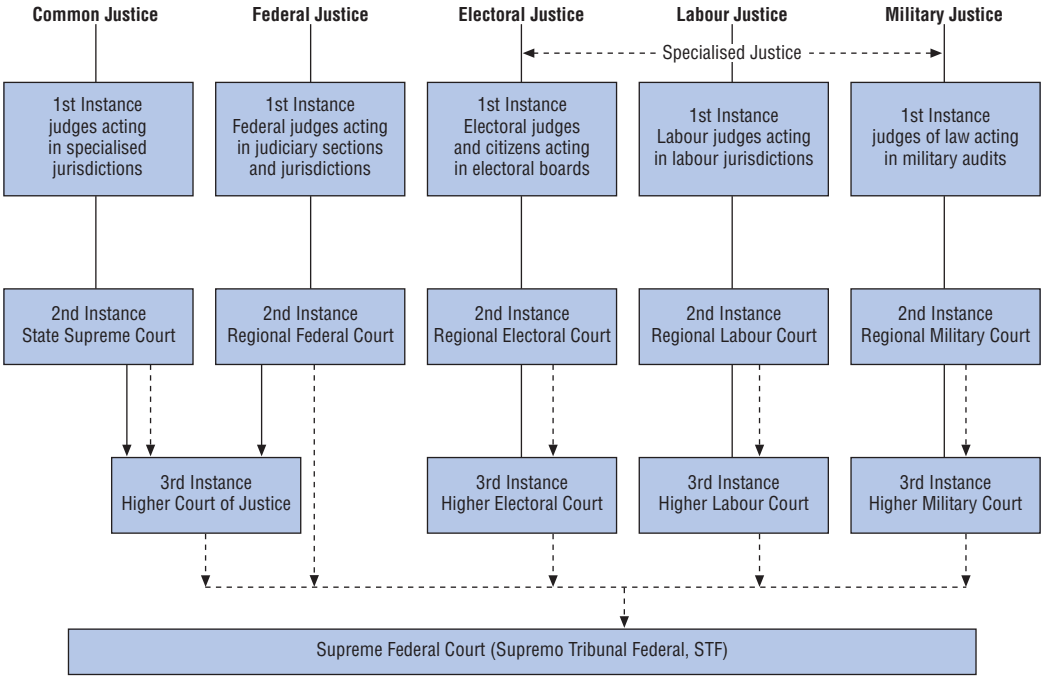
Public redress and appeals

A sound regulatory system requires clear, fair and efficient procedures to appeal administrative decisions based on a regulation as well as the regulation itself.

The Federal Constitution, in Article 5, establishes that "no one shall be deprived of freedom or of his/her assets without the due process of law; that everybody, within the legal and administrative sphere, is ensured the reasonable duration of the process and the means that guarantee the celerity of its procedure (and that) litigants, in judicial or administrative processes, as well as defendants in general, are ensured of the adversary system and of full defence with the means and resources inherent to it".

The Brazilian judiciary is divided into federal and state court systems (see Figure 1.4), each having a different jurisdiction. The prerogatives and duties of judges are the same,

Figure 1.4. **The judicial system in Brazil**



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Box 1.11. **Appeals procedures in Brazil**

The Brazilian system of appeals functions in the following way. In first instance, cases are heard by federal or states judges, who act in forums, judiciary sections or specialised jurisdictions (*varas*). The country is divided into judicial districts named *comarcas*, which are composed of one or more cities. Each *comarca* has at least one court of first instance. There are specialised courts of first instance for family litigation or bankruptcy in some cities and states. Judgements from theses district courts can be the subject of judicial review following appeals to the courts of second instance. Judgements of courts of first instance are usually made by only one judge. The Brazilian judiciary system uses jury trials only for judging crimes against the person.

The sentences can then be appealed to the respective regional court: the states' supreme courts or regional federal courts. Each state has a State Supreme Court (*Tribunal de Justiça – TJ*) where the Governor, with approval by the State Assembly (*Assembléia do Estado*), appoints the judges to the court. This court has the prerogative of appointing special state circuit judges to deal with agrarian problems. In addition, it is responsible for organising and supervising the lower state courts.

Concerning the federal judicial branch, the national territory is divided into five regions, which are composed of one or more states. Each region is divided in judiciary sections (*seções judiciárias*) with a territory that may not correspond to the states' *comarcas*. The "judiciary sections" have federal courts of first instance and each region has a federal regional court (*Tribunal Regional Federal*) as a court of second instance. The five federal regional courts – Recife, Brasília, Rio de Janeiro, São Paulo, and Porto Alegre – were created by the 1988 constitution. Each federal regional court must have at least six judges, appointed by the president and approved by the Senate.

In addition to the regular civil court system, Brazil's judicial system has a series of special courts, covering areas such as military, labour, and electoral affairs. In cases concerning these matters, the appeal of a first instance decision is heard in the specialised regional court: regional electoral court (*Tribunal Regional Eleitoral, TRE*), regional labour courts (*Tribunal Regionais do Trabalho, TRT*) and military justice court (*Tribunal de Justiça Militar, TJM*).

Sentences can be appealed in the third instance courts. The Higher Court of Justice (*Superior Tribunal de Justiça, STJ*) is the highest court in non-constitutional issues in Brazil and grants a special appeal (*recurso especial*) when a judgement of a court of second instance offends the federal statute provision or when two or more second instance courts make different rulings on the same federal statute. There are parallel courts for labour law, electoral law and military law: the higher electoral court (*Tribunal Superior Eleitoral, TSE*), the higher labour court (*Tribunal Superior do Trabalho, TST*), and the higher military court (*Superior Tribunal Militar, STM*). These courts do not analyse any factual questions in their judgements, only the application of the law and the Constitution. Facts and evidence are judged by the courts of second instance.

The Supreme Federal Court (*Supremo Tribunal Federal, STF*) grants extraordinary appeals (*recurso extraordinário*) when judgements of second instance courts violate the constitution. The STF is the last instance for the writ of habeas corpus and for reviews of judgements from the STJ, and is the only federal court responsible for checking constitutionality matters.

the only differences being in the competences, structure and composition of the courts. Both systems are subordinated to the Supreme Federal Court (*Supremo Tribunal Federal, STF*), which is the court of last instance in cases involving constitutional law. The federal system is composed of courts of appeals and, in the first instance, superior courts. Each state has its own constitution and establishes its own judiciary, and each has a court of appeals and courts of first instance. Federal courts only have jurisdiction over commercial cases that involve the government.

The Brazilian judicial branch is composed of the *Supreme Federal Court*, the *Higher Court of Justice*, the federal regional courts and federal judges, the labour courts and judges, the electoral courts and judges, the military courts and judges, and the courts and judges of the states and of the Federal District. The jurisdictions of the Supreme Federal Court, the Higher Court of Justice, and the higher courts cover the entire territory.

Administrative appeals

Law 9 784 from January 1999 regulates the procedures of the federal public administration and establishes basic norms for administrative procedures within the federal administration, aiming at protecting the rights of the citizens and at better compliance with the objectives of the administration. The claimants who can log an administrative appeal are the following: Those entitled with rights and interests and who are part of the process; those whose rights and interests were indirectly affected by the decision; organisations or representative associations, related to collective rights and interests; and citizens or associations, in terms of diffuse rights or interests. Administrative appeals can be filed ten days after the decision was taken; the period for filing should not exceed thirty days. In case of non-action, the affected parties can appeal the decision up to three administrative instances. The administrative appeal does not suspend the decision.

The judiciary and regulatory quality

The role of the judiciary is essential for regulatory quality control and better economic performance. The effectiveness of the process arises from the ability of the judiciary to consider regulations' consistency with principles of constitutionality, including notably proportionality and the right to be heard. It also arises from courts' scrutiny of whether delegated legislation is fully consistent with primary legislation.

In Brazil, the liberalisation of economic sectors and privatisation of formerly state-owned companies brought new responsibilities for the judicial branch, mainly to guarantee property rights and to make stakeholders and the state comply with contracts. The situation has led to an increase in caseloads, which has made evident the need to reform the judiciary system in order to make it more efficient and diligent. Two of the main concerns facing Brazil's legal system are a lack of public confidence and slow processing times (see Tables 1.2 and 1.3).

These perceptions also have important consequences for the way businesses relate to the judiciary system. While many businesses also contribute to the distortion of the judiciary system by appealing government decisions in order to slow down the process and take advantage of the delay, others have opted for avoiding any contact with the judiciary – even if that would imply loss of opportunities and greater inefficiency. The costs that this situation imposes on the economy as a whole have been estimated by calculating the

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Table 1.2. **Public confidence in the judicial system**

Why is it not worth it to seek justice?	Agrees (%)
Justice is slow	39.8
Justice does not work	29.1
Justice is not trustworthy	22.3
Justice is expensive	4.4
Others	4.4

Source: Centro de Pesquisa de Opinão Pública DATAUnB (2005), *Pesquisa de Imagem do Judiciário junto a População Brasileira*, 13º Relatório de Atividades, Universidade de Brasília, Brazil, October, p. 13.

Table 1.3. **Opinion about the time for cases in justice**

Main reason for the duration of judicial processes	Percentage
Complexity of justice	30
The judges	23.5
The law	18.8
The lawyers	7.1
Civil servants of the judiciary	6.9
The interested parties	3.8
Prosecutors	3.5
Does not know	6.4

Source: Centro de Pesquisa de Opinão Pública DATAUnB (2005), *Pesquisa de Imagem do Judiciário junto a População Brasileira*, 13º Relatório de Atividades, Universidade de Brasília, Brazil, October, p. 17.

impact of an improved judiciary on other issues: the volume of annual investment could increase by 13.7%, and the number of enterprises could grow by 18.5%.[26]

In Brazil there is the phenomenon of the "judicialisation" of political conflict, understood as the tendency of political powers to transfer to the judicial branch disputes of a highly political nature that are not solved within their proper spheres, leading to the "politisation" of the judiciary.[27] One instance of this is the legislative procedure in which the incapacity to produce clear political majorities to approve unambiguous and well-defined laws leads to ambiguous texts requiring political compromise. This leaves the more difficult issues and tradeoffs to the judiciary to handle at a later stage.

The judiciary is then placed in a situation where it is responsible for arbitrating political conflicts, instead of simply applying the law. This too can be a source of legal unpredictability. Very few regulatory reforms aimed at redefining the role of the state in Brazil were approved without being subject to some form of veto by the judiciary. On the contrary, several cases demonstrate the impact of judges and of judicial courts o the policy-making process. These cases raise the questions of "when", "how much" and "how" those actors: *i)* constrain the set of policy choices available, *ii)* influence the processes of implementing public policies and *iii)* change the courses of reforms undertaken in Brazil since the re-democratisation of the 1980s.

Choice of policy instruments: regulations and alternatives

A core administrative requirement for quality regulation is the ability to choose the most efficient and effective policy tool, whether regulatory or non-regulatory. With experimentation, the range of policy tools and their use has expanded, as has learning and understanding of the potential role of markets. At the same time, administrators often face risks in using relatively untried tools, highly conservative bureaucracies are reluctant, and

there are typically disincentives for public servants to be innovative and use alternatives to regulations. Reform authorities must take on a clear leading role – supportive of innovation and policy learning – if alternatives to traditional regulation are to make serious headway into the policy system.

Since the 1990s – and in accordance with the privatisation of state-owned enterprises, the elimination of state monopolies, the creation of regulatory agencies and the introduction of competition mechanisms in different sectors providing essential services, command and control mechanisms have been accorded only secondary importance, underlining the idea that competitive pressure makes companies more productive and efficient.

The use of alternatives to regulations is not yet widespread in Brazil. There is, however, a request to reflect on possible alternatives to the regulatory measure when drafting law proposals. Decree 4 176 from 2002, in its Annex 1.A1, lists issues that should be taken into consideration while elaborating normative acts. Section 2 of this annex refers to the use of alternatives and looks at whether they are available to policy makers (Box 1.12).

Box 1.12. **The use of alternatives in the Brazilian regulatory system**

The questions listed in Decree 4 176 from March 2002 related to the use of alternatives available to policy makers are the following:

- What is the result of the analysis of the problem? What the origins of the problem? Under which conditions can the action to undertake have an effect?
- What instruments seem adequate to reach the expected objectives, in general or in part? (Examples: measures for the execution of existent regulations; campaigns to work with public opinion, broad understandings; agreements; investments; incentives; support to find solutions for those affected by regulations; use of judicial review to solve problems.)
- What are the adequate instruments, considering the following aspects?
  - Burdens on citizens and the economy.
  - Efficiency (precision, degree of probability that the expected goal will be reached).
  - Costs and expenses for the public budget.
  - Effects on the legal order and already established objectives.
  - Secondary effects and other consequences.
  - Understanding and acceptance from those affected and responsible for the execution.
  - Possibility of appeal before the judiciary.

Source: Decree 4 176, Annex I, March 2002, p. 16.

Voluntary agreements

Voluntary agreements are established when companies take voluntary action to address a policy concern that may stave off more onerous government regulation. A government using the credible threat of possible future regulation can encourage an industry to deal with the issue itself rather than actually taking the step of implementing regulation. Firms may enhance their reputation and hence increase sales via participation in voluntary associations.

The Brazilian authorities are promoting voluntary agreements, especially in the environmental field. For example, an employer-union collaboration – that also included government officials and institutions – was signed to address the benzene contamination of workers. Unlike joint government and industry agreements, trade unions were here an equal partner. This nationwide voluntary agreement – which eventually became the "Tripartite Agreement on Benzene" – spurred significant reductions in benzene emissions in the metal and petrochemical industries.[28] Voluntary agreements have also been proposed to sign with the sugar cane industry, as Brazil is the world's top supplier of ethanol, over the government's demand for a local price cap and instead of imposing export quotas if international prices become too attractive. Voluntary agreements have also been signed for implementation of the Globally Harmonised System for Classification and Labelling of Chemicals (GHS). The system's implementation began in 2001, through the setup of a sub-group of the National Commission on Chemical Safety; the group, chaired by the Ministry of Development, Industry and Foreign Trade, also included other ministries and stakeholders.

Education and information policies

These instruments act to change behaviour by making more information available, so that businesses and consumers can make more informed decisions as opposed to having one universal solution imposed on them, as is often the case with traditional command and control regulation. Information and education campaign are examples of these instruments

Box 1.13. **The Crescendo Project: Regulation and Active Citizenship**

The project "*Crescendo: Regulação e Cidadania Ativa*" was launched in 2002 by the Regulatory Agency of Public Services (energy, transport and communications) of the State of Bahia (*Agência Estadual de Regulação de Serviços Públicos de Energia, Transportes e Comunicações, Agerba*) in co-operation with the federal regulatory agency for electricity (*Agência Nacional de Energia Elétrica, ANEEL*).

The project consists of school campaigns in which teachers are trained in and pupils informed on the importance of public services, in particular electricity and transport, and the rights of consumers. In the State of Bahia, experts have visited more than 1 800 public schools and education institutions, and the project has reached more than 1.5 million pupils. The goal is to disseminate information about the objectives and services provided by the regulatory agency, underlining the right of consumers and citizens, as well as their social responsibilities.

The information campaign includes two kits of teaching materials, one for the electricity and another one for the transport sector. The kits include books, videos and CDs that describe the institutional reform of the electricity sector, the regulatory agencies, the legal principles and normative aspects of the regulatory frameworks, the quality of the services, and the rights and obligations of users.

Standardisation

The Brazilian Association of Technical Standards (*Associação Brasileira de Normas Técnicas, ABNT*)[29] is the body responsible for technical standardisation in the country, providing the necessary foundation for Brazil's technological development. Created in 1940, it is a private non-profit entity, recognised as the only National Forum of Standardisation

through the Resolution Number 07 of the National Council of Metrology, Standardisation and Industrial Quality (*Conselho Nacional do Metrología, Normalização e Qualidade Industrial, CONMETRO*) from 24 August 1992.

The ABNT is a founding member of the ISO (International Organisation for Standardisation), COPANT (Pan-American Commission of Standards) and AMN (Mercosul Standardisation Association). It is Brazil's sole representative in the international entities ISO and IEC (International Electro-technical Commission); and in the regional normalisation entities COPANT and AMN.

Self-regulation

In Brazil, several professions are self-regulated: physicians, dentists, lawyers, etc have professional councils. The most widely known of these are the Federal Council of Medicine (*Conselho Federal de Medicina*), created in 1957, and the Brazilian Bar Autarchy (*Ordem dos Avogados do Brasil*), established in 1930.

The Brazilian Stock Exchange is also self-regulated. It has the authority to monitor its members and the security of its operations carried out within it, following Article 17 of Law 6 385/1976. An example of successful self-regulation created by the São Paulo Stock Exchange (BOVESPA) is the "Listing Regulation of the New Market" and the "Regulation of Differentiated Practices of Corporate Management". Those instruments helped to structure a type of self-regulation that aims at developing the stock market, and the defence of the public interest is ensured by the established model's framework. In the financial market, the National Association of Investment Banks (*Associação Nacional dos Bancos de Investimento, ANBID*) proposed to the group of institutions participating in the securities market that they implement self-regulation codes for their activities, such as the distribution of public offers and the acquisition of securities, investment funds, continued certification programmes, qualified services to the stock market, and private banking in the domestic market. Similarly, the Brazilian Federation of Banks (*Federação Brasileira de Bancos, FEBRABAN*) has been discussing the creation of a self-regulation code for the activity of financial institutions.

Box 1.14. **Self-regulation in the Brazilian health system**

Hospital accreditation is one of the most representative cases of self-regulation in Brazil's health system. This standard allows the Ministry of Health to make investments through the REFORSUS programme (*Reforço a Reorganização do Sistema Único da Saúde*), aimed at inducing private bodies to participate in the National Accreditation Organisation (*Organização Nacional de Acreditação, ONA*). This has resulted in the creation of quality standards in the market and has reduced the costs of bureaucratic regulation stimulating competition among hospitals for public and private resources.

Self-regulation is also represented in the health system by professional councils that regulate individual professional practice through the elaboration of norms and ethical proceedings. These institutions are considered part of the Brazilian state as a result of traditional corporate legislation. This could be seen as paradoxical in terms of a self-regulation system, but they enjoy the organisational autonomy obtained after the political re-democratisation process in the country and the professional autonomy of physicians and dentists.

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In Brazil the National Council of Advertising Self-regulation (*Conselho Nacional de Auto-regulamentação Publicitária, CONAR*) is a non-governmental organisation aiming to promote freedom of speech in advertising and defend the constitutional prerogatives of the commercial advertising. Its legal foundation derives from Law 4 680/1965.

Understanding regulatory effects: the use of Regulatory Impact Analysis

The 1995 *Recommendation of the Council of the OECD on Improving the Quality of Government Regulation* emphasised the role of Regulatory Impact Analysis (RIA) by systematically ensuring that the most efficient and effective policy options were chosen. The 1997 *OECD Report on Regulatory Reform* recommended that governments "integrate regulatory impact analysis into the development, review, and reform of regulations". A list of RIA best practices is discussed in

Box 1.15. **Regulatory Impact Analysis in OECD countries**

What is Regulatory Impact Analysis (RIA)?

RIA is a regulatory tool that examines and measures the likely benefits, costs and effects of new or changed regulations. It provides decision makers with valuable empirical data and a comprehensive framework in which they can assess their options and the consequences their decisions may have. A poor understanding of the problems at hand or of the indirect effects of government action can undermine regulatory efforts and result in regulatory failures. RIA is used to define problems and to ensure that government action is justified and appropriate.

Key elements of a RIA programme

RIA takes many forms in OECD countries, reflecting a variety of government policy agendas. The objectives, design and role of administrative processes differ among countries and among regulatory policy areas. There is, however, a key element related to the institutional framework that makes RIA a successful regulatory tool: quality control through independent review, which helps assess the substantive quality of new regulations and ensures that ministries achieve the goals embodied in the assessment criteria. Oversight bodies responsible for RIA must be able to question its quality and regulatory proposals. They need the technical capacity to verify the impact analysis and the political power to ensure that their view prevails in most cases.

Good RIA practices identified in OECD countries:

1. Maximise political commitment to RIA.
2. Allocate responsibilities for RIA programme elements carefully.
3. Train the regulators.
4. Use a consistent but flexible analytical method.
5. Develop and implement data collection strategies.
6. Target RIA efforts.
7. Integrate RIA with the policy-making process, beginning as early as possible.
8. Communicate the results.
9. Involve the public extensively.
10. Apply RIA to existing as well as new regulation.

Source: OECD (1997), *Regulatory Impact Analysis: Best Practice in OECD Countries*, Paris.

detail in *Regulatory Impact Analysis: Best Practices in OECD Countries*.[30] The 2005 *Guiding Principles for Regulatory Quality and Performance* recommends that RIA be conducted in a timely, clear and transparent manner.[31]

At the time of writing this report, there is no obligation in Brazil to conduct RIA in the policy and decision-making process. Some ministries and government institutions undertake a kind of analysis of the impact of the introduction or modification of regulatory norms, but in an incomplete way and without systemic application. Decree 4 176 from 2002 establishes that when sending a proposal to the Civil House, apart from sending a statement of justification a form should be included that contains the following elements: the synthesis of the problem or situation that requires action; solutions and actions proposed by the regulation; existing alternatives to the proposed measure; costs; reasons that justify the urgency, in case of provisional measures; potential impact on the environment; proposed modifications compared with the previous drafting; synthesis of the opinion of the juridical body. Annex I of the decree requests that the description of possible impacts of the regulations to be adopted is explained. These preliminary elements could lead to a fuller RIA process.

Building on the existing requirements, and as part of the implementation of the Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG mentioned above), it is expected that RIA will gradually be integrated into regulatory policy in Brazil. OECD experience shows that RIA implementation is a process that requires accurate planning, dedicated resources and short- and medium-term goals. Specifics of the system depend on the political, economic, cultural and legal background of the country. Each country has found different ways to set up a RIA system; there is no single model to transpose. The following section provides an overview of the institutional issues Brazil is considering while designing its own RIA system. They are assessed against practices and experiences in OECD countries.

Road map to implement RIA based on international good practices

RIA is fundamental to consolidating a comprehensive regulatory approach, since it is a tool that provides objective elements – such as costs, benefits and options – for decision making. A RIA system can only be consolidated and improved over time. The road map to implement RIA in Brazil requires evaluation of the following issues:

Maximise political commitment to RIA. OECD experience shows that the use of RIA to support reform should be endorsed at the highest levels of government. RIA must be supported by a legal instrument that makes it compulsory for bodies inside the administration (Box 1.16).

Box 1.16. **Legal basis for RIA in OECD countries**

OECD countries have adopted various legal forms requiring RIA to be included in draft legislation. The *Czech Republic, Korea and Mexico* have adopted RIA by law. RIA is required by a presidential order in the *United States*, and by prime-ministerial decree or guidelines in *Australia, Austria, France, Italy* and the *Netherlands*. In *Canada, Denmark, Finland, Japan, Hungary, New Zealand, Norway, Poland, Germany, Portugal, Sweden* and the *United Kingdom*, the use of RIA is based on a cabinet directive, cabinet decision, government resolution or policy directive.

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According to PRO-REG, RIA will be implemented in Brazil as part of the country's efforts to improve regulatory quality. The Civil House of the President of the Republic, the Ministry of Finance and Ministry of Planning, Budget and Management would be the bodies responsible for implementing RIA, as these institutions will constitute a committee that will be in charge of managing the programme. This institutional arrangement would allow having strong political support and commitment to regulatory quality.

However, there are as yet no plans to create a legal instrument that could institutionalise the use of RIA as a tool for *ex ante* analysis inside the administration. Law Proposal 3 337 from 2004 concerning regulatory agencies, currently discussed in Congress, envisages that these agencies should present annual reports and meet with thematic commissions from both the Senate and Federal Congress, to discuss and evaluate the proposed goals and objectives and explain the impacts of their actions and the results obtained.

Allocate responsibilities for RIA programme elements carefully. Experience in OECD countries shows that RIA will fail if left entirely to regulators, but will also fail if it is too centralised. To ensure "ownership" by regulators while at the same time establishing quality control and consistency, responsibilities for RIA are often shared between ministries and a central quality control unit.

PRO-REG would be led by the Civil House of the President of the Republic. This institution envisages close co-operation with the Committee on Regulatory Policy (*Câmara de Políticas Regulatórias*),[32] which might be created in the future, the Ministry of Finance, the Ministry of Planning, Budget and Management, regulatory agencies, and the ministries supervising them.

Train the regulators. Regulators must have the skills to prepare high-quality economic assessments, including an understanding of the role of RIA in assuring regulatory quality and of methodological requirements and data collection strategies. All complex decision-making tools, such as producing adequate RIA, demand a learning process.

In the current proposal to introduce RIA into Brazil's policy making, special attention is reserved for the training of officials who would be responsible for undertaking and challenging RIA. Initially, training will be essential for civil servants from the Civil House, the Ministry of Finance, the Ministry of Planning, Budget and Management and those ministries responsible for regulatory agencies. But RIA must also be known by officials from the Executive and the Legislative, who should be acquainted with the obligations and competencies that RIA imposes. It is also important to involve other stakeholders, such as businesses, academics and consumer protection agencies, who would participate in public consultation and provide data required for conducting RIA.

The Brazilian government foresees that the Civil House, the Secretary of Management and the National School of Public Administration from the Ministry of Planning, Budget and Management, and the Superior School for Finance Administration from the Ministry of Finance could be the bodies responsible for the supervision of training courses for RIA.

Use a consistent but flexible analytical method. The OECD recommends as a key principle that regulations "produce benefits that justify costs, considering the distribution of effects across society".[33] A cost/benefit analysis is the preferred method for considering regulatory impacts, because it aims to produce public policy that meets the criterion of being "socially optimal" (*i.e.* maximising welfare).

Decree 4 176 from March 2002 contains an annex in the form of a checklist that includes some guidance on the way evaluation of the problem and the proposed solution

should be presented. There is, however, no concrete definition of the methodological approach that government offices are obliged to follow. Nor there is an obligation to conduct an economic analysis of the costs and benefits of the proposed piece of legislation, even if it is suggested government bodies reply to questions such as: what are the charges imposed on citizens and the economy? What are the costs and charges for the public budget? Is there an equilibrium between the costs and benefits? Can enterprises, in particular SMEs, cope with those additional charges? Was a cost/benefit analysis performed? What were its results? How can charges and collateral effects be evaluated after the piece of legislation has come into force?

Target RIA efforts. RIA is a difficult process and often opposed by ministries unfamiliar with external review or that are under time and resource constraints. Preparation of an adequate RIA is a resource-intensive task for drafters of regulations. Experience shows that central oversight units can be swamped by large numbers of RIAs concerning trivial or low-impact regulations. OECD countries have opted for different approaches to target RIA (see Box 1.17).

Box 1.17. **Targeting RIA efforts: the OECD experience**

In *Korea*, the RIA system requires a rough estimate of costs for all regulations, and defines as "significant" regulations those that have an annual impact exceeding KRW 10 billion (USD 0.9 million), an impact on more than one million people, a clear restriction on market competition, or that are a clear departure from international standards. Significant regulations, as defined, are subject to the full RIA requirements.

The *United States* adopts similar criteria, requiring a full benefit/cost analysis where annual costs are estimated to exceed USD 100 million or where rules are likely to impose major increases in costs for a specific sector or region, or have significant adverse effects on competition, employment, investment, productivity or innovation. This means that the US oversight body, Office for Management and Budget, Office for Information and Regulatory Affairs (OMB/OIRA) reviews roughly 600 regulations a year (around 15-17% of the rules published), of which fewer than 100 (around 1-2% of the rules published) are "economically significant", and thus require a full benefit/cost analysis.

The *Netherlands* adopts a two-part approach to targeting RIA effort. The first stage involves applying a set of criteria similar to those discussed above, with the effect that only about 8% to 10% of draft regulations are subjected to RIA. The second stage involves adaptation of the questions to be addressed in the RIA to the specific regulation. A ministerial committee reviews the regulatory proposal and determines which of the 15 standard questions contained in the directive governing RIA must be answered for each regulation.

Source: OECD (2002), *Regulatory Policies in OECD Countries. From Interventionism to Regulatory Governance*, Paris.

The current PROG-REG does not foresee any kind of special targeting for RIA. The government acknowledges that energy and transport are challenging regulatory areas in Brazil, but there is no agreement to start on those policy fields, nor agreement on which legal instruments RIA could be used, such as laws, decrees, regulations, etc. Nor does the programme ever refer to extending, in the medium and long term, RIA to other levels of government, which is essential for regulatory coherence and co-ordination as a whole. Yet

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the fact remains that targeting is crucial for the success of any RIA system – otherwise efforts are diverted, resources lost, and little achieved in the end. The most promising target should concern the economic impact and scope of the text envisaged, keeping in mind that impacts that may depend on Brazil's current economic situation.

Develop and implement data collection strategies. The usefulness of a RIA depends on the quality of the data used to evaluate the impact. An impact assessment confined to qualitative analysis provides less accountability of regulators for their proposals. Since data issues are among the most consistently problematic aspects in conducting quantitative assessments, the development of strategies and guidance for ministries is essential.

Brazil is relatively well equipped in terms of data production and analysis, but the distribution of the expertise remains uneven. Ministries and regulatory authorities produce data used for official purposes. However, the policy assessment functions of a number of ministries do not allow for effective assessment. Some public institutions at federal level, such as the Institute for Economic Research (*Instituto de Pesquisa Econômica Aplicada, IPEA*), the Brazilian Institute for Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística, IBGE*) and certain federal universities conduct economic research to better understand market performance and social developments. There are also private entities, such as the Confederation of National Industries (*Confederação Nacional das Indústrias, CNI*) and the National Confederation of Transports (*Confederação Nacional dos Transportes, CNTC*), that also produce reports on the evolution of different economic sectors. Non-governmental institutions, such as the Institute for Consumer Protection (*Instituto de Defesa do Consumidor, IDEC*) also conduct analyses of different government policies, to improve consumers' rights.

Integrate RIA in the policy-making process, beginning as early as possible. Integrating RIA in the policy-making process will, over time, ensure that the disciplines of weighing costs and benefits, identifying and considering alternatives, and choosing policy in accordance with its ability to meet objectives become a routine part of policy development. If RIA is not integrated into policy making, impact assessment becomes simply an *ex post* justification of decisions already taken, and contributes little to improving regulatory quality. Integration is a long-term process, which often implies significant cultural changes within regulatory ministries. Early integration in the policy process of RIAs would require stronger incentives and possible sanctions for non-compliance. More importantly, it would require policy makers to be convinced of and request the added value of RIA.

PRO-REG sees RIA as a tool that can help improving the decision-making process in Brazil. RIA is conceived of as a dynamic process that would avoid the immutability of relations created during the regulatory process, and instead provide useful information and propose, where necessary, appropriate and justified suggestions for changes. The programme, however, does not call for RIA implementation at the beginning of the policy-making process. There will necessarily be a period in which decision makers and policy makers need to be acquainted with this instrument.

Communicate the results. The assumptions and data used in RIA can be improved if they are tested through public disclosure and consultation. Releasing RIAs along with draft regulatory texts as part of the consultation procedure is a powerful way to improve the quality of the information available about new regulations, and so improve the quality of the regulations themselves.

PRO-REG foresees the publication of RIA results. As RIA is a way to show alternative possibilities for government action, it is important that not only the Executive but also the legislative and the judiciary are aware of RIA results.

Involve the public extensively. Public involvement in RIA has several significant benefits. Those affected by regulations especially can constitute cost-effective sources of data needed to complete high-quality RIA. The challenge is to use this information in a structured and critical way, avoiding promoting interests of particular stakeholders. Consultation can also provide important checks on the feasibility of proposals, on the range of alternatives considered, and on the degree of acceptance of the proposed regulation by the affected parties.

Even if public consultation is not always mandatory in Brazil, a growing number of laws and regulations that have an impact on consumers and users are circulated for consultation or public hearings. This process, already in place, could serve as a basis for the incipient RIA. The objectives of this practice are different: to obtain better information and data for the decision, to include comments and suggestions made by stakeholders, and to identify the relevant aspects of the issue. This practice, mainly co-ordinated by the Civil House, refers exclusively to those legal instruments proposed and issued by the Executive (provisory measures, laws and decrees).

Apply RIA to existing as well as new regulation. RIA is as useful for reviewing existing regulation as it is for assessing proposed new regulatory measures. In fact, reviewing existing regulation involves fewer data problems, so the quality of the resulting analysis can be higher. Consistently applying RIA to existing regulation is a key priority. Parts of the regulatory structure not directly subject to government disciplines should be included in the analysis, such as local government regulations or the actions of independent regulators.

The introduction of RIA in the framework of the PRO-REG does not foresee a specific evaluation of the existing regulations. Laws are produced in Brazil according to the requirements established in the Decree 4 176 from 2002, which does not call for the analysis of existing regulations. There are no systematic procedures to review or update regulations.

Dynamic change: Keeping regulation up-to-date

Revisions of existing regulations

Over the years, most OECD countries have accumulated a large stock of regulation and administrative formalities. Regulations that are efficient today may become inefficient tomorrow, due to social, economic, or technological change. If not checked or reviewed, these can lead to a highly burdensome regulatory system. The 1997 *OECD Report on Regulatory Reform* recommends that governments review regulations systematically to ensure that they continue to meet their intended objectives efficiently and effectively. The 2005 *OECD Guiding Principles for Regulatory Quality and Performance* recommends that the assessment of impacts and the review of regulations include *ex post* evaluation.

Brazil has devoted efforts to keeping regulations up-to-date – mainly through consolidation and codification strategies – as part of national efforts to modernise the public administration: in 1979 the National Programme for "Debureaucratisation" (*Programa Nacional de Desburocratização*) was launched; presently, the National Programme of Public Management and Deburocratisation (*GesPública*), following the Decree 5 378 from

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Box 1.18. **Legal consolidation efforts in OECD countries**

A systematic approach to review and update regulations helps ensure consistency in approaches and review criteria, generates momentum, and ensures that important areas are not exempted from reform due to lobbying by powerful interests. *Ex post* reviews are a complement to rigorous *ex ante* RIA, rather than a substitute for it. *Ex post* review can help to determine whether legislation is meeting its initial objectives, but cannot substitute for RIA's role in providing a systematic basis for the weighing of policy alternatives from the very beginning. *Ex ante* analysis avoids problems, while *ex post* analysis corrects problems early.

Substantial reviews of existing laws and other regulations have been carried out in different OECD countries. In 1992, the *Canadian* Federal Government began a comprehensive review of all existing regulations, "to ensure that the use of the government's regulatory powers results in the greatest prosperity for Canadians". At the end of the review (completed in June 1993), 835 out of a total of about 2 800 regulations then listed in the Consolidated Index of Statutory Instruments were identified for revocation, revision or further review. *Korea* succeeded in eliminating 50% of its regulations in less than a year, while *Mexico* revised over 90% of its national legislation in about six years. Australia completed of a six-year review of 1 700 Acts and subordinate regulations that were identified as containing restrictions on competition.

23 February 2005, is still in place. Consolidation has been a way to avoid confusion of contradictory texts, to eliminate outdated regulations, to review existing regulations, and to codify and use single texts.

Supplementary Law 95 from February 1998 provided a framework for the consolidation of normative acts. According to this regulation, consolidation is the integration of all pertinent laws of a given subject in a single volume. This Law was amended and refined by the Supplementary Law 107 from April 2001. As such this is useful as it helps to collate all the relevant texts in a single volume. This activity refers to consolidation, revision and up-date of legal acts.

Decree 4 176 from 2002 was enacted for the application of this law. It foresaw the establishment of an Executive Group for Consolidation of Normative Acts, technically and administratively supported by the Civil House, in charge of co-ordinating and implementing the consolidation of normative acts. This work is currently undertaken by the Ministry of Justice. According to Decree 6 061 from 15 March 2007, the Secretary for Legal Affairs is responsible for knowing the existing stock of regulations in order to consolidate them, and the Department for Legal Drafting is in charge of co-ordination inside the Ministry of Justice and promotion with other bodies in the executive power concerning efforts for legal consolidation.

The consolidation work was done by permanent commissions (regulated from Art. 42 to Art. 51 of the Decree), responsible for the consolidation and evaluation of normative acts. These commissions were established by ministries or other governmental bodies that were themselves responsible for reviewing those legal acts that concern them, in order to consolidate the legal texts. Commissions were composed of at least four members, including a representative from the Federal Attorney, and co-ordinated by a lawyer. More than 160 legal experts worked together on this project.

The results, presented to the Federal Congress, included 11 projects for consolidation in different policy fields (see Tables 1.4). The study showed that over ten thousand laws could be consolidated in sectoral volumes. More than 17 000 legal documents, such as retirement, promotions or credit entitlements, could not be included in that effort.[34] However, the work done by the Executive was not completed at the time of writing this report; the Ministry of Justice is currently working on a follow-up of those efforts.

Table 1.4. **Some proposals for consolidation sent to Congress by the Executive**

Consolidated legislation	No. of law proposal	Completely revoked laws	Current situation
Oil sector	LP – 4 633/01	2 ordinary laws and 7 law decrees	Approved by the Commission* – Ready to be sent to plenary
Sector of the Ministry of Agriculture	LP – 4 944/01	10 ordinary laws, 1 law decree, 1 delegated law	Approved by the Commission – Ready to be sent to plenary
Transport sector	LP – 4 000/01	16 ordinary laws, 36 law decrees, 4 legislative decrees	Ready for discussion in the Commission
Social security	LP – 4 202/01	96 ordinary laws, 169 law decrees, 2 supplementary laws and 3 legislative decrees	Approved by Senate
Labour issues	LP – 4 402/01	28 ordinary laws, 58 law decrees	Ready for discussion in the Commission
Transportation	LP – 4 490.01	9 ordinary laws, 6 law decrees	Ready for discussion in the Commission
Cultural issues	LP – 3 757/00	12 ordinary laws, 14 law decrees	Approved by Senate
Telecommunication services (radio and post)	LP – 6 189/02	48 ordinary laws, 76 law decrees, 26 decrees to the legislative powers	Ready for discussion in the Commission
Devolved land and colonisation	LP – 3 999/00	3 ordinary laws, 7 law decrees	Waiting for reporting in the Commission
Foreigners	LP – 4 489/01	38 ordinary laws, 13 law decrees, 4 legislative decrees	Not under GT-LEX

* Permanent Commission for Constitution and Justice.

The Federal Congress and the Senate have also been active in implementing consolidation procedures. The consolidation of national laws at the Federal Congress began with the setup in 1997 of a Working Group of Parliamentarians (*Grupo de Trabalho da Consolidação Brasileira, GT-LEX*), whose work is regulated by the Internal Rules of the Congress (Articles 212 and 213). This Working Group is in charge of presenting its proposals to the Permanent Commission for Constitution and Justice which, once it has revised them, has to send them to the plenary for discussion and approval. The final instance for sanction is the Senate. The initial results of this Working Group consisted of two concrete proposals for consolidation, one approved by the plenary and other filed without success. The GT-LEX has been reactivated in 2007 with the aim at continuing the efforts in other areas, including an extensive review of the existing regulations in Brazil. Thematic groups, such as tax law, telecommunications, financial services, etc., chaired by a Parliamentarian, have been created in the Brazilian Congress to work on this consolidation effort. Similar projects have been undertaken at state level, as administrative burdens at that level also represent a significant challenge. The state of São Paulo has made significant efforts in this field (Box 1.19).

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Box 1.19. **Legal consolidation in the State of São Paulo**

Between 1835 and 2006, the State of São Paulo issued more than 33 000 normative acts (laws and law decrees). Most of them were no longer valid or suited to **the Federal Constitution from 1988.** Some others were not clear and confused citizens and businesses. In 2005, the Commission of Constitution and Justice of the regional Congress decided to give priority to the legal consolidation process. At the beginning, the Commission decided to "clean" the legislation, reducing the number of existing laws in the state. Between 2005 and 2006, 16 law proposals led to the revocation of 13 000 laws and law decrees created between 1891 and 1972.

The Executive Board of the Congress of São Paulo, through the Commission for Constitution and Justice, the Attorney and the Department of Documentation and Information, continues its work on the project to simplify regional legislation and consolidate state laws. The main objective is to classify the state legislation and to consolidate it into a single law, facilitating its content and dissemination to citizens. The legislative works in close co-operation with the Executive and the judiciary, as well as the regional *Ministério Público*. In 2002 the results of this process had led to the revocation of 17 000 normative acts.

The consolidation process also has led to the updating of the State Constitution. Through Constitutional Amendment 21 from February 2006, the Constitution of the State of São Paulo has been adapted to reflect the 54 amendments of the Federal Constitution since its promulgation in 1988.

Source: www.al.sp.gov.br; www.vaccarezza.com.br.

Notes

1. World Bank (2007), *World Development Indicators Database*, Washington, April.
2. The regulatory authorities discussed in the rest of this report are generally *autarquias*, which is a form of decentralised administrative agency.
3. Decree No. 3 029 from 16 April 1999.
4. Management contracts have been introduced for some of the authorities discussed in this report.
5. These councils exist in several of the policy areas discussed in this report, but they are generally not supported by a substantive secretariat.
6. The concession process worked as follows. The winner of the contract would operate a facility for a limited period (usually 20-25 years), at the end of which the assets would revert to the state unless a new concession was granted, either to the old firm or to a newcomer after auction. The contract would include provisions for rate and tariff readjustments, investment obligations for both maintenance and upgrading of the relevant facilities, etc. Amman, Edmund and Baer, Werner (2005), "From the Developmental to the Regulatory State: the Transformation of the Government's Impact on the Brazilian Economy" in *The Quarterly Review of Economics and Finance*, No. 45, University of Illinois, p. 424.
7. For more detail see OECD (2005a), *Competition Policy and Law in Brazil*, Paris.
8. The number of current laws in the Brazilian legal system has been estimated to 3 510 804 norms. Amaral, Gilberto *et al.* (2007), *Quantidade de normas editadas no Brasil: 18 anos da Constituição Federal de 1988*, Instituto Brasileiro de Planejamento Tributário, Curitiba.
9. OECD (2006), *OECD Economic Survey Brazil*, Paris.
10. OECD (2005b), *OECD Economic Survey Brazil*, Paris, p. 94.
11. Regulatory quality is defined by a framework in which regulations and regulatory regimes are efficient in terms of cost, effective in terms of having a clear regulatory and policy purpose, transparent, and accountable. OECD (2004), *Building Capacity for Regulatory Quality: Stocktaking Paper*, GOV/PGC(2004)11, Paris, April.
12. OECD (2002), *Regulatory Policies in OECD Countries – From Interventionism to Regulatory Governance*, Paris.

13. See OECD (2005a), *Competition and Law Policy in Brazil*, Paris.
14. For a comprehensive analysis of the Brazilian Competition Policy System (*Sistema Brasileiro de Defesa da Concorrência*), see OECD, 2005a.
15. Pó, Marcos Vinicius and Abrucio, Fernando Luiz (2006), "Desenho e funcionamento dos mecanismos de controle e accountability das agências reguladoras brasileiras: semelhanças e diferenças" (Design and work of the control and accountability mechanisms of the Brazilian regulatory agencies) in *Revista de Administração Pública*, Vol. 40, No. 4, Rio de Janeiro, July/August, p. 683.
16. Nearly 74% of the municipalities created after the 1988 Federal Constitution have less than 10 000 inhabitants.
17. Even if municipalities had been recognised in previous constitutions, it was only in 1988 that these political entities acquired political autonomy and status as federative entities. For a broader view on the role and the evolution of municipalities in Brazil see Tomio, Fabricio Ricardo de Limas (2002), "A criação de municípios após a Constituição de 1988" in *Revista Brasileira de Ciências Sociais*, Vol. 17, No. 48, February.
18. Abrúcio, Fernando Luiz (2005), "A coordenação federativa no Brasil: a experiência do período FHC e os desafios do Governo Lula" in *Revista de Sociologia e Política*, No. 24, Curitiba, p. 58.
19. In research conducted with magistrates, 29.3% of those interviewed responded that "deficiencies of the legal system are very important to explain the lack of predictability of judicial decisions". This is one of the first obstacles to anticipate judges' decisions. Pinheiro, Armando Castelar (2003), *Judiciário, Reforma e Economia: A Visão dos Magistrados*, Texto para Discussão No. 966, IPEA, Rio de Janeiro, July, p. 45.
20. Between 1997 and 2005, 23 regulatory agencies were created in 18 Brazilian states. Only two of them correspond to municipal agencies. Olivieri, Cecília (2006), "Agências regulatórias e federalismo: a gestão descentralizada da regulação no setor de energia" in *Revista de Administração Pública*, No. 40 (4), Rio de Janerio, July/August, p. 570.
21. *Ibid*., pp. 572-573.
22. Article 34, II, of the Decree Number 4 176, from 2002.
23. Gesner, Oliveira and Fujiwara, Thomas (2005), *Brazil's Regulatory Framework: Predictability or Uncertainty?*, São Paulo, p. 8.
24. Alston, Lee *et al*. (2006), *Political Institutions, Policy-Making Processes and Policy Outcomes in Brazil*, Inter-American Development Bank, Washington, p. 33.
25. The General Ombudsman produces newsletters called *Escuta Brasil* and an annual report (*Relatório de Atividades*).
26. Pinheiro, Armando Castelar (2001), *Economia e Justiça: Conceitos e Evidência Empírica,* BNDES, p. 16. See also Pinheiro, Armando Castelar (2003), "Judiciário, reforma e economia: a visão dos magistrados, texto para discussão 966", IPEA, available at *www.febraban.org.br/Arquivo/Destaques/Armando_Castelar_Pinheiro2.pdf*.
27. In research conducted with Magistrates, 33.6% of those interviewed admitted that "frequently" they have to decide on issues of a political nature that should be resolved at the political level. Pinheiro, Armando Castelar (2003), *op. cit.*, pp. 23-24.
28. Freitas, Nilton and Gereluk, Winston (2002), "A National Tripartite Agreement on Benzene in Brazil" in: ten Brink, Patrick (ed.), *Voluntary Environmental Agreements: Process, Practice and Future Use*, Sheffield, U.K., Greenleaf Publishing, pp. 176-190.
29. *www.abnt.org.br.*
30. OECD (1997a), *Regulatory Impact Analysis: Best Practices for Regulatory Quality and Performance,* Paris.
31. OECD (2005c), *Guiding Principles for Regulatory Quality and Performance*, Paris.
32. This Committee would formulate or propose guidelines concerning the relationships between the Ministries and the regulatory authorities.
33. OECD (1997b), *Report on Regulatory Reform*, Vol. I, Paris, p. 221.
34. *Jornal do Senado,* 7 August 2003.

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Bibliography

Albuquerque, Kélvia Frota di (2006), *A retomada da reforma/melhora regulatória no Brasil: um passo fundamental para o crescimento econômico sustentado*, Documento de Trabalho No. 35, SEAE/MF, Brasília.

Amman E., Baer W. (2005), "From the Development to the Regulatory State: the transformation of the government's impact on the Brazilian Economy", *Quarterly Review of Economics and Finance*, Vol. 45, pp. 421-31.

Aragão, Alexandre Santos de (2005), *Agências reguladoras e a evolução do direito administrativo econômico,* Editora Forense, Rio de Janeiro.

Better Regulation Task Force (2001), "Economic regulators", July, London, *www.cabinetoffice.gov.uk*.

Câmara dos Diputados (2005), *Anuário Estatístico do Processo Legislativo*, Brasília.

Centro de Pesquisa de Opinão Pública DATAUnB (2005), *Pesquisa de Imagem do Judiciário junto a População Brasileira*, 13º Relatório de Atividades, Universidade de Brasília, Brasilia, October.

OECD (1997a), *Regulatory Impact Analysis: Best Practices for Regulatory Quality and Performance,* Paris.

OECD (1997b), *OECD Report on Regulatory Reform*, Paris.

OECD (2001), *OECD Economic Survey Brazil*, Paris, June.

OECD (2002), *Regulatory Policies in OECD Countries – From Interventionism to Regulatory Governance*, Paris.

OECD (2005a), *Competition Law and Policy in Brazil*, Paris.

OECD (2005b), *OECD Economic Survey Brazil*, Volume 2005/2, Paris, February.

OECD (2005c), *Guiding Principles for Regulatory Quality and Performance*, Paris.

OECD (2005d), *Taking Stock of Regulatory Reform – A Multidisciplinary Synthesis*, Paris.

OECD (2006), *OECD Economic Survey Brazil*, Volume 2006/18, Paris, November.

Pacheco, Marcus Ferraz, "A ouvidoria a serviço da sociedade", available in *www.abonacional.org.br*.

Presidência da República/Casa Civil (2002), *Manual de Redação da Presidência da República*, Brasília.

Salgado, Lucia Helena/Motta, Ronaldo Serôa da (ed.) (2005), *Marcos regulatórios no Brasil – O que foi feito e o que falta fazer*, IPEA, Rio de Janerio.

Salgado, Lucia Helena/Motta, Ronaldo Serôa da (ed.) (2007), *Regulação e concorrência no Brasil – Governança, incentivos e eficiência*, IPEA, Rio de Janeiro.

Secretaria de Acompanhamento Econômico (2006), Relatório de atividades.

ANNEX 1.A1

Regulatory Agencies and Oversight Bodies

Table 1.A1.1. **Regulatory agencies at federal, state and municipal level in Brazil (1997-2005)**

Regulatory agencies at federal level	Legal base and date of creation
Agência Nacional de Energia Elétrica – ANEEL	Law 9 427, 2 December 1996
Agência Nacional do Petróleo, Gás Natural e Biocombustiveis – ANP	Law 9 478, 6 August 1997
Agência Nacional de Telecomunicações – ANATEL	Law 9 472, 16 July 1997
Agência Nacional de Vigilância Sanitária – ANVISA	Law 9 782, 26 January 1999
Agência Nacional de Saúde Suplementar – ANS	Law 9 961, 28 January 2000
Agência Nacional de Águas – ANA	Law 9 984, 17 July 2000
Agência Nacional de Transportes Aquaviários – ANTAQ	Law 10 233, 5 June 2001
Agência Nacional de Transportes Terrestres – ANTT	Law 10 233, 5 June 2001
Agência Nacional do Cinema – ANCINE	Provisional Measure 2 228-1, 6 September, 2001
Agência Nacional de Aviação Civil – ANAC	Law 11 182, 27 September, 2005
Regulatory agencies at state level	**Legal base and date of creation**
Agência Estadual de REgulaçào dos Serviços Públicos Delegados do Rio Grande do Sul – Agergs/RS	Law 10 931, 9 January 1997
Agência Reguladora de Serviços Públicos Concedidos do Estado do Rio de Janeiro – Arsep/RJ	Law 2 686, 13 February 1997
Comissão de Serviços Públicos de Energia (Sào Paulo) – CSPE/SP	Supplementary Law 833, 17 October 1997
Agência Reguladora de Serviços Públicos Delegados do Estado do Ceará – Arce/CE	Law 12 786, 30 December 1997
Agência Estadual de Regulação e Controle de Serviços Públicos – Arcon/PA	Law 6 099, 30 December 1997
Agência Estadual de Regulação de Serviços Públicos de Energia, Transportes e Comunicações da Bahia – Agerba/BA	Law 7 314, 1998
Agência Reguladora de Serviços Concedidos do Estado de Sergipe – Ases/SE	Law 3 973, 10 June 1998
Agência Reguladora de Serviços Públicos do Estado de Minas Gerais – Arse/ES	Law 12 999, 31 July 1998
Agência Estadual de Regulação dos Serviços Públicos Delegados do Estado do Mato Grosso – Ager/MT	Law 7 101, 14 January 1999
Agência Reguladora de Serviços Públicos do Rio Grande do Norte – Arsep/RN	Law 7 463, 2 March 1999
Agência Goiana de Regulação, Controle e Fiscalização de Serviços Públicos – AGR/GO	Law 13 550, 11 November 1999
Agência Reguladora dos Serviços Públicos Concedidos do Estado do Amazonas – Arsam/AM	Law 2 568, 25 November 1999
Agência Estadual de Regulação dos Serviços Públicos Delegados do Estado do Pernambuco – Arpe/PE	Law 11 742, 14 January 2000
Agência Reguladora de Serviços Públicos do Estado de Alagoas – Arsal/AL	Law 6 267, 20 September 2001
Agência Estadual de Regulação dos Serviços Públicos de Mato Grosso do Sul – Agepan/MS	Law 2 363, 19 December 2001
Agência Reguladora de Serviços Públicos Delegados de Transportes do Estado de São Paulo – Artesp/SP	Law 914, 14 January 2002
Agência Estadual de Vigilância Sanitária da Paraíba – Agevisa/PB	Law 7 069, 12 April 2002
Agência Estadual de Energia da Paraíba – Ageel/PB	Law 7 120, 28 June 2002

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Table 1.A1.1. **Regulatory agencies at federal, state and municipal level in Brazil (1997-2005)** *(cont.)*

Regulatory agencies at federal level	Legal base and date of creation
Agência Reguladora de Energia e Saneamento Básico do Estado do Rio de Janeiro – Agenersa/RJ	Law 4 556, 6 June 2005
Agência Reguladora de Serviços Públicos Concedidos de Transportes Aquaviários, Ferroviários, Metroviários e de Rodovias do Estado do Rio de Janerio – Agetransp/RJ	Law 4 555, 6 June 2005
Agência Executiva de Gestão das Águas do Estado da Paraíba – Aesa/PB	Law 7 779, 7 July 2005
Regulatory agencies at municipal level	**Legal base and date of creation**
Agência Municipal de Regulação dos Serviços de Saneamento de Cachoeiro de Itapemirim – Agersa/ES	Law 4 798, 1999
Agência Municipal de Regulação dos Serviços de Água e Esgotos de Joinville – Amae/SC	Law 4 341, 2001

Source: Brazilian Association of Regulatory Agencies (*www.abar.org.br*); Casa Civil (2003), "Análise e avaliação do papel das agências reguladoras no atual arranjo institucional brasileiro", Relatório do Grupo de Trabalho Interministerial, Brasília.

Table 1.A1.2. **Regulatory quality oversight bodies in OECD countries**

Countries	Name and location	Date	Main mission	Resources and comments
Australia	Office of Regulation Review in the Productivity Commission	1998	• Advise departments/regulatory agencies on appropriate quality control for development of regulatory proposals and review of existing regulations. • Encourage right use of regulation and reduction of unnecessary regulation. • Examine and advise the government on Regulation Impact.	• A staff of approximately 20.
Austria	The Legal Service of the Federal Chancellery		• Secure regulatory quality at federal level surveying the compliance of drafts with national constitutional law, European law and regulatory policies. • Securing the clarity, comprehensibility and coherence of regulation. • Develop new regulatory policies and legislative guidelines.	
Belgium	Agency for administrative simplification in the Prime minister's Office		• Initiate simplification projects in all domains, stimulate simplification projects, co-ordinate the simplification policy on administrative level. • Develop tools (measure administrative burdens).	
Canada	Regulatory Affairs and Orders in Council Secretariat, Privacy Council Office		• Develop and manage the government's regulatory reform and research agendas. • Support to the Cabinet on regulatory matters, including secretariat services for the Cabinet committee that approves most federal regulations.	• The President of the Treasury Board has a mandate for promoting the implementation of Smart Regulation in Canada.
Czech Rep.	Department for Regulatory Reform and Quality of Public Administration in the Ministry of Interior		• Prepare strategy materials in the area of central state administration reform and regulatory reform, co-ordination of these reforms. • Oversight of RIA quality.	• The Department has 30 employees, 20 of which are dealing with regulatory reform agenda.
Denmark	Division for Better Regulation in the Ministry of Finance		• Ensuring high quality in new and existing regulation. • Develop government's regulatory policies, and co-ordinate the preparation and examination of the government's annual law planning programme. • Co-ordinate the government's annual action plans for simplification. • SCM-measurement of the administrative burdens and assist other ministries in performing Business Impact Analysis as part of their RIA-process. *Note:* Ministry of Justice, a division on law quality, is monitoring the legal coherence and quality of draft regulation.	• Ministry of Finance: a Head of Division and six heads of section. • Danish Commerce and Companies Agency: a Head of Division and fifteen heads of section. • Ministry of Justice: a Head of Division and four heads of section.
Finland	Bureau of Legislative Inspection, Ministry of Justice			
Germany	Regulatory control council		• This body will be associated to the Federal Chancellery and has to assess red tape and the necessity of new and existing laws	• Regulatory control council is scheduled to begin its work in Autumn 2006.
Greece	Central Regulatory Impact Unit, General Secretariat of the Government, Prime minister's Office		• Co-ordinate the vertical ministerial units and provide guidelines on RIA. • Draft reports for the Prime minister's edicts and Ministers' Council regulations. • Report the progress of better regulation policy to the Parliament. • Ministry of the Interior, Public Administration is responsible for some parts of the better regulation agenda, such as simplification and codification.	
Hungary	Ministry of Justice		• General quality assurance and control of the legislation.	
Iceland	Consultative committee on official monitoring rules, office of the Prime minister		• Examine monitoring rules or the implementation of specific activities. • Comment on parliamentary bills/draft government instructions on rules. • Verify that the review of monitoring rules is consistent with Act. 27/1999 and present suggestions for review where appropriate. • Advise government authorities on the review of monitoring rules and implementation of monitoring in keeping with the objectives of Act 27/1999. • The Prime minister reports to Parliament every three years.	• The committee has no permanent staff but uses the staff of the ministry and independent consultants.

Table 1.A1.2. **Regulatory quality oversight bodies in OECD countries** *(cont.)*

Countries	Name and location	Date	Main mission	Resources and comments
Ireland	Better Regulation Unit in the Public Service Modernisation Division, Prime minister's Department		• Overseeing regulatory impact analysis. • Supporting implementation of EU Action Plan of Better Regulation and representing Ireland at other international bodies. • Performing advocacy role in relation to better regulation issues at national level.	
Italy	Presidency of Council of Ministers		• Promoting regulatory policy/monitoring/reporting/co-ordinating ministries activities.	• RIA unit has 4 staff members and 5 advisors, under the supervision of the Head of Department.
Japan	Council of the Promotion of Regulatory Reform		• Researching and deliberating what is necessary to push ahead with structural reforms of social economy, 1) necessary items about the reform of the nature of the regulations when outsourcing central/local governments' operations/office works; 2) other fundamental items about the nature of regulations.	
Korea	The Office of Regulatory Reform (ORR), the Prime minister's Office	1998	• Support the Regulatory Reform Committee which examines newly establishing or strengthening regulations of each ministry. *Note:* The Regulatory Reform Task Force (RRTF) under the Office of Regulatory Reform plays the role of improving existing regulations, or bulk regulations that affect many ministries.	• ORR: 40 staff members (1 deputy minister level; 2 director general level; 10 director level; 4 special experts; 23 staff members). • RRTF: staff of 53 (3 director general level; 6 director level; 23 special experts; 15 members).
Luxembourg	*Missing*			
Mexico	Federal Regulatory Improvement Commission, Ministry of Economy		• Improve the quality of the regulatory framework by means of the Biennial Programs of Regulatory Improvement (PBMR). • Integrate and maintain updated the Federal Register of Formalities and Services. • Review/improve federal drafts generating fulfilment costs to the citizens. • Collaborate and offer technical support to the states and municipalities to establish regulatory reform programmes.	
Netherlands	Bodies within the Ministries of Justice, Finance, Economic Affairs and Council of State Advisory Board on Administrative Burdens (Actal)	2000	• Since 2000 the independent Advisory Board on Administrative Burdens (Actal) has been scrutinising impact assessments with specific attention paid to the quantification of administrative burdens. Because of Actal's independent status it plays no direct role in deciding whether a legislative proposal is ready to go ahead to the Council of Ministers, but its opinions are made public alongside the legislative proposal and can thus play a role in parliamentary debate.	• Also the Minister of Finance on occasion does draw on Actal's judgement when proposals are discussed in the Council of Ministers.
Norway	Ministry of Modernisation			
New Zealand	Ministry of Economic Development		• The RIA Unit has issued guidelines for the preparation of Regulatory Impact Statements. • Review RISs and provide adequacy statements on them. • Provide training and advice on regulatory issues to officials to build capability for undertaking regulatory impact analysis.	• From the 8 staff members in the Regulatory Policy Unit, approximately 4 full-time equivalents are dedicated to the work of the RIA Unit. • Other Ministry of Economic Development staff may assist.
Poland	Inter-ministerial Regulatory Quality Team (Minister for Economic Affairs and Labour is the head of the team). Department for Economic Regulation in the Ministry of Economic Affairs and Labour		• Development of draft government positions on regulatory reform. • Undertaking measures on administrative burdens and eliminating needless administrative burdens and procedures.. • Development of RIA guidelines. • Providing access to information and dissemination of knowledge. • Other issues pertaining to regulatory quality as commissioned by the Council of Ministers or the Prime minister. • Implementation of Regulatory Reform Programme. *Note:* The team is a consulting and advisory body to the President of the Council.	• The Team is composed of representatives, including those in the rank of a secretary of state, undersecretary of state, president or deputy president, from 21 ministries and bodies of state administration.

Table 1.A1.2. **Regulatory quality oversight bodies in OECD countries** *(cont.)*

Countries	Name and location	Date	Main mission	Resources and comments
Spain	Ministry of Public Administration, Prime minister's Office. Agency for Evaluating Public Policies		• Prime Minister's Office: dealing with quality on drafting regulations • Public Administration Ministry: dealing with Better Regulation Policy and promoting of government-wide progress on regulatory reform. • Comisión de Secretarios de Estado y Subsecretarios: monitoring the quality of all regulations produced by ministries before presenting the text to the Council of Ministries. • Agency for Evaluating Public Policies was created at the end of 2006 and began to work 1 January. It monitors the quality of RIAs and develops guidances.	

Source: Adapted from Jacobzone, S., Ch.-W. Choi and C. Miguet (2006), *Quality Indicators of Regulatory Management Systems*, OECD Working Papers on Public Governance, No. 4.

PART II

Current Trends and Regulatory Frameworks in Selected Sectors

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Chapter 2

The Power Sector

Introduction

Brazil has set itself the ambitious goal of developing a national power system that can reliably meet growing demand, is environmentally sustainable, and supports social justice. Its current large and modern power sector, centralised regulatory management, and reforms of the last decade that have disaggregated the industry and introduced competition, all combine to give it a solid basis for meeting these objectives.

At the same time, the dominance of hydro-power in generation raises the question of whether system management can ensure reliability. The 2001 crisis – a power shortfall requiring emergency measures for over a year – was a major shock for the government, economy and society. A main cause of the crisis was inadequate investment. Attracting adequate investment, especially in generation, has been a major challenge. Investment in generation is perceived to be relatively risky and so is not easily keeping pace with the growth in demand. Securing the diversity of power sources is a related challenge. Brazil relies heavily on imports of natural gas to fuel its thermal plants, subject to negotiations with Bolivia recently, which provide the main reserve cushion for hydro-power shortfalls.

Whether the government can expect to meet its strategic objectives depends in large part on the strength and appropriateness of the regulatory framework and, especially, the regulator. The government has no plans for further power market reforms – the current regime dates back only to 2004 and needs to settle – but rather, has asked for a view on the effectiveness of the regulatory framework in order to support its chosen policy for the sector. The aim of this chapter is therefore very specific: to assess whether ANEEL, the power regulator, is sufficiently well equipped to support policy objectives for the power sector. Issues considered include its place in the broader institutional context, its autonomy, mission and responsibilities, its powers, and not least its governance framework, including resources.

The first part of the chapter sets the market, performance and policy context. The second part considers the institutional and regulatory framework and takes a closer look at ANEEL.

Market and policy background

Key features and performance of Brazil's power sector

Structure of the sector

Brazil has a large and modern power sector. The power industry is a mix of private and public ownership across the main activities of generation, transmission and distribution (supply to customers is bundled with distribution).[1] It includes one very large government-controlled holding company (Eletrobrás, the ex-monopoly incumbent) for generation, transmission and distribution assets, alongside a number of smaller companies. Eletrobrás controls the three largest generation plants, 38.96% of installed generation capacity and 62% of transmission lines, as well as the government-owned distribution companies. The

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dominant national oil and gas company (Petrobras), which is also controlled by the Federal Government, has an important stake in generation as owner of over a fifth of thermal plant capacity. Foreign firms have a relatively minor presence. State ownership predominates in generation (80% of assets). By contrast, over two-thirds of distribution assets are in private hands.

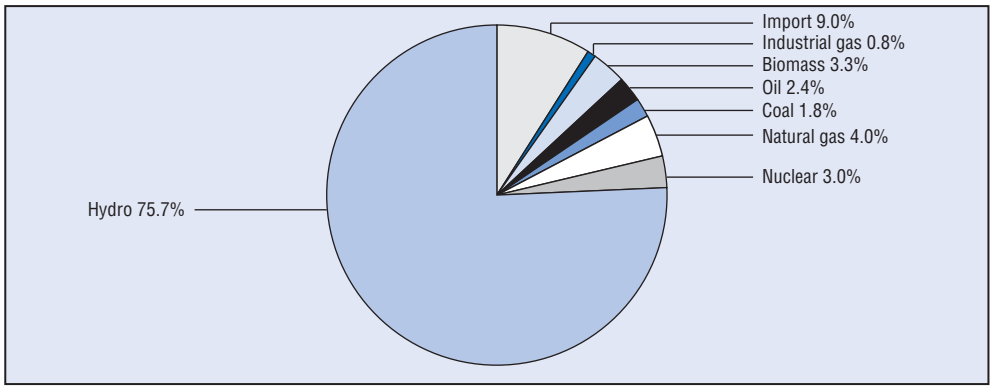
Box 2.1. **Eletrobrás and Petrobrás**

Eletrobrás is organised as a holding company of the largest generation and transmission group in Brazil, which includes Furnas, Chesf, Eletronorte, Eletrosul, Itaipu, CGTEE, Eletronuclear; it is present in each state of the Federation. It is responsible for around 40% of installed generation capacity. It controls 32 hydro-plants, including Brazil's share of Itaipu (7 000 MW) and Tucuruí (8 370 MW), 15 thermal plants, and Brazil's two nuclear plants. It moreover controls distribution companies belonging to the government (Ceal, Ceam, Cepisa, Ceron, Eletroacre, plus Boavista Energia and Manaus Energia controlled by Eletronorte). The company is also closely involved in the main National Interconnected System, which is composed of a group of generating, transmission and distribution companies that includes Eletronorte, Furnas, Eletrosul and CHESF. This gives Eletrobrás a 69% stake in the system. Eletrobrás also co-ordinates the planning, expansion and operation of the Isolated Electricity System, which serves regions not covered by the National Interconnected System; these are mostly located in the Amazon region. Eletrobrás is majority-owned by the Federal Government (78% shareholding with voting rights).

Petrobrás is Brazil's largest company in terms of profits and revenues, and the 14th largest international oil company. Its monopoly of oil and gas was ended in 1997. The private sector, including foreign companies such as Shell and Chevron, has since entered the market. Petrobrás remains dominant upstream, owning nearly all the proved gas reserves and controlling 93% of the high-pressure pipelines through a subsidiary. It is also a major supplier of natural gas through a subsidiary, the main user of Gasbol (the Brazil-Bolivia pipeline) and holds most of gas import contracts. It has a major presence in gas distribution, as the main shareholder in 18 out of 25 local distribution companies. It remains under government control (56% shareholding).

As mentioned above, generation is dominated by hydro-power (accounting for 76% of production, around 347.8 TWh out of a total of 459.6 TWh in 2006). Brazil is the world's largest producer of hydro-power after Canada. A third of its hydro potential has been exploited so far (258 GW). The hydro system is largely storage-based (plants that store water behind dams),[2] with large reservoirs that can assure supply for two to three years after a good rainy season. Reservoir capacity together with foreseen expansion is sufficient to cover demand until the end of 2012. Capacity tends to be lower with the newer plants – partly because these are often built downstream of older plants, and partly because of difficulties in obtaining environmental clearance for very large plants. Remaining generation is made up of thermal power (mainly natural gas, 4%), nuclear (3%), biomass (3.3%), oil (2.4%), and coal (1.8%), and coal (1.5%), with a tiny sprinkling of other new renewables (Figure 2.1). Total capacity is 100 166.68 MW spread across 1 666 plants, some of which are the largest hydro-plants in the world (Itaipu, shared with Paraguay, is the world's largest hydro-plant, with a capacity of 14 000 MW).

Figure 2.1. **Brazilian electricity mix (2006)**



Source: ANEEL.

Brazil's main transmission system, the National Interconnected Grid (Rede Básica) is one of the largest interconnected systems in the world. It is made up of four interconnected subsystems. System operation for the main grid is based on the ISO (Independent System Operator) model.[3] There is an isolated system for part of the Amazon region which is managed by Eletrobrás – and in which, again, Eletrobrás has a significant stake. There are significant efficiency gains from a large centralised main grid and system operation, which reduce the need for back-up and frequency control services.[4]

Distribution and supply is in the hands of more than one hundred companies that are mainly – but not wholly – privately owned.[5] Large consumers (3 MW or more) may contract for their power in the free wholesale market, or directly with the distribution companies. Distribution companies are no longer allowed to own generation plants directly. Strong indirect links remain (generators and distributors belonging to the same group). This raises potential issues of competitive neutrality in relation to other generators, which are mitigated in part by the competitive auctions for power generation serving the regulated market of distribution: generators do not know the total amount of energy to be contracted, nor can they sell their energy directly to distributors.

Brazil has some interconnections with neighbours: 8 170 MW of power is currently imported from Paraguay, Argentina, Venezuela and Uruguay (nearly 7.54% of total supply to Brazilian consumers). Paraguay's share of the Itaipu hydro-plant output (5 650 MW) accounts for most of this, and Argentinian imports account for another 2 250 MW. However, regional trade remains relatively undeveloped, at least compared with North America and Europe.

Performance

Reliability of supply: Investment and power technologies

The International Energy Agency (IEA) defines security of supply as the likelihood that energy will be supplied without disruption (economic variables such as price levels and price volatility are excluded from the definition). For electricity, the IEA notes that security of supply depends on three factors: adequate investment to provide enough generation capacity to meet demand; adequate transmission and distribution networks to transport electricity; and an adequate portfolio of technologies to deal with variations in the availability of input fuels.

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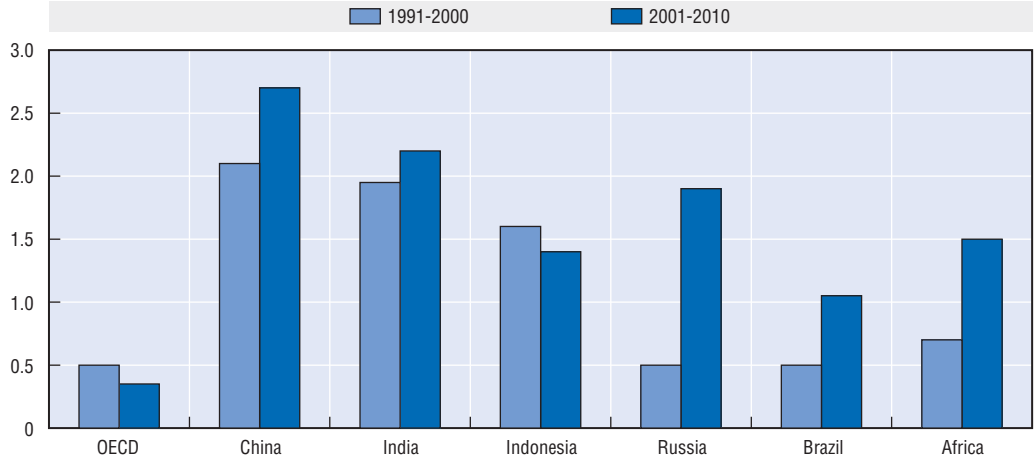
If its investment performance in the power sector is compared with that of other countries, Brazil is not well placed. Of the non-OECD countries featured in Figure 2.2, Brazil emerges as joint lowest with Russia, behind Africa and well behind China, India and Indonesia. Power sector investment in developing countries generally accounts for a larger share of GDP than in OECD countries, often ranging between 1% and 3%. A lower share can indicate that existing levels of investment are insufficient. Although its rate of investment growth is relatively high, Brazil's absolute performance barely takes investment above 1% of GDP.[6]

Figure 2.2. **Electricity investment as a proportion of GDP by region**



Source: World Energy Investment Outlook 2003.

Transmission sector investment nevertheless appears to be doing relatively well. It is currently perceived as low risk by investors, and investments are being made via regular competitive auctions.[7] This is likely to reflect, at least in part, confidence in a well-functioning regulatory framework for the grid with effective third party access (TPA) and efficient pricing for network revenues and user charges by the regulator ANEEL, which is responsible for grid access and use.[8] The achievement of reliability standards (voltage stability and continuity of service) has neither improved nor deteriorated over the last four years.[9]

The most serious challenge lies in generation capacity to meet demand, as well as the underlying mix of generation technologies and availability of input fuels. As regards capacity, the generation reserve margin fell significantly in recent years, due to higher economic growth and drought in some years which could reoccur in the future; this has led to concerns over security of future supply.[10] There is growing demand for power from economic and population growth, and also from the government's plans to electrify those parts of the country (mainly in the Amazon) that are not yet on the grid. Brazil's economic development programme projects a 4.5% growth rate in 2007, and 5% pa the following three years. This may put further pressure on the reserve margin, which could fall to 2% in 2007. The issue is whether the current model for power sector management will be in a position to offer adequate incentives to the market players for them to respond quickly and independently to supply shortfall. The projected growth in demand would require investments in new generation capacity of some 5 000 MW pa (an estimated

USD 5.7 billion pa over the next ten years); Over 90 new plants are under construction[11] to begin operation between now and the end of 2011. A further 524 plants are planned, which would make a total of 26 549 MW of additional capacity. Environmental licensing for new plants is a key issue; there are environmental restrictions on most of the capacity currently under construction. Resolving this issue is a priority challenge that must be met if additional capacity is to be built.

Investment in generation is currently perceived to be riskier than in transmission, apart from small plants and new renewable, reflecting the need for the regulatory environment to offer positive incentives for investors. Challenging aspects of the regulatory environment for investors, apart from environmental licensing, include the supply of natural gas to thermal plants and a relatively strong state presence still in generation. Clarity in the future mix of power technologies is also an important element for increasing visibility for investors. At the same time, the government is seeking to minimise public investment as part of its strategy to reduce public debt, and because of other priorities for public spending. Private investors are therefore important and need to be attracted into the market in greater numbers.

The International Energy Agency (IEA) has identified three conditions for securing a policy and regulatory environment conducive to investment in power generation (Box 2.2).

Box 2.2. **Essential conditions for investment in power generation**

- Clear and stable policy framework. Uncertainty about government support for specific generation technologies creates considerable investment risks. Governments (not regulators) have the ultimate responsibility for setting priorities for new generation capacity and the desired energy mix.
- Effective licensing process. Market signals or policy-driven incentives will not be effective if investors cannot obtain permission to build new electricity infrastructure. Delays associated with regulatory approval of new power plants and associated transport frustrate markets and increase the cost of projects. Public debate is essential to creating acceptance of necessary new power infrastructure.
- Competition, including cost reflective prices, drives an efficient investment climate, provided that a clear and stable policy framework exists and that the government maintains a clear commitment to competition.

Source: IEA (2007), *Tackling Investment Challenges in Power Generation in IEA Countries*.

The outlook for investment may be improving however, due at least in part to an improvement in the regulatory environment since 2004. Financial analysts of the Brazilian utilities sector[12] note that another re-rating of the sector is likely this year (the first re-rating followed the 2004 reforms). They expect that generation and transmission will be the first to benefit, while distribution will lag pending further stabilisation of the tariff revision process. The analysts identify three main contributory factors: a positive macroeconomic outlook, including falling interest rates and controlled inflation; improved corporate governance; and – not least – a more stable regulatory environment.

The mix of power generation technologies, linked to the availability of input fuels, is a major issue for Brazil. An adequate portfolio of technologies needs to be in place to counter possible difficulties of supply and avoid overdependence on one source. Brazil has a high

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dependence on hydro-power, and heavy reliance – at least at present – on imports of natural gas to fuel its thermal plants; these plantsare the second most important source of power and, as stated in the chapter's introduction, provide the main reserve cushion for hydro shortfalls. However, the recent difficulties with Bolivian gas imports highlight the risk attached to such a strategy. This might not matter if Brazil were part of an effective regional power market in which it could trade its way out of shortfalls in its own generation.[13]

The government is keenly aware of the power sector's vulnerability as regards generation sources. As in most other countries, there is no single optimum solution; each power technology presents both advantages and drawbacks. The government is considering the full range of options, including new hydro-plants, coal fired plants, a new nuclear plant, and new natural gas thermal plants, as well as increasing the role of biomass and new renewable.[14] New hydro-power, unless it is from very small plants, is highly controversial, and some large plants have been awaiting an environmental green light for over a decade. Further nuclear power is also controversial. Of crucial importance for investor confidence in this context are clarity and consistency over time on the part of the government as to its strategic choices.

The difficulties presented by other technologies and the need for hydro-power backup puts the spotlight on fossil-fuelled plants and natural gas (Box 2.3). The prospects for increasing the share of thermal plants powered by natural gas depend on further major efforts to improve security and diversity of gas supply, as well as ensuring that the regulatory framework for both sectors supports this objective.

Box 2.3. **Natural gas for power**

Natural gas-powered thermal plants are used in Brazil to stabilise seasonal variations in power supply from a largely hydro-based system that depends on rainfall, and to support the prudent management of hydro-power reservoirs. A major problem with this approach is that hydro-power needs flexible backup, whereas piped natural gas supply is itself relatively inflexible. Under the power sector model established in 2004, efforts are being made to mitigate this incompatibility by remunerating gas plants for availability and paying their variable cost when called to produce power (they are a form of reserve capacity). A related issue is that gas plants are not required to produce power very often or regularly, which – added to their high inflexibility – makes them uneconomic.[1] Due to the system of dispatch based on a formula aimed at optimising supply security and efficiency, the load factor is very low, with an average of barely 20% when it needs to be nearer 60% for economic viability.[2] Gas power plants account for some 11% of installed capacity, but hardly 4% of production. Last but not least, the supply of gas is an issue for when the plants do need to run, given the tight supply situation relative to overall demand. Again, the 2004 power sector framework seeks to address this issue by requiring power plant owners contracted to supply power to have a guaranteed source of gas supply, and enforcing this requirement.[3]

Gas regulatory framework

The natural gas sector is regulated upstream at the Federal level, where competition has been introduced via auctions for the allocation of concessions for E&P. Supply is through Take or Pay contracts, and the high pressure pipeline network, owned by the dominant company Petrobras, is subject to a restricted form of negotiated access. The regulator is the

Box 2.3. **Natural gas for power** *(cont.)*

National Agency for Petroleum, Natural Gas and Biofuels (Agência Nacional do Petróleo, Gas Natural e Biocombustiveis – ANP). ANP is responsible for organising the bidding process for new exploratory blocks and signing related concession contracts; preparing and signing production concession contracts; controlling the quality of gas traded; authorising gas imports and the construction of new transmission pipelines; authorising the distribution of compressed and liquified natural gas; setting policies for transport service tariffs; and setting rules for promoting competition in the gas industry (but it has no mandate to prepare cases for the competition authority or to contest abuse of market power).

Regulation downstream – from the city gate[4] – is at State level. This means that the States have jurisdiction over the low-pressure distribution network within their boundaries, and hence the natural gas supply to those power plants or large industrial customers that are sited in their State and connected directly to distribution pipelines. ANP, however, has jurisdiction over supply where customers are not connected to the distribution pipeline, but to a "transference" pipeline which is for their exclusive use.

Reform proposals

Reform plans are currently under discussion in the Brazilian Parliament. Two proposals (one tabled by the government and the other by Senator Rodolpho Tourinho) were merged and approved in the House of Representatives. This merged proposal has been sent to the Senate. Its broad lines would establish a competitive bidding system for investment in new pipelines, and define a clearer and stronger form of negotiated third party access. A concession system would be established for new pipelines (existing pipelines would retain their current authorisation regime), based on invited bids under which the winner would be the company requesting the lowest revenue. An open season would be established, under which transport capacity could be acquired by third parties. There would be a few exceptions, including international pipelines with a political dimension for which the minister would apply an authorisation regime. For both existing and new pipelines, the access regime would only be triggered following a defined period to allow investors to recoup their investment. (For new pipelines, the period would be defined as part of the bidding conditions, depending on the state of gas market development in the area; for existing pipelines it would be ten years, which means open access as most of them are at least ten years old.) Terms of access would be negotiated directly between the customer and the transporter, with a provision for ANP to intervene and define tariffs if a deal cannot be reached.

Gas for power: Issues

To boost the role of natural gas in power generation, there needs to be increased flexibility and competition in the supply of gas. The current rigidity of gas supply take-or-pay contracts, and the absence of an effective regime for investment in new pipelines and for third party access, compromises the competitiveness of new thermal power.[5]

To overcome this problem Brazil is taking action to import Liquefied Natural Gas (LNG), to increase its domestic production of natural gas, and to expand its pipeline infrastructure. All these actions are included in the PAC (Programme for Accelerated Growth) and account for BRL 40.4 billion investments by 2010.

Two LNG regasification plants starting operation in 2008 will add 20MM m^3/d of natural gas to the market, supporting the flexibility required by the thermal plants.

The pipeline infrastructure is to be doubled by 2010, which will help optimise gas exchanges between production regions and consumer centres, as well as the interconnection between the South East and Northwest pipeline networks.

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Box 2.3. **Natural gas for power** *(cont.)*

The increase in the domestic production of natural gas is being developed through the PLANGÁS (Gas Production Anticipation Plan), which will add 39 million m^3 per day of natural gas in the South East region by 2010.

Other measures might work on the demand side by raising the load factor, in order to compensate for the uncertainty inherent in the use of natural gas for power. Potential consumers with a high average demand include cogeneration in combined cycle plants for industry and commerce, and use related to oil refineries. The use of gas could also support the management of intermittent sources of power such as wind.

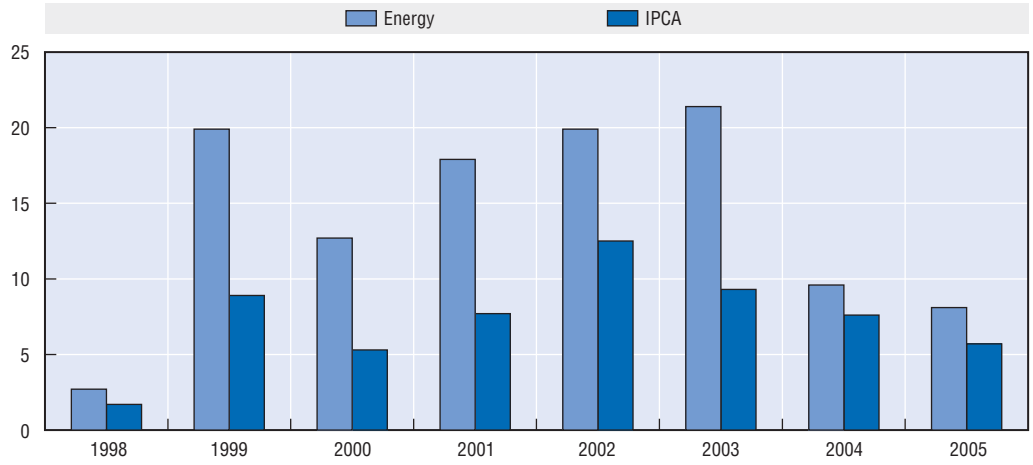
If natural gas is to play an enhanced role in assuring a reliable power supply, investors need to be clear that this is the government's strategic objective, and that this is reflected in appropriate, mutually supportive regulatory regimes for each sector. For example, this situation underlines the need for a much closer relationship between ANEEL and ANP, as well as the importance of gas market reform, already on the government's agenda. It will also help to ensure that the availability of gas for power is not crowded out by other end-uses, which could happen if investors decide that the future lies elsewhere such as in industrial or commercial uses for gas. The 2004 reforms have reinstated a strong strategic planning function at the centre of government (and this can be used to reassure investors about the government's commitment to natural gas in power).

1. This may not be true in a more competitive and disaggregated market.
2. Plants are idle most of the time as hydro reservoir levels historically run low only every two or three years. The year 2005 was an especially bad one for gas, with lots of rain; hydro met most of the demand. The load factor is the ratio of annual average electricity demand to peak demand.
3. The electricity regulator ANEEL is responsible for regulating agreements for gas supply to power plants, and can and does apply penalties for non-availability of plants (based on the legal requirement that plants that have successfully bid at auction to supply power should have 95% supply cover).
4. The city gate is a commonly used term in the natural gas sector, which refers to the point at which a local distribution company receives gas from a high-pressure pipeline into the low-pressure distribution network.
5. There is a major pricing issue embedded in the current power sector regime. Take-or-pay contracts for gas and the absence of a wholesale market means that fuel supply is not a variable cost for a gas-fired plant when it is dispatched but part of its overall capacity cost, reflecting the cost of take-or-pay fuel contracts. This increases the cost of using the reserve thermal plants.

Prices and efficiency

According to data collected by IDEC (Instituto Brasileiro de Defesa do Consumidor – Brazilian Institute for the Defense of the Consumer),[15] prices have risen faster than inflation, consistently and by a significant margin, since 1999, although the gap narrowed in 2004 and 2005 (Figure 2.3). IDEC identifies two issues behind these figures. The first is methodology for setting distribution companies' tariff revisions. Changes to the calculation methodology meant that some companies' tariffs – especially in the large urban centres – were adjusted higher than inflation. This may well be appropriate if it was part of a deliberate strategy to rebalance tariffs to promote more cost-reflectiveness, and in fact one aim of the new methodology was to better reflect the services offered by companies. However, the TCU – *Tribunal de Contas da União,* Federal Court of Accounts – challenged some of the evaluations, and IDEC drew attention to the scope for interference in ANEEL decisions. The second issue concerns the pass-through of costs by distributors, where IDEC identified a "flagrant imbalance in relations between agents". For example CELPE (among others) was allowed to adjust its tariffs to reflect the purchase of more

Figure 2.3. **Electricity tariff increases compared with the inflation rate, 1998-2005**



Note: IPCA is the National Consumer Price Index and reflects general inflation. The energy tariff increases displayed in the figure have been reported by IDEC, Brazilian Institute for the Defense of the Consumer.

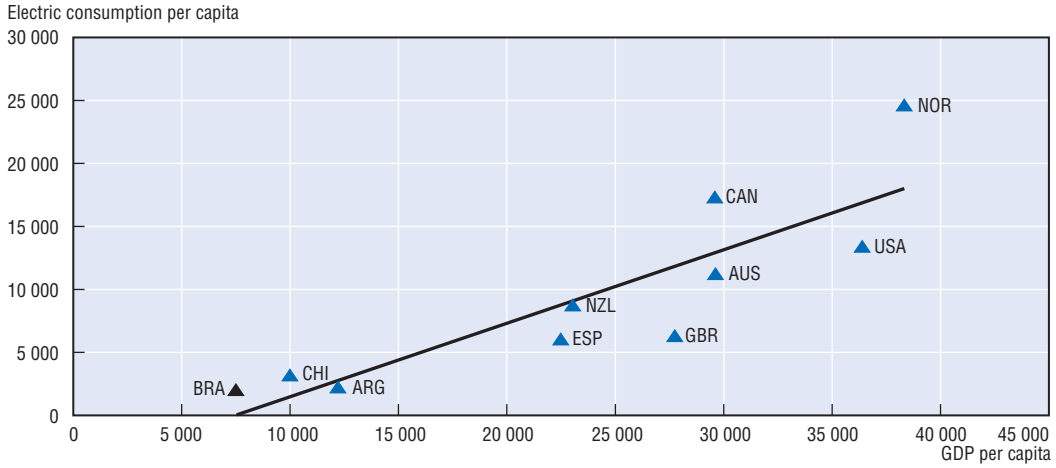
Source: IDEC, Brazilian Institute for the Defence of the Consumer.

expensive energy from a company of the same group (Termopernambuco).[16] The issue, however, arose out of contracts agreed before 2004, when self-dealing was still allowed, and would not be possible today (self-dealing has since been prohibited). This also reflects the need for ANEEL to rely on an adequate number of technically qualified staff to manage the tariff reviews effectively, and also on the adequacy of its powers to request appropriate information from the distribution companies.

The current regulatory regime is aimed at achieving a range of strategic objectives, including sustainability, social justice, guaranteeing a balance between supply and demand, and promoting investment. Efficient and cost-reflective pricing – which promotes efficiency and puts pressure on prices – is not an explicit part of the approach, although minimising costs forms an important part of the methodologies deployed (*e.g.* for system dispatch).[17] Partial market opening and the managed framework of auctions which substitutes for decisions taken directly by market players for the supply and purchase of power will not deliver the same focus on costs as a fully competitive market. Price signals are inevitably muted, as they generally do not reflect short-term variations in demand. The pressure for market players to be cost-conscious is also muted.

Another important aspect of efficiency is the amount of energy consumed per capita (energy intensity).[18] Figure 2.4 shows that Brazil's electricity intensity is roughly comparable to that of South American neighbours with a similar per capita GDP. This is an important indicator to track over time, as energy intensity tends to grow with GDP (the higher the income per capita, the higher the consumption per capita). Although energy efficiency (more energy for less fuel) is not the same thing, efficiency improvements improve energy intensity.

Figure 2.4. **Electricity consumption per capita in relation to GDP, 2004**



Source: International Energy Agency (2006), *Key World Energy Statistics*.

Brazil's current approach to power sector management

Adoption of a new model in 2004

Brazil's current framework for the management of its power sector was adopted in 2004 against the background of the 2001 supply crisis, which had a serious impact on the economy, reducing GDP by 1% according to some estimates. It replaced an earlier model that had emphasised privatisation and the development of full competition. The new model reflects a new approach as well as the pragmatic need, highlighted by the crisis, to stimulate new private investment, especially in generation. The previous approach had failed to do this, despite the fact that it had been introduced to attract private capital and improve efficiency. A large part of the problem appears to have been flaws in the key elements of the old framework – including pricing, the wholesale market and the institutional structure.

The new model is a carefully constructed hybrid of competition and highly regulated transactions. It includes important elements of direct competition through the auction process for generation and transmission, and the "free" market (see explanation below of the structure of the power market, which consists of a "regulated" and a "free" market). Efforts have been made to address the flaws of the old model to the extent that they remain relevant issues in the new framework, for example in the institutional structure. The formal objectives are to secure an adequate supply of power by attracting investment at least cost and at a reasonable price to consumers, and to promote universal access to power via social programmes.[19]

Key elements of the current framework

Strategic and political leadership: Ministries and the President

Energy policy is set by the President. For this task, the President receives advice from the National Energy Policy Council and a committee of relevant ministries, (*Conselho Nacional de Política Energética* – CNPE), which is a committee composed of a number of ministers specified by law. The CNPE reports directly to the President, who may approve its proposals. The Ministry of Mines and Energy (*Ministério de Minas e Energia* – MME) chairs the CNPE, which also includes representatives of the Finance Ministry and the Environment

Box 2.4. **A brief review of Brazil's power sector reforms**

The 1990s: A flawed effort to implement market-oriented reforms

As in many other countries, Brazil's power system was originally based on a set of vertically integrated companies, for the most part under public ownership. Difficulties in keeping up with growing demand worsened in the 1990s. This triggered major market-oriented reforms in 1996, inspired by reforms in the United Kingdom and elsewhere. A large number of state companies were privatised, partly or wholly. A wholesale power market was established under which large consumers (over 10 MW) were allowed to contract electricity with generating companies, including Independent Power Producers (IPPs), in a wholesale power market. A regime of regulated third party access to the grid was established for the transport of contracted power. A new institutional framework to oversee the new system was created, with the establishment of the regulator ANEEL (Agência Nacional de Energia Elétrica – National Electricity Agency); a system operator, ONS (Operador Nacional do Sistema Elétrico – National Electric System Operator) separate from transmission assets; a market manager, MAE (Mercado Atacadista de Energia Elétrica – Wholesale Electricity Market); and a co-ordinating policy body, CNPE (Conselho Nacional de Política Energética – National Energy Policy Council).

The reforms were ambitious but incomplete and flawed in important respects, and did not attract the anticipated private investment, setting the scene for the 2001 supply crisis. Installed generation capacity expanded only by 28% between 1990 and 1999, compared with demand growth of 45%. Most of this was hydro-power, and very little was additional thermal capacity needed to secure the stability of a largely hydro-based system, absent significant prospects for regional trading with Brazil's neighbours. To bridge the gap, water reserves were depleted to generate more hydro-power. The system operator was still dispatching hydro-power a few months before the crisis, instead of thermal.

- *Flawed pricing regulation.* Pricing of power for generators, distributors and end-users was flawed. There were major methodological inadequacies in determining the value of the capital base and productivity, and no regulatory accounting to provide a sound basis for calculations. Distributors complained that they were not allowed to pass through changes in uncontrollable costs such as taxes and levies. Generators complained that the regulatory price cap for the pass-through of energy purchased under new long-term contracts was significantly below the true long-run marginal cost of building new plant, and that the methodology for fixing the cap was flawed. Transmission pricing methodology was also flawed. Transmission constraints were ignored and costs were "socialised" within each sub-market.
- *A dysfunctional wholesale market.* The power market was undermined by financial and contractual disputes, mostly between generators and distributors, which the institutional framework was unable to resolve. The market manager had been set up to implement settlements arising from contracts for power purchases, and was not equipped to arbitrate on the contracts when disputes arose. It also had governance problems (a large and unwieldy stakeholder board) which prevented it from finalising market rules and implementing the necessary accounting and settlement systems in time to support trade.
- *Institutional weaknesses.* Disputes and difficulties bounced around the institutions set up to oversee the new model, none of which appeared to be able to take a clear lead or co-ordinate. The strategic planning and policy function that had been embedded in MME was dismantled, and resources for this critical function were scattered.

The 2001 crisis

This was a crisis brought on by inadequate investment in generation and insufficient diversification away from hydro-power, against the background of reforms that had failed to stimulate appropriate and timely investment, and a shortage of gas.

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Box 2.4. **A brief review of Brazil's power sector reforms** *(cont.)*

It was clear a year or so before the crisis that a supply shortage loomed. Prices in the wholesale market reached an unprecedented high, which finally triggered investment in new hydro-power. But it was also clear that these investments would not be in time to prevent a shortfall. The government decided to intervene, and launched the emergency PPT (Programa Prioritário de Termoeletricidade) progamme in 2000, aimed at encouraging investment in gas-fired plants. But the programme was a relative failure, and never completed. Only 15 of the planned 49 plants were built. Investors stayed away partly because of the high cost of gas, as well as continuing worries about the regulatory regime and the stability of the government's policy objectives.* It was too little and too late to avoid a power crisis, the immediate trigger of which was an unusually dry summer that reduced reservoirs to a critical level at a time of growing demand spurred by economic recovery.

By contrast, management of the crisis was extremely effective. The government quickly set up a programme (the Emergency Electric Power Consumption Programme) and an institution (the Electric Power Crisis Management Chamber) to implement emergency measures, which lasted from June 2001 until February 2002. Power consumption was reduced by 20%. Energy saving and efficiency measures taken by consumers (for example, switching to more efficient appliances) had a sustained effect and demand did not recover to pre-crisis levels until 2004. Perversely, this moved the power system into a situation of excess supply, undermining the sector's profitability and incentives for investment. The PPT construction programme was halted, and the dominant national oil and gas company, Petrobras, underwrote much of the cost of the PPT that had been built by purchasing most of the plants. However, a positive feature that emerged from this crisis was the need to pay attention to energy saving and management, which was not at the forefront of energy policy in Brazil in the past.

The new model established in 2004

The new model considers that electricity is a key public service that needs to be upheld by a strong state role – as well as delivering a pragmatic assessment of the weaknesses of the first reforms and the need to establish a framework that would deliver investment for reliable power and thus avoid another damaging crisis. Private investment, as before, needed to be encouraged. Demand had started to grow again, but the public debt needed to be brought under control and priorities for government spending lay elsewhere, especially in social programmes and poverty alleviation. The privatisation programme was halted. Key lessons drawn from the past included the need to reinstate a strong planning function, and to improve the functioning of the wholesale market. Prioritising hydro-power in a country where two-thirds of potential hydro resources have not yet been exploited was another strong policy objective.

Reflecting these varied objectives, the new framework is a hybrid, made up of a "regulated" market organised around a wholesale power pool, based on long-term contracts between generators and distribution companies serving captive consumers, and a much smaller "free" market in which large consumers (over 3 MW) are free to contract directly with generating companies. The contracts underpinning the regulated market (a form of Power Purchase Agreement – PPA) are based on long term concessions allocated to generators and distributors for the supply of power to captive consumers through competitive auctions. The regime of regulated third party access – TPA – to the grid set up by the previous reforms has been retained.

* See earlier comments on the regulatory risk that existed under the earlier pre 2004 regime, in the section on supply.

Ministry. It has a permanent secretariat which meets at least twice a year, although decisions are sometimes taken *ad referendum* and formally endorsed at the next meeting. The MME is the lead ministry for the power sector. Authority to grant concessions and conduct auctions is an executive power delegated by the Congress to the MME.

The legal and regulatory framework

Electricity distribution is a public service under the Constitution. The executive power may however, under Article 175, assign concessions for a period of time to private parties chosen by means of a competitive auction process, under the supervision of the executive power (*Poder Concedente*). This provision underpins the reforms that have dismantled the old monopoly and wholly publicly-owned structure of the Brazilian power sector. The sector is regulated mainly at Federal level while regulation of the downstream natural gas sector is a responsibility of the states. The current legal framework consists of seven laws[20] and associated secondary legislation, which have accumulated over time since the start of reforms in the mid-1990s.

The accumulation of laws raises the issue of whether it might make sense to rationalise the legal stock of existing regulations. The contrast can be made with ANATEL, the telecoms regulator, which rests on a single primary law. There are gaps and a lack of clarity in some parts of the legal framework. However, rationalisation may also represent a hazardous process: what is not broken should not be fixed, and the framework for the power sector appears to work effectively. In any event, the issue may be one of more effective co-ordination of policy and regulatory decision making among the actors, and a clearer allocation of responsibilities.

The regulatory authority: ANEEL

The National Electricity Agency (Agência Nacional de Energia Elétrica – ANEEL) is the regulator, established under the set of reforms carried out in the nineties. Modeled on the concept of independent regulators that have been implanted in nearly all countries with reformed power markets, ANEEL is an autonomous body set up under public law, which means that it is administratively linked, but not subordinate, to the MME. Its formal mission is to regulate and monitor the production, transmission, distribution and supply of power, and to establish conditions for power market development which balances the interests of market players (agents) for the broader benefit of society, and in accordance with the government's political directives. ANEEL is also responsible for promoting, under MME directives, the auctions for power acquisitions, as well as the auctions for transmission line concessions.

Nearly all power sector regulation is in federal hands.[21] The States have virtually no regulatory powers of their own, but the law provides for delegation of certain activities to State regulators and the Federal District, via agreements and contracts, which are paid for out of the tax on companies that funds ANEEL. The aim is to get closer to consumers and market players, adjusting supervision and mediation activities (audits and the management of consumer complaints) to local conditions.

Two not-for-profit entities regulated by ANEEL are responsible for system dispatch and market management. The National System Operator (Operador Nacional do Sistema Elétrico – ONS) operates the National Interconnected System. Its budget must be approved by ANEEL and most of its revenues are generated from tariffs for grid use. The Electric Power Trading Chamber (Câmara de Commercialização de Energia Elétrica – CCEE), which has a similar relationship to the regulator, is responsible for settlements between the free and regulated markets, and also manages the practical aspects of the auction process under delegation of ANEEL.

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A strong strategy and planning function

The new model has reinstated the strategy and planning function that had previously been with the Ministry of Mines and Energy (MME). Attached to the MME is the Energy Research Enterprise (Empresa de Pesquisa Energética – EPE), which did not exist before the 2004 reform and supports the development of strategy for the energy sector, using this as a basis for planning the auctions for transmission and generation projects (see Box 2.5). The system operates at two related levels. Long-term strategy plans are drawn up for investment needs in generation and transmission, based on anticipated demand. These plans are then given effect through an auction process for new capacity. Specifically, demand is estimated by the distribution companies, which have to contract all of their projected electricity demand over the next 3-5 years. These projections are submitted to the MME, which estimates the required expansion in supply capacity to be sold to the distribution companies in order to meet demand. Beyond that, ANEEL and CCEE can promote adjustment auctions to contract energy to be delivered in one year. EPE then draws up a list of projects that can be put forward for auction and certifies the plants, which can take part. The overall aim is to find a balance between old and new power so as to reassure investors,[22] and between different power technologies. The aim is also specifically to contract "correct" or "desirable" proportions of hydro and thermal power, to maximise the chances of a high-security/low-cost outcome.

Box 2.5. **The role of the EPE (Empresa de Pesquisa Energética)**

This body (which did not exist before the 2004 reforms) was set up to re-establish a central energy-planning function lost under the pre-2004 reforms; that lack appears to have been a major factor in the difficulties leading up to the 2001 crisis. The strategic planning and policy function that had been embedded in MME was dismantled, and resources for this critical function were scattered. The EPE is contracted to the MME to carry out its functions but has been granted private company status in order to ensure that it can recruit highly qualified staff, as it hires its employees by means of an official public examination but is granted greater freedom for level of compensation. The EPE plays a central supporting role in the management of the power sector. It draws up and submits to the MME strategy and long-term goals for energy, including power supply. These are used as the basis for the auctions to contract generation and transmission projects. Strategy studies formulated by the EPE include one with a ten-year time horizon, revised yearly, and one with a 25-year time horizon, revised every three to four years. This strategy role involves, among other issues, analysis of expected demand: in feasibility studies; these consider the technical, economic and socio-environmental potential of different energy projects; and in river basin inventories to identify the potential for further hydro-power, on which the EPE works with ANA, the water regulator.

The results are used by the MME to plan the power technology portfolio (the share of power from different types of plant). A list of specific strategic and non-strategic projects (the former have priority in the auctions) are submitted by the EPE to the MME, and then to the CNPE for approval (companies may replace non-strategic projects put forward by EPE if their proposal offers the same capacity for a lower cost/tariff). The EPE then certifies the plants whose power can be submitted for auction, sharing this information with the regulator ANEEL but taking the final decision.

Competitive auctions for generation and transmission

National and international companies can participate in auctions, alone or in a consortium, including non-power companies. Competitive auctions are run for the generation and supply of power, and for investment in the grid. Auctions for power are run for three categories – power from existing plants, new plants, and new renewables, at a set time ahead of the demand which the generation is expected to meet.[23] The winners are awarded concessions, the duration of which varies according to the type of plant (usually half as long for thermal than for hydro) and which form the basis for long-term supply contracts with the distribution companies. The first auction (for power from existing plants) was in 2004 for contracts of eight years' duration.[24] The first auction for new power took place in December 2005. Two further auctions took place in 2006. Bidders at auction must have an assured energy supply for the power which they wish to contract. The regulatory regime prescribes that 95% of total anticipated demand should be covered by energy supply contracts. Winning bidders are those that offer the lowest proposed tariff for their power. Organised by ANEEL, the transmission auctions are consolidated in MME and designed according to two studies called "Reinforcements and Enlargement Plans" and "Transmission Expansion Plan" (PAR/PET *Plano de Ampliações e Reforços e Plano de Expansão da Transmissão*) that are developed by a team from the National System Operator (ONS), Energy Research Enterprise (EPE) and the Ministry of Mines and Energy (MME), with background support from the staff of the distribution companies.

The power market

Regulated market (Ambiente de Contratação Regulado – ACR). This broadly takes the form of a highly managed mandatory pool that covers all the distribution companies on the National Interconnected System. These companies are required to cover expected demand from captive customers through contracts with generators. The contracts cover the purchase of power from both new and existing plants, and cover anticipated demand for the current year, three years ahead and five years ahead. They are put in place through annual auctions organised by ANEEL at the request of MME.

All the energy produced by a contracted plant is then at the disposal of the system operator for potential dispatch. There is no bidding. Plants are dispatched according to a methodology that uses a mathematical formula – developed by a research centre, validated by the system operator, and under the overall approval of the regulator – that seeks an optimal balance between supply security and efficiency. To this end the formula takes into account the current as well as the future cost of stored water, and seeks to ensure an optimal dispatch, over the long term, of hydro and thermal plants. The formula calculates the operational marginal cost (OMC) of one extra MW of power into the system, and thermal plants are dispatched when OMC is reached.[25] The difference between the amount of power contracted and actually dispatched is "liquidated" on the basis of the OMC, subject to a ceiling.

Free market (Ambiente de Contratação Livre – ACL). The price of power is freely negotiated according to perceptions of demand, the possibility of shortages, etc. Large consumers are also free to invest in generation, selling the energy that exceeds their needs.[26] The free market has a pivotal role in securing a supply/demand balance. If distributors find that demand is higher than projected, they buy from the free market. If demand falls short of expectations, they can sell their surplus contracted power in the free market. The free

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market has grown rapidly to 25% of total supply, as large consumers have switched away from contracts with distributors. This needs close monitoring, as the drift toward the free market by distributors' more important customers can destabilise the efficient regulation and functioning of the distribution sector.

New renewables. The Incentive Programme for Alternative Sources of Energy (Programa de Incentivo às Fontes Alternativas de Energia Elétrica – PROINFA), launched in 2004, provides incentives to increase the contribution of wind, small hydro, and biomass. The aim is to have 10% of these new renewables in the power mix by 2020. The government has designated Eletrobrás as the primary buyer of electricity generated by PROINFA projects, entering into PPAs at a guaranteed price. The target for Eletrobrás in a first stage is to install 3 300 MW power capacity for production by end-2008. The cost of these subsidised projects is picked up in end-user tariffs.

Distribution and supply

The power generated for the regulated market is, in effect, pooled and sold to distributors at a price (the same for all distributors) determined by the average of the different generation costs. Competition has been introduced for consumers of 3 MW[27] or more, who may choose to buy their power directly from generators, or acquire their own power supply, or have a contract with a distributor.[28]

Tariffs for these captive consumers are regulated through a price cap set by ANEEL, which differs for each distribution company and class of consumer. The cap is calculated using a methodology that combines a number of factors – taxes and fees for the sector, the cost of energy purchased by the companies and the inflation index. Low-income and rural consumers, public lighting, and sewage/water services are subsidised.

Supervision of companies and competitive neutrality

There are two issues. The first is regulation of state-owned companies to ensure that they are not able to take advantage of a potentially privileged position and to secure competitive neutrality for all market players. This is important in a market where private investors are competing for contracts to supply power. It reassures investors, and helps to ensure that such behaviour does not occur. There are a number of ways in which state-owned companies can undercut private competitors, including cross-subsidisation of activities such as generation and transmission, and soft financing conditions from the government.

In Brazil, Eletrobrás is the holding company of the largest generation and transmission group. It is still majority state-owned. Staff at Eletrobrás[29] increased from 21 904 in 2002 to 23 076 in 2005. Although this was a period of power system expansion, it may reflect implicit evidence of a company that is not yet fully exposed to competition or under some protection. Eletrobrás' main activity, transmission, is even-handedly regulated as a natural monopoly, and its own requests for access to and use of the grid for the supply of power are treated the same as other companies. However, this does not address all the potential issues. For direct transactions between generators and customers to be conducted in a climate of confidence about impartiality, this requires the grid companies to be independent of generating interests. This position has been reached in many countries that have reformed their power markets, even if there are some sizeable exceptions. If such independence is not ensured, the regulator needs to be sure that it can not only enforce a strong grid access and use regime, but also acquire and act on information regarding possible cross-subsidisation of activities by the main incumbent. This involves so-called "regulatory accounts" (Box 2.6)

Box 2.6. **Regulatory accounts in support of effective competition**

To enforce effective separation in the absence of divestiture, there is a need to develop *regulatory accounts*. These differ significantly from ordinary financial accounts. Regulatory accounting principles were developed in the first place to establish a clear separation of competitive from monopoly parts of the value chain in previously integrated utilities, but the same principles are just as relevant for separating utilities from their state owners. The following principles were developed by a group of European telecoms regulators:

- *Regulatory accounting principles*. These principles should establish the key doctrines to be applied in the preparation of regulatory accounting information. They should include, *inter alia*, the principles of cost causality, objectivity, transparency and consistency.
- *Methods for attributing costs, revenues, assets and liabilities*. A description of the attribution methodologies used to fully allocate revenues, costs, assets and liabilities should be given.
- *Basis for transfer charging*. A description of the basis used to transfer charge between different parts of the entity should be given, as required under the accounting separation rules. Typically this will prescribe methodologies for ensuring that an entity charges itself on the same basis as other entities for similar services.
- *Accounting policies*. These should follow the form used to prepare standard statutory accounts and should include, for example, details of fixed asset depreciation periods. Where the regulatory accounts are prepared on a current cost basis, the basis on which the assets are valued should be included.
- *Long-run incremental cost (LRIC) methodologies*. If LRIC applies, a description of the methodologies used to prepare long-run incremental cost information should be given. It should include details of the identification and treatment of shared or common costs.

The regulators note that "financial information prepared and published for regulatory purposes often differs significantly from other financial information prepared by companies for statutory or other purposes" and that "the basis on which regulatory accounts are prepared requires special regulatory rules as well as the application of generally accepted accounting practices". They also note the value of procuring an independent audit opinion on the accounts, which enhances the quality, objectivity and credibility of the information presented.

The second issue is that other companies are present, also indirectly, in more than one part of the value chain. Distribution companies sometimes form part of a group with interests in generation, although they are no longer allowed to own generation plants directly. Regulatory accounts are demanded on a regular basis by ANEEL to ensure that cross subsidisation does not happen.[30] It is not clear, however, how far the procedures in place are effective in preventing anti-competitive behaviour (Box 2.6).

Social programmes

Some 12 million Brazilians (out of a population of 188 million) do not yet have access to electricity. The Light for All (Luz para Todos) programme aims to give all households access to electricity in the very near future; 6.6 million people have already benefited. The programme is co-ordinated by MME and implemented by distribution companies, in partnership with state governments and rural electrification co-operatives. Funding is via an Energy Development Account (CDE), created in 2002 and paid for by existing consumers. Eletrobrás participates as a CDE account manager and establishes contracts with the

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distribution companies in order to provide funds and to supervise the programme's implementation.

Low-income consumers also have subsidies for CDE and a general reversion fund (RGR-*Reserva Global de Reversao*). The funds are allocated to the distribution companies under the regulation and supervision of ANEEL, in order to set reduced tariffs for poor families.

Box 2.7. **Brazil's power sector reforms and objectives: A comparative view**

Brazil's power sector reforms broadly match developments elsewhere (see Annex 2.A1, Table 2.A1.1 and Table 2.A1.2). Competition – full or partial – has been introduced over the last decade in most of the power markets of developed and middle-income countries in order to promote a more efficient sector that is less reliant on the state. This has been accompanied by a restructuring of the industry to encourage a critical mass of market players and neutral access to the transmission network for power generators, suppliers and consumers. Strategic policy goals tend to converge around the themes of securing affordable and reliable power, and the consequent need to promote positive conditions for investment.

At the same time, a renewed interest in ensuring a secure and reliable power supply has been stimulated by concerns over timely and adequate investment in power generation and the grid, as well as the sources of primary energy supply. (Supply takes different forms; for example, some countries are assessing whether to continue supporting nuclear power, while others are looking to diversify sources of natural gas to reduce political risk.) There has also been a rapidly growing interest in addressing the issue of climate change – the power sector accounts for around a third of greenhouse gas emissions. This is reflected in policies to promote renewable sources of energy and to stimulate energy efficiency, while more generally supporting customer choice and efficient markets. These other policy objectives need to be integrated into the basic regulatory framework for securing a well-functioning market, which is still a work-in-progress of finding the right institutional balance between policy makers at the centre of government, and regulators charged with implementing the policy regime. In practice the relationship is strongly iterative: policy sets the parameters for regulation, while application of the rules affects the outcome of policy goals, which may be adjusted accordingly.

Although the policy and regulatory landscape has evolved significantly in most countries, the technical features of the power sector have not undergone significant change. There have been no major breakthroughs in the storage of electricity, and an important natural monopoly remains at the centre of the supply chain – system dispatch and transmission. These technical constraints drive some important parts of the regulatory framework (*e.g.* the need to secure effective third party access to the grid, neutral arrangements for the dispatch of generators), which must be in place when the power sector is opened to competition.

Notes

1. The ten main generation companies in terms of installed capacity are CHESF, Furnas, Eletronorte, CESP, Itaipu, CEMIG-GT, Tractebel, COPEL-GER, AES TIETÊ, and Duke Energy.
2. The other type of hydro-plant is run on the river, powered solely by the flow of water in rivers.
3. Brazil also separates system operation from market management, with another entity handling the latter.
4. This approach, however, also gives rise to systemic risk: a power shortfall in one part of the country can affect the whole system.

5. The main companies are Eletropaulo, CEMIG-D, Light, CPFL-Paulista, COPEL-DIS, COELBA, CELESC, ELEKTRO, BANDEIRANTE, and CELPE.
6. It should be noted that energy intensity has been falling steadily in most economies over this period, which implies that higher levels of GDP can be supported with relatively less power. This has implications for the rate of investment in the power sector. The nature of economic growth – notably the extent to which it is based on services rather than manufacturing – also affects energy use.
7. Auctions are held around three times a year.
8. It may also reflect the regulated and thus low-risk nature of this part of the power value chain.
9. Continuity of service of the integrated grid (duration and frequency of interruptions) is monitored at control points on the grid. A robustness index shows the relationship between the number of disturbances without lost load and total disturbances. Data are available on ANEEL's website, *www.aneel.gov.br*.
10. The generation reserve margin is the measure normally used to determine whether there is enough generation capacity to meet demand. This may be broadly defined as the percentage of installed capacity in excess of peak demand over a given period (such as a year, month or day). Installed capacity generally refers to the generation assets located within a given geographical area. However systems with a very high percentage of hydraulic plants have to take account of the fact that the assured energy granted to a hydraulic plant has been mostly 50-54% of its installed capacity.
11. 51 small hydro, 20 large hydro, 19 thermal, 5 windcentral generation plants.
12. UBS Pactual, April 2007.
13. Norway, for example, which is almost wholly dependent on hydro-power, is part of a larger regional market, Nordpool, in which other power technologies are available, such as Danish coal. Hydro-power accounts for about half of Canada's generation mix, but it engages in significant trade with the United States, which spreads the risk.
14. The government has recently given the go-ahead for a third nuclear reactor. An environmental green light has also finally been given for the Madeira river dam complex.
15. IDEC compiles an annual review of the performance, from the point of view of the consumer, of selected regulators including ANATEL (telecoms), ANS (supplemental health) and the Central Bank, as well as ANEEL. For ANEEL, it reviews distribution tariffs for end-users and the management of low-income subsidies and quality of service.
16. Self-dealing (the purchase of power by distributors from their own subsidiaries) is in principle not allowed.
17. Note that cost-reflective prices are not necessarily lower prices.
18. The amount of energy used per unit of economic activity, or (per capita) energy consumption per unit of GDP.
19. Assured power supply is especially crucial for northeastern Brazil, which is home to more than two-thirds of the poor, and which was also the region most affected by the power crisis given the dependence on hydro, and with droughts a recurring phenomenon.
20. Adopted in 1995, 1996, 1998, 2000, 2004 (two laws), and 2006.
21. Brazil's regulatory system starts with this built-in advantage. Fragmentation of regulatory responsibilities across different levels of government usually delays or undermines the benefits of reform. The EU and Australia are examples of a trend toward centralisation to reap the benefits of an integrated and coherent approach to power sector management. By contrast, the United States and Canada struggle to develop integrated markets across their territory, and China is finding it difficult to manage an increasingly decentralised system.
22. The marginal costs of each type of plant are taken into account, so as to ensure that short-term price considerations do not undermine future plants, and to prevent existing generators from capturing the "hydro rent".
23. The two 2006 auctions were carried out for contracts three years before demand, and five years before demand.
24. 2013 is therefore a key date for the renewal of contracts.

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25. There is a list of priority thermal plants, which are remunerated for their availability (*i.e.* they are a form of reserve capacity) as well as for their power, when called to produce. The decision about which plants to dispatch when OMC is reached is based on the plants' proposed prices for incremental power and their operational constraints, which are notified to the system operator. They are then listed in a merit order based on their prices and taking account of operational constraints. Remuneration of the power produced is based on an aggregate of the prices that have been bid.

26. This now represents some 8 500 MW of installed capacity (10% of total capacity).

27. The law enables ANEEL to review the limit of 3 MW.

28. There are no plans to extend choice at this stage.

29. Data taken from Eletrobras annual report and accounts.

30. A further means of strengthening the regulatory regime to prevent abuse by dominant state-owned companies is to strengthen corporate governance through increased transparency, including shareholders' rights via reports and public meetings. This, however, is not the direct responsibility of the regulator.

Bibliography

ANEEL (2005), *Atlas de Energia Elétrica do Brasil*, 2nd edition, Brasilia

ANEEL (2006), *Annual Report*, Brasilia.

ANEEL website: *www.aneel.gov.br.*

Council of European Energy Regulators (2005), *Regulatory Benchmark Report of European Energy Regulators*, Brussels.

Eletrobrás Annual Report, Brasilia (2005).

EPE website: *www.epe.gov.br.*

IDEC (2006), *Avaliação do consumidor: agências e órgãos governamentais reguladores*, Instituto Brasileiro de Defesa do Consumidor, Sao Paulo.

IEA (2007), *Tackling investment challenges in power generation in IEA countries, Natural Gas market review*, Paris.

Instituto de Eletrotécnica e Energia (2007), "Energia: o Desafio das Agências Reguladoras", Universidade de São Paulo, São Paulo.

Moita, R. (2007), *Entry and externality: hydroelectric generators in Brazil,* M.S., IBMEC Sao Paulo.

OECD (2005), "Enhancing Brazil's Regulatory Framework for Network Industries: the case of electricity, oil and gas, and water and sanitation", *Economics Department Working Paper*, No. 45, April, *www.oecd.org/eco.*

ONS website *www.ons.org.br.*

Santiago F.A. (2006), "Distribuição e fornecimento de eletricidade no Brasil: integração ou desverticalização", *Revista de Direito Público da economia*, RDPE, No. 13, January/March, pp. 129-140.

World Bank (2002, 2004), PPIAF Project for Brazil Power Sector, Task 4, "Strengthening of the Institutional and Regulatory Structure of the Brazilian Power Sector", report by Ashley Brown and Ericson de Paula.

World Bank (2006), *Handbook for Evaluating Infrastructure Regulatory Systems*, Washington DC.

World Bank (2007), *How to Revitalise Infrastructure Investments in Brazil, Public Policies for Better Private Participation*, Washington DC.

ANNEX 2.A1

Regulatory Authorities in the Energy Sector

Table 2.A1.1. **General description of regulatory authorities in the energy sector across selected countries**

Country/regulator	Year	Applicable laws	Regulated sectors	Institutional framework and status
Argentina, ENRE, Ente Nacional Regulador de la Electricidad (National Electricity Regulatory Entity) *www.enre.gov.ar/*	1992	• Law 24 065 (19/12/1991). Law 15 336 (regulatory framework, electricity sector).	Electricity sector. • Distribution concessions to the entities created out of the former public company SEGBA, as well as national transmission and generation of electricity.	Independent public entity within the Secretary of Energy which is part of the Ministry of General Planning. Other relevant institutions in the sector's regulation include the Secretary of Energy, a centralised office dependent on the Ministry of Economy. It is in charge of advising the national executive power about decisions to be taken in energy matters. It also issues rules and regulations governing the technical and economic dispatch of the wholesale electricity market and sets seasonal prices for electricity distribution companies.
Australia, AER, Australian Energy Regulator (from 2008) *www.aer.gov.au/content/index.phtml/itemId/651437*	1974 (date of first relevant legislation)	• Trade Practices Act (1974), National Electricity Act (1996) and 2005 Amendment. • Australian Energy Market Agreement (June 2004) establishes future powers of the AER (to become effective 2008).	Electricity and gas sectors. • Wholesale electricity market and electricity transmission networks in the National Electricity Market (NEM). • Gas distribution networks and retail markets (except retail pricing), gas transmission networks and access codes (starting in 2008).	Formed out of the old energy division of the Australian Competition and Consumer Commission (ACCC), the federal competition authority acts as a separate legal entity. Note: AER does not regulate gas or electricity markets in Western Australia or electricity in Northern Australia where State regulatory entities have been created. Other relevant institutions in the sector's regulation include (at the federal level) the Department of Industry, Science and Resources, the Ministerial Council for Energy (MCE), and (at the state level) the state governments and regulatory authorities. The Australian Energy Market Commission (AEMC) is responsible for rule making and market development.
Brazil, ANEEL *www.aneel.org.br*	1996	• Law 8 987/1995 arranges the concession and permission regime for the provision of public services. • Law 9 427/1996 creates ANEEL. • Law 10 848/2004 establishes the rules for the commercialisation of energy.	Production, transmission, distribution and commercialisation of energy.	Member of the Indirect Federal Public Administration, connected to the Ministry of Mines and Energy. The Agency is legally qualified as a "special autarky", characterised by administrative independence, absence of hierarchical subordination, financial autonomy and stability of the members of the Board of Directors, who are submitted to a fixed term of office (renewable once).

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Table 2.A1.1. **General description of regulatory authorities in the energy sector across selected countries** *(cont.)*

Country/regulator	Year	Applicable laws	Regulated sectors	Institutional framework and status
Canada, NEB, National Energy Board *www.neb-one.gc.ca/clf-nsi/rcmmn/hm-eng.html*	1959	National Energy Board Act, Oil and Gas Operations Act, Environmental Assessment Act, Northern Pipeline Act, Petroleum Resources Act, Transportation Act.	Oil, gas and electricity sectors. ● International and inter-provincial aspects of the oil, gas and electric utility industries.	Independent federal agency linked to the Ministry of Natural Resources. Other relevant institutions in the sector's regulation include the provincial energy ministries and the Federal Competition Bureau.
Chile, CNE, Comision Nacional de la Energia (National Energy Commission) *www.cne.cl/*	1978	Decree-Law 2 224 (25/5/1978).	Energy sector ● All issues related to electricity, carbon, gas, oil and derivative products, nuclear geothermal solar energy and other sources of energy.	CNE is a national public body. Its acts are performed through the Ministry of Mining. Its President has ministerial rank although the CNE is not considered a ministry. Other relevant institutions are the Ministry of Economy and the Superintendence of Electricity and Fuels (SEC), under the Ministry of Economy. The Ministry of Economy authorises concessions, approves and publishes tariffs proposed by CNE and general economic oversight. The SEC is in charge of oversight functions, such as technical and operating compliance of sector entities with sector legal and regulatory requirements and of tariff applications. The SEC's superintendent is appointed by the President.
New Zealand, EC, Electricity Commission *www.electricitycommission.govt.nz/*	2003	1992 Electricity Act, 2001 and 2004 Electricity Amendment Act, Government Policy Statements (GPS).	Electricity sector. ● Wholesale and retail operations of the electricity industry.	Crown agent (public sector organisation that is not a public service department or a state-owned enterprise) linked to the Ministry of Economic Development. Shares responsibilities with the Commerce Commission (general competition authority).
Norway, NVE, Norges Vassdrags og Energidirektorat (Norwegian Water Resources and Energy Administration) *www.nve.no/*	1921	Energy Act (1990), Water Resources Act (2000), Watercourse Regulation Act, Industrial Concession Act, Planning and Building Act.	Energy and water sectors.	Directorate within the Ministry of Petroleum and Energy (MPE). NVE operates as an autonomous and independent economic regulator of monopoly network services within the framework of the MPE. Other relevant institutions include the Competition Authority.
Spain, CNE, Commission Nacional de la Energia (National Energy Commission) *www.cne.es/cne/Home*	1998	Law 34/1998 of October 7, Royal Decree 1 339/ 1999 of 31 July.	Electricity, oil and gas sectors.	Independent public entity linked to the Ministry of Economy. Other relevant institutions in the sector's regulation include the competition authority (Competition Tribunal), and the autonomous regions.
United Kingdom, GEMA, Gas and Electricity Markets Authority, supported by OFGEM, Office of Gas and Electricity Markets (GEMA Is the controlling authority for OFGEM). *www.ofgem.gov.uk/Pages/OfgemHome.aspx*	1987 (Creation of OFFER, the precursor to OFGEM)	Gas Act (1986), Utilities Act (2000), Competition Act (1998), Enterprise Act (2002), Electricity Act (2000), Energy Act (2004).	Electricity and gas sectors.	Independent public authority linked to the Department of Trade and Industry. Other relevant institutions in the sector's regulation include the competition authorities (Office of Fair Trading and Competition Commission).
United States, FERC, Federal Energy and Regulatory Commission *www.ferc.gov/*	1977 (replaced the first regulator, the Federal Power Commission which was established in 1930)	Energy Policy Act (2005), Energy Policy Act (1992).	Electricity, gas and oil sectors. ● Interstate transmission of electricity, natural gas, and oil.	Independent regulatory agency within the Department of Energy (DoE). Other relevant institutions in the sector's regulation include the federal competition authorities (Federal Trade Commission, Department of Justice) and the state level Public Utility Commissions (PUC).

Table 2.A1.2. **Market and policy context of the energy sector in selected countries**

Country/regulator	Market characteristics	Policy context
Argentina, ENRE	• Gas (55%) and hydro (30%) are the largest sources of electricity production. • Grid connections with Chile and Uruguay. • Three distribution companies, six transmission companies, 21 generation companies, plus 21 provincial distribution companies, out of three original federal power companies. Private ownership, these companies operate under the concession regime.	• Centralised structure for power sector policy and regulation, which is primarily the responsibility of the central government. • Partial market opening. There is a choice of three markets typically involving large users, where the parties are free to negotiate the terms of the contract, and then "spot" and "seasonal markets" where prices are established. Major liberalisation in 1989, separation of generation, transmission and distribution activities.
Australia, AER	• Coal is the dominant fuel input to power, accounting for nearly four-fifths of the power production. Natural gas and hydro-power are the other main power sources. • Isolated power market, no transmission links to other countries or regions. However, it is the world's leading exporter of coal and uranium (about 50% of its coal production is exported), and a growing exporter of liquefied natural gas (LNG). • Industry structure with mixed public/private ownership, largely based on the States. Some 20 generators, 5 transmission companies, 17 distribution companies, and nearly 100 retailers.	• Highly decentralised federal structure for power sector policy and regulation. Regulation of electricity and gas is a responsibility of the States, while the Commonwealth government has responsibility for interstate issues. A national approach was developed in the 1990s through an agreement between the State and Commonwealth governments, to create a National Electricity market (NEM), which is regulated by State regulators as well as a federal regulator. A similar approach was taken for gas. In 2008 the regulatory approach will become much more centralised as AER will take over responsibility from the States for distribution issues. • Full market opening/choice for all consumers in most States. One of the earliest reformers. National Electricity Market (NEM) started in 1998, together with separation of generation, transmission, distribution and supply.
Brazil, ANEEL	• The power industry covers a mix of private and public ownership across the main activities of generation, transmission and distribution. • Eletrobrás controls the three largest generation plants, 40% of installed generation capacity and 60% of transmission lines, as well as the government-owned distribution companies. • The dominant national oil and gas company (Petrobrás), which is also controlled by the Federal Government owns over a quarter of thermal plant capacity. Foreign firms have a relatively minor presence. • State ownership predominates in generation (80% of assets). • Two thirds of distribution assets are in private hands. • Generation is dominated by hydro-power (77% of capacity). • The hydro system is largely storage-based (plants that store water behind dams), with large reservoirs. • Remaining capacity is made up of thermal power (mainly natural gas, which accounts for 11%), biomass (4%), nuclear power (2%), and coal (1.5%), with a tiny sprinkling of other new renewables.	• Centralised structure for power sector policy and regulation. The energy policy is set by the Ministry of Mines and Energy (Ministério de Minas e Energia – MME) and a committee of relevant ministries, the National Energy Policy Council (Conselho Nacional de Política Energética – CNPE). The CNPE reports directly to the President, who may approve its proposals. The President may also delegate executive powers (Poder Concedente) to others. • The MME chairs the CNPE, which also includes representatives of the Ministry of Finance and the Ministry of the Environment. It has a permanent secretariat which meets at least twice a year, although decisions are more often taken *ad referendum* and formally endorsed during the following meeting. The MME is the lead ministry for the power sector. Authority to grant concessions and conduct auctions is an executive power delegated by the President to the MME. • The power sector is regulated mainly at Federal level while regulation of the downstream natural gas sector is a responsibility of the States. • ANEEL is an autonomous body set up under public law, administratively linked, but not subordinated to the MME. Its formal mission is to regulate and monitor the production, transmission, distribution and supply of power, and to establish conditions for power market development which balances the interests of market players (agents) for the broader benefit of society, and in accordance with the government's political directives. • Two non-profit entities regulated by ANEEL are responsible for the dispatch system and market management: the National System Operator (*Operador Nacional do Sistema* – ONS) and the Electric Power Trading Chamber (*Câmara de Commercializaçao de Energia Elétrica* – CCEE).
Canada, NEB	• Nearly 60% of electricity is produced from hydro, followed by coal (20%) and natural gas (nearly 6%). • Market is highly integrated with the US market. Major energy producer and exporter of oil, gas, and coal. • Each province has a different industry structure, depending on its reform arrangements.	• Highly decentralised federal structure for power sector policy and regulation. Electricity falls under provincial jurisdiction except for inter-provincial and international trade. • Market opening varies by province, from monopoly to competitive wholesale markets and some retail competition.

Table 2.A1.2. **Market and policy context of the energy sector in selected countries** *(cont.)*

Country/regulator	Market characteristics	Policy context
Chile, CNE	• Hydro and gas sources produce 76% of total consumption. Significant increases in hydro production since the early 1990s, although other sources are being explored to prevent drought related shortages. • 4 interconnected electricity grids that produce and supply electricity for the different geographical areas. The Central Interconnected System (SIC) is the largest one. It extends from the city of Taltal in the north, to the lake region south of Santiago. The SIC contains about 80% of the nation's installed electricity capacity and serves about 90% of its population. • Argentina and Chile's SIC grid and are connected through a transmission line. A second interconnection is under consideration as is a connection with Bolivia. • Private companies provide 100% of Chile's electricity. Enersis, and Endesa Chile, primarily owned by Endesa of Spain, produce about 50% of the country's power. Gener, owned by US-based AES, is the second largest producer (20%).	• Centralised structure for power sector policy and regulation, which is primarily the responsibility of the central government. • Partial market opening/choice for some consumers. Market is divided into final consumer segment (under 2 000 KW), with regulated prices, and industrial segment (over 2 000 KW), where prices are set by the market.
New Zealand, EC	• The power system is mainly hydro and geothermal (70%), followed by natural gas (17%). • Isolated power market, no transmission links to other countries or regions. • 5 main generating companies, 3 of which are state-owned enterprises, which are also suppliers to 98% of the retail market. Transpower, another SOE, owns and operates the high-voltage transmission network. 28 distribution companies are under mixed ownership.	• Centralised structure for power sector policy and regulation, which is primarily the responsibility of the central government. • Full market opening/choice for all consumers.
Norway, NVE	The power system is nearly 100% hydro-based. Integrated with the Nordic (Sweden, Finland, Denmark) market (Nord Pool), established in 1999. Also part of the converging EU regional electricity market. 328 electricity utilities, 128 are vertically integrated. Ownership is fragmented. Local and regional authorities own some 50% of generation capacity and government owns around 37% through Statkraft (SF). Private companies own about 13%. Foreign ownership is limited and concentrated in trading. Hydropower is viewed as a strategic resource and is consequently subject to government ownership or control. Thus, government can resume ownership of privately owned hydroelectric assets without compensation once the original 60-year licence expires or during the course of the licence whenever there is a change of ownership and the resulting share of private ownership exceeds one-third. Publicly owned hydro facilities are not subject to these precepts and can be granted perpetual licences.	Centralised structure for power sector policy and regulation, which is primarily the responsibility of the central government. Full market opening/choice for all consumers.
Spain, CNE	The main sources of power are coal (29%) and nuclear (23%), followed by gas (20%). Part of the converging EU regional electricity market. Four groups generate the majority of electricity in Spain. Four companies generate, transmit, distribute and sell electricity as wholesalers.	Centralised structure for power sector policy and regulation, which is primarily the responsibility of central government. Full market opening/choice for all consumers.
United Kingdom, GEMA and OfGEM	The main sources of power are coal and gas (74%), and nuclear (23%). Part of the converging EU regional electricity market. There are some 30 companies involved in power generation. One large power producer (British Energy) controls most of the nuclear energy and some 20% of total power generated. Twelve regional companies, mostly owned by generators, cover distribution. The main grid for England and Wales is owned and operated by the National Grid Company.	Centralised structure for power sector policy and regulation, which is primarily the responsibility of the central government. Full market opening/choice for all consumers.
United States, FERC	Electricity production relies heavily on coal (50%) and nuclear power (20%), although gas has seen large increases (17%). Significant trading links with Canada. World's largest energy consumer, it imports 30% of its energy. Possesses the largest world reserves of coal. There are over 5 000 electric entities, made of utilities owned by private investors, the government (mainly municipal but also federal), and rural co-operatives. There is a growing number of independent power producers with interests in generation only. Over half of the investor-owned utilities are traditional, integrated generation-transmission-distribution companies involved in all aspects of the industry. There is no national market, but a set of interconnected regional markets.	Decentralised federal structure for power sector policy and regulation, which is shared between the Federal Government and the states. No single governmental body sets government policy for the electricity sector. Federal Government regulates wholesale markets following a pro-competition policy. Partial market opening. Less than half the states have enacted laws to permit some form of retail competition, several states have delayed plans and California has suspended them.

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Chapter 3

The Private Health Insurance Sector

Introduction

Private health insurance (PHI) refers to diverse health funding arrangements in different national contexts (Colombo and Tapay, 2004a). It is distinguished from public coverage programmes primarily by its funding through non-income-related premiums – usually paid on the basis of a contract between a private party and an insurance entity – as opposed to taxes or social security payroll contributions. It is generally, but not always, of a voluntary nature, although participation may be set forth by the conditions of employment (OECD 2004a).[1]

The Brazilian Federal Constitution of 1988 states in Article 196 that "Health is everyone's right and the State obligation, granted under social and economic policies that aim to decrease illness and other indemnity risks and the universal and equal access to actions and services for its promotion, protection and recovery". The legal basis for the current development of the health system was established in Articles 196 to 200. The 1988 Constitution led to the establishment of the Brazilian National Health Service[2] (*Sistema Único de Saúde* – SUS), which was consolidated by Law 8 080 of 19/09/1990. This system replaced another where part of the population enjoyed a type of social insurance coverage, while another part was left with no coverage or specific last-resort instances. Even though the Constitutional Brazilian philosophy states that healthcare should be allocated on the basis of need rather than ability to pay, providing universal services in a huge middle-income country with wide social as well as geographical socio-economic and demographic differentials represents a major challenge. As a result, the services provided by the SUS in public hospitals and health public institutions may not match the expectations of the wide Brazilian middle class in terms of comfort and responsiveness.[3] A private health insurance system has therefore developed as a result of the diversity of preferences as well as of financial resources in the population, and the need to face the increased costs of medical technology. The result is a system where private coverage duplicates the universal coverage, *i.e.* where individuals who are privately insured may still rely on the public service. The public service still keeps a major role for highly complex in-patient interventions, traumatic surgery, transplants, renal dialysis, etc. The offer covered by the private health insurance sector may also not be as comprehensive, but rely on the SUS as a system of last resort.

Private health insurance market imperfections and the need for regulation

Information asymmetry in the PHI market can cause several market failures, which provide a rationale for regulation and public intervention. Moral hazard and information asymmetries *ex post* may result in the over-utilisation as well as oversupply of medical services. Incentives for overconsumption are also introduced by fee-for service reimbursement schemes that reimburse expenses incurred *ex post*. Adverse selection with information asymmetries *ex ante* may result in market imbalances, as well as an exit of the low-risk consumers and very high premiums for the high risks.

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Across OECD countries, health systems pay for healthcare through mixed financing mechanisms, with a mix of pooling and pre-payment. Health insurance can be defined as a way to distribute the financial risk associated with healthcare expenditures by pooling costs over time (pre-payment) and over different individuals (pooling). It differs from out-of-pocket payments in that it does not pool risks nor pre-pay for healthcare costs (OECD, 2004a).[4] The distribution of health expenditure is generally highly concentrated, resulting in wide social inequalities when out-of-pocket payments are used to finance health expenditure. In middle-income or non-OECD countries, a range of informal arrangements may also be substituted to provide for risk sharing, such as pooling of health expenditures across the extended family, and informal payment mechanisms.

Health insurance arrangements differ in terms of the level of cross-subsidisation (across time, risks and income groups) inherent in each scheme; its ownership and management; and whether participation is compulsory or not. Public health insurance includes coverage mainly financed through taxation or income-related payroll taxes, including social security contributions. Private health insurance, by contrast, is covered by private non-income-related payments (premiums) made to an insuring entity.[5] This coverage guarantee is usually set forth in a contract between a private party and the insurance entity that spells the terms and conditions for payment or reimbursement of health services; it is also influenced by the laws and regulations applying to supplemental health insurance, with which the new contracts must comply. The insuring entity assumes much or all of the risk for paying for the contractually specified services (OECD, 2004a).[6]

Private health insurance markets are widely influenced by their regulatory structure. From a public policy perspective, PHI may be considered an alternative or additional source of funding for financing health systems, especially when public budgets are stretched (OECD, 2004b). In Brazil, supplemental health insurance can also be seen as an effort toward self-reliance for society, providing some relief to the publicly funded health system (*SUS*). From a regulatory standpoint, private health insurance may raise two types of policy issues:

- One is in terms of its financial sustainability, to ensure that the insurers will be in a position to meet their commitments.
- The other is in terms of fulfilling public policy objectives in the healthcare sector. This may have implications in terms of access to coverage, quality of care, or protecting consumers.

From an overall perspective, the supplementary health insurance sector is a unique industry given its information asymmetries and social implications, and an industry that poses complex problems in terms of ensuring quality regulation that meets its goals without creating unnecessary burdens or distortions. This chapter will adopt a high-quality regulation approach, assessing the quality of the regulatory framework mainly in terms of the setup and governance of the national regulatory authority. It will not take a position on the goals of the overall health system; nor will it assess the health policy aspects as such. The discussion begins with the stated goals of the Brazilian health insurance system, public and private, and examines the regulatory and governance mechanisms of its national private health insurance regulatory body, the ANS – *Agência Nacional de Saúde Suplementar*. It will adopt a cross-country perspective, building on the existing results of an OECD study on private health insurance (OECD, 2004a).

The PHI sector and its functions across OECD countries

Private health insurance plays a leading role in financing healthcare in a few OECD countries and a supporting role in many others (OECD, 2004a).[7] PHI can have different functions across public-private financing mixes, as shown in Box 3.1. In a few countries, it is a main source of financing basic healthcare for large or significant sections of the population, who either are not eligible for public health insurance or have chosen to opt out of such cover (principal/substitute function). (This is the case in countries such as the Netherlands or Germany.) In a number of countries with universal public insurance for basic healthcare, PHI provides duplicate cover that parallels some or all of the cover guaranteed by public insurance systems (duplicate function). According to this classification, Brazil would appear to fall under the duplicative category.[8] This function exists in countries such as the United Kingdom, where private coverage has often been used to bypass queues in the public sector by giving access to private providers. In many countries with universal health insurance for basic care, PHI offers supplementary cover for risks outside the basic or publicly insured package (supplementary function), or covers the cost sharing required by the public system (complementary system). This is the case of the French system and the US health insurance system for elderly individuals that cover

Box 3.1. **Definition of the functions of private health insurance**

Primary private health insurance: private insurance that represents the only available access to basic health cover because public health insurance does not apply. This could be because there is no public health insurance, or individuals are not eligible for cover under public health insurance, or they are entitled to public coverage but have chosen to opt out of such coverage:

- *Substitute:* Private insurance for health costs, which *substitutes for cover that would otherwise be available* from a compulsory social insurance or employer's scheme.
- *Principal:* Private insurance for health costs- that for the insured individual represents the *only available access* to cover where a social security scheme does not apply. This includes the employer's compulsory schemes if cover is privately insured or self-insured.
- *Duplicate cover:* Private insurance that offers cover for *health services* already included under public health insurance. Duplicate health insurance can be marketed as an option to the public sector because, while it offers access to the same medical services as the public scheme, it also offers access to different providers or levels of service. It does not exempt individuals from contributing to public health insurance.
- *Complementary cover:* Private insurance that complements the coverage of publicly insured services or services within principal/substitute health insurance; it is intended to pay only a portion of qualifying care costs, by covering all or part of the residue of such costs not otherwise reimbursed (*e.g.* co-payments).
- *Supplementary cover:* Private health insurance that provides cover for additional health services not covered by the public scheme. Depending on the country, it may include services that are uncovered by the public system such as luxury care, elective care, long-term care, dental care, pharmaceuticals, rehabilitation, alternative or complementary medicine, etc., or superior hotel and amenity hospital services (even when other portions of the service (*i.e.* the medical component) are covered by the public system).

Source: Extracted from OECD, 2004a.

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services beyond Medicare ("Medigap market"). In most OECD countries, PHI has more than one function, although usually one prominent or main role can be identified in each country.

OECD governments have adopted three different approaches to ensure broad population coverage. A first group of countries has achieved universal or near-universal cover through a national public health insurance system (*e.g.* the Nordic, Mediterranean and Eastern European countries, Canada, Australia, New Zealand, Korea, Japan). A second group of countries has promoted basic coverage through a combination of public and private health insurance for different population groups (*e.g.* the Netherlands, Germany, and the United States). A third approach, represented by Switzerland, is to ensure universal coverage by mandating basic health insurance for the entire population (OECD, 2004a, pp. 30-31).

Certain health sector reforms have blurred the boundaries between private and public health insurance, for example by regulating and subsidising PHI extensively. Furthermore, some financing schemes may not be easily classified as public or private on the basis of the criteria used by the OECD. Other ways to distinguish public from private health insurance can be proposed and are indeed used in the literature and by governments. These can be based, for example, on the public or private nature of the entity administering cover; the existence of a profit motive driving insurers offering it; the voluntary or statutory nature of cover;[9] the extent to which the insurance entity actually bears risk; insurers' flexibility to base their decisions upon business practices, which depends on the intensity of regulation; and whether coverage falls under general or specific health insurance law. A few of these factors are discussed in Box 3.2 (OECD, 2004a, p. 27).

Box 3.2. **Blurring borders between financing arrangements across countries**

Nature of carriers of health insurance coverage

There is a distinction between the (public or private) nature of the provider of insurance and the financing method used to fund a health insurance arrangement. Sometimes public programmes contract with private insurance carriers to offer coverage to the publicly insured – as with the US Medicare Plus Choice programme.[1] In this case, private insurers relieve the public sector of some of the burdens of "third party" administration, in such areas as claims processing. Social security schemes can be administered and provided by private institutions, such as mutual companies in Belgium or sickness funds in the Netherlands and Germany. Government-owned insurers can also provide private health insurance. VHI Healthcare (formerly the Voluntary Health Insurance Board) is a state-backed organisation that until 1996 operated as monopoly provider of PHI in Ireland. Medibank Private, the largest not-for-profit health fund in Australia, was established by the Federal Government in 1976 and has become an autonomous Federal Government Business Enterprise since 1998. In some cases, the same insurance entity may offer different types of cover, for example sickness funds or their affiliates in the Netherlands, Belgium and Switzerland offer both statutory health insurance and voluntary private health insurance. Control over the way resources are collected (income tax or social security contributions through payroll premiums) – rather than the public or private nature of the insurer – is more important in determining whether insurance is public or private for the purposes of this study, although the nature of the insurer can be more relevant for supervisory purposes.

Box 3.2. **Blurring borders between financing arrangements across countries** *(cont.)*

Government financing of private or voluntary health insurance

Private health insurance, or segments within the PHI market, may receive considerable public subsidies. In some cases, the purchase of health insurance policies is financed predominantly by public sources, either because of large tax incentives or because the premiums of certain low-income individuals are greatly subsidised. These schemes nonetheless share several other features with private health insurance: The main method for collecting funds (premiums); administration by private insurance entities; the applicable regulatory regime; the role of the insurance arrangement in relation to public insurance systems; and so forth. In France, a government universal health insurance programme (CMU) provides eligible low-income individuals with publicly funded complementary health insurance coverage.[2] The premiums for such complementary cover are entirely subsidised through government resources. The insurance cover is administered by the social security insurers as well as complementary insurance entities ("mutuelles", private insurance companies or provident institutions). Its benefits and conditions of cover are regulated.

Government regulation of PHI markets and the similarity to public health insurance

Private insurance schemes, or segments within the PHI market, may be extensively regulated in a manner not dissimilar from public health insurance. In the Netherlands, some high-risk individuals who are not eligible for social health insurance coverage can buy standardised PHI policies (called WTZ) where benefit coverage, premium levels, and enrolment conditions are regulated by the government. Insurers' exposure to risk is minimal. In Switzerland, it is mandatory for individuals to purchase basic health insurance from private sickness funds applying non-income-related flat-rate premiums. The provision of basic insurance is regulated in a manner similar to social security schemes in other OECD countries, *e.g.* the benefit package is standardised, premiums community-rated, and enrolment open (Colombo, 2001).

Government employees' schemes

The government funds health coverage of civil servants through private insurers in some countries. This coverage shares many traits of private employer-sponsored coverage, despite being largely financed through public sources. In Germany, public employees are reimbursed by the government for most of their healthcare bills and receive PHI coverage for the remainder (European Observatory, Germany, 2000). Civil servants and their dependents in Spain receive health coverage from private mutual funds. They can opt to receive such coverage from private commercial insurers, with the state continuing to act as a third payer (European Observatory, Spain, 2000).

Is all private health insurance voluntary?

In most OECD countries PHI has a voluntary nature, while public systems are mandatory for at least some sections of the population. However, there can be cases of private health cover in which participation is mandatory. Switzerland, for example, had relied on voluntary PHI as principal source of health coverage until the 1996 Health Insurance Law (LAMal) mandated basic coverage for the entire population. Similar proposals for extending primary health insurance coverage to all in the Netherlands would establish a mandatory private health coverage system (Dutch Ministry of Health, Welfare and Sport, 2002). In the United States, the health reforms proposed during the first Clinton administration envisaged establishing a system of regulated, mandatory private health insurance. In Korea,

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Box 3.2. **Blurring borders between financing arrangements across countries** *(cont.)*

the purchase of insurance to cover health-related expenditure in case of car accidents is mandatory. Finally, individuals that opt out of the sickness fund system in Germany (as described later in this chapter) are obliged to purchase long-term care insurance from private insurers. Participation in private health insurance arrangements may not be mandatory by law; however, it can be imposed by the conditions of employment, for example by general agreements or employer-specific conditions.

1. Under the Medicare+Choice programme, private health plans participate in the US public health programme for the elderly, Medicare, on a risk or cost-reimbursement basis.
2. The "Couverture Maladie Universelle" (CMU) can also be seen as an example of a public health insurance programme administered by private entities. It provides basic insurance coverage to limited population groups that were uninsured until the introduction of the CMU in 2000, as well as subsidised complementary coverage.

Source: OECD, 2004a. See Box 2.1.

The PHI sector in Brazil in perspective

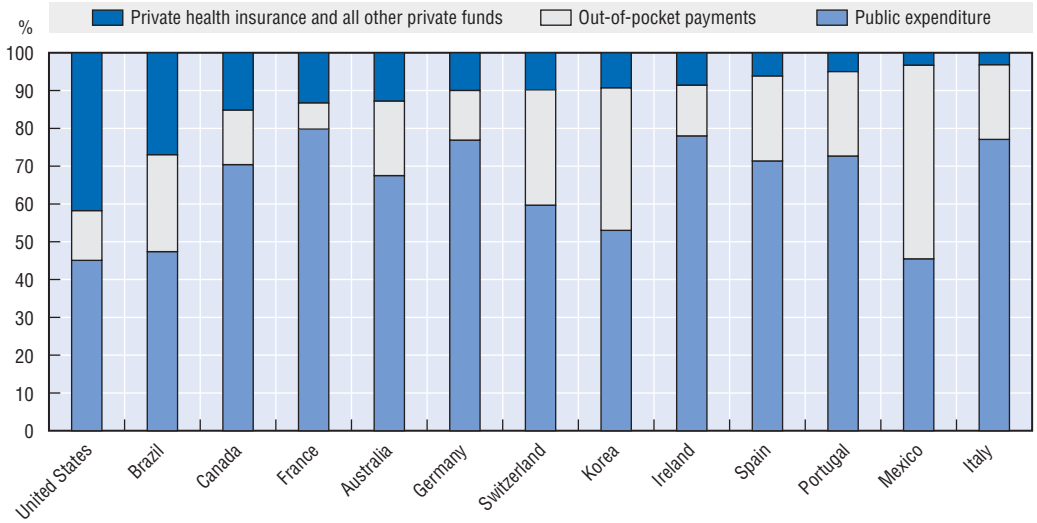
The private health insurance system in Brazil has been created to cover services supplied by private service providers. According to Lassey (1997), the increase in private health expenses results from the gap between what the public system and its supply can offer, given the social and economic circumstances of the country and the expectations of higher income classes. Thus the function of PHI in Brazil is to provide a duplicate cover, as it offers cover for health services already included under public health insurance. Among OECD countries, the most significant cases of duplicate insurance are Australia and Ireland. Other cases include New Zealand, Portugal and the United Kingdom.

In the Brazilian case, there are no public subsidies in the form of lump-sum transfers within the PHI market.[10] It is generally of a voluntary nature, although participation may be set forth by the conditions of employment. Like other countries within the OECD, such as the United States, public bodies fund health coverage of civil servants through private insurers or, alternatively, self-insurance schemes.

Private health financing in Brazil, including private health insurance and out-of-pocket payments accounted for 52.6% of total health expenditures (THE) in 2006. The expenditure corresponding to the provision of private health insurance by public employers is counted as private health insurance expenditure in these data. Out-of-pocket expenditure represents 49% of this, accounting for 26.5% of the THE. Private health insurance represents 27% of the THE, covering 23.9% of the population (ANS). This contrasts with the vast majority of health financing in OECD countries, where public sources account, on average, for 72% of total health expenditure (THE).[11] Only the United States and Korea have a smaller share of public expenditure on health (OECD, 2004a), as can be seen in Figure 3.1. Private health insurance also plays a major role in Brazilian health financing, second only to the United States when compared with OECD countries.

This is in a context where health expenditure represents a significant percentage of GDP; it reached 7.2% in 2006, which is relatively high when adjusting for GDP per capita on a PPP basis. In terms of overall expenditure expressed as a percentage of GDP, Brazil and

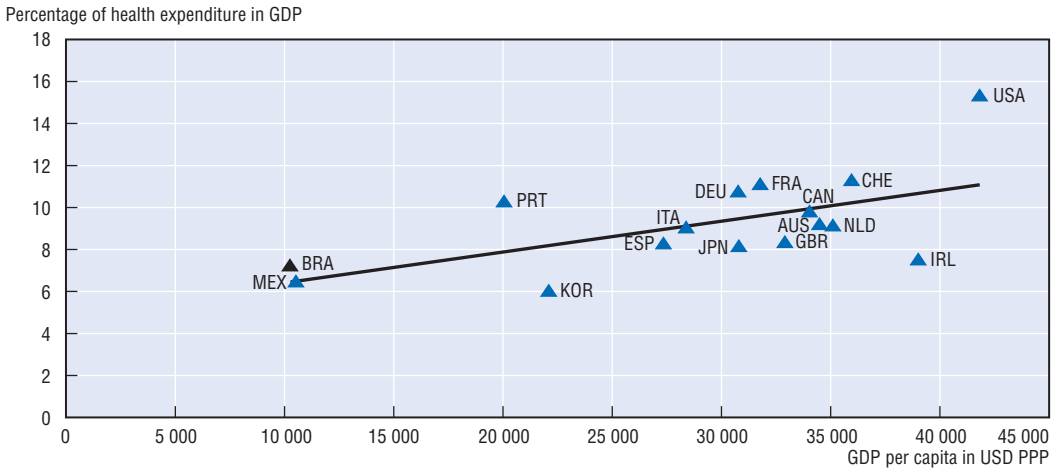
Figure 3.1. **Health expenditures by source of funding**



Notes: Data from 2003: Australia, Japan.
Data from 2006: Brazil, Italy, Canada.

Source: OECD Health Data 2007, July 07 version for data for OECD countries. Data for Brazil are from ANS.

Figure 3.2. **Percentage of health expenditure in GDP and GDP per capita**



Notes: Data from 2003: Australia, Japan.
Data from 2006: Brazil, Italy, Canada and Szitwerland.

Source: OECD Health Data 2007, 7 July; version Data for Brazil are from ANS.

Mexico are approaching some of the European countries, even though the GDP per capita in those two countries is less than half the European levels.

In PPP-adjusted terms, expenditure per capita on private health insurance in Brazil is similar to that observed in Australia and Ireland, and much above that observed in a number of OECD countries, including Spain, Portugal, Mexico and Italy – even though the relative income levels for these countries differ significantly.

Brazil is second to the United States in terms of the respective share of private health insurance in total health expenditure, while the percentage of the population covered is

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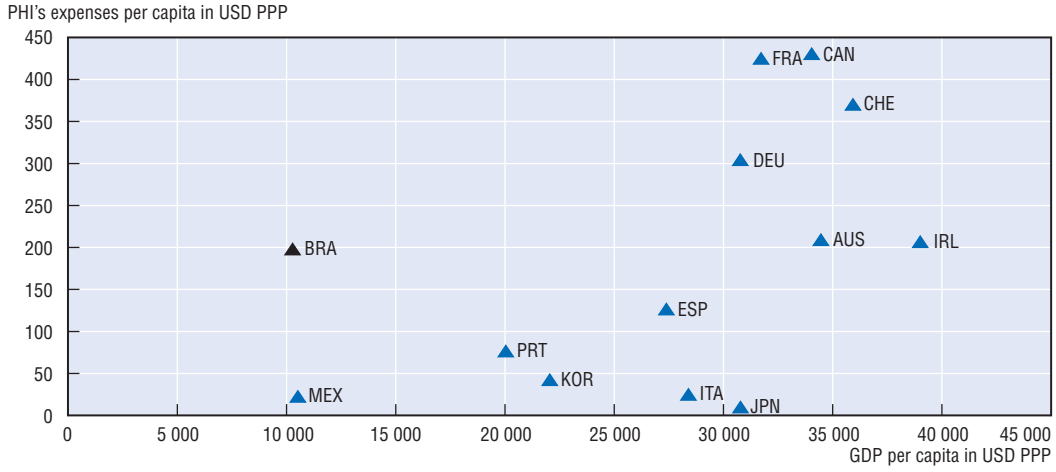
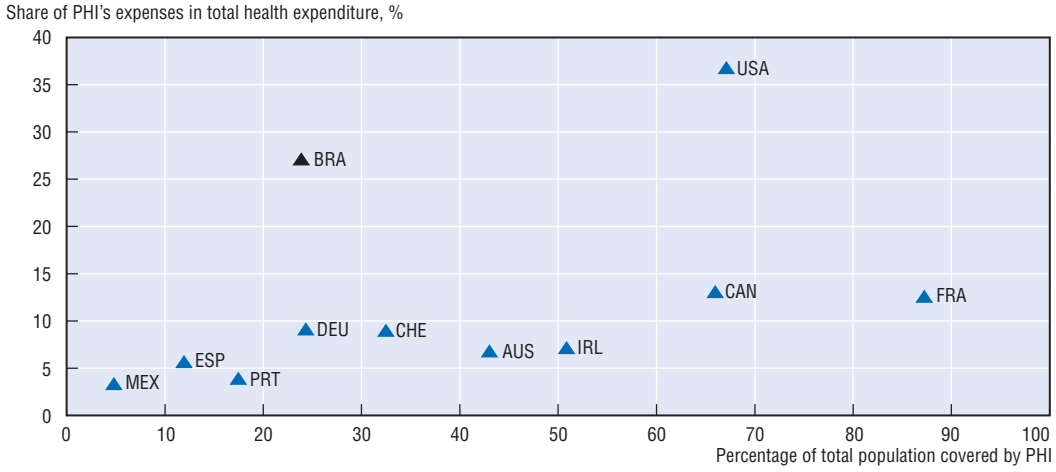
Figure 3.3. **PHI's expenses per capita and GDP per capita**



Source: Data for OECD countries relate to 2005, and are extracted from OECD Health Data 2007. Data for Brazil are from 2006 from ANS (2006).

much lower than in countries such as Australia and Ireland, with duplicative functions (Figure 3.4). This reflects the major role of private health insurance in the country, as well as its political importance. PHI is the main system for financing care for most of a population that could be described as middle class, or at least involved in the formal economy with a regular income.

Figure 3.4. **Share of PHI's expenses in THE and share of population covered by PHI**



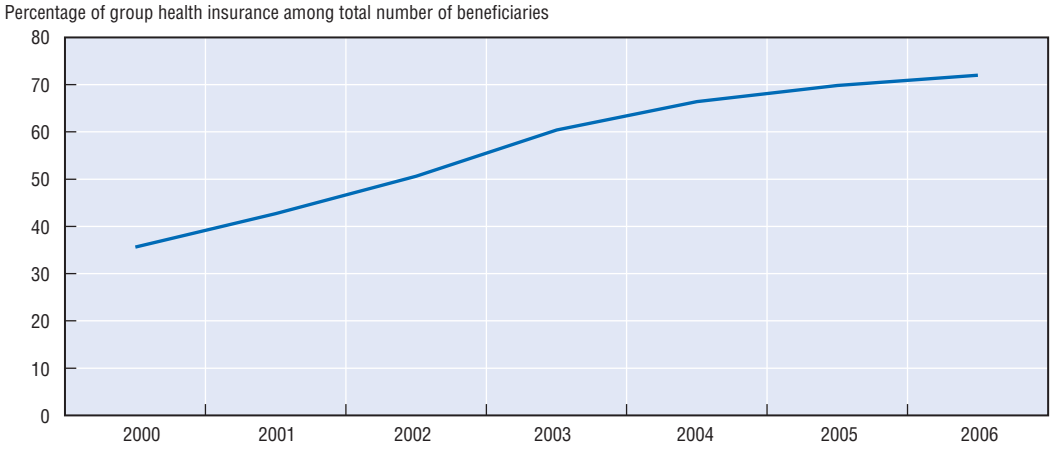
Note: Data for Australia and the Netherlands are from 2004, Canada and Italy from 2006, and other OECD countries from 2005.

Source: OECD Heatlh Data 2007. Data for Brazil are from 2006, source ANS.

A diversified market with unequal access

Group health insurance with collective plans is the main form of insurance (72% of beneficiaries in 2006) (ANS). It is also the main form of insurance in a majority of OECD countries with significant PHI markets (See Annex 3.A1, Tables 3.A1.3). From 2000 to 2006, the participation of collective plans increased 182%, reflecting a long-term trend.

Figure 3.5. **Share of collective plans as a percentage of total**



Source: ANS, 2006.

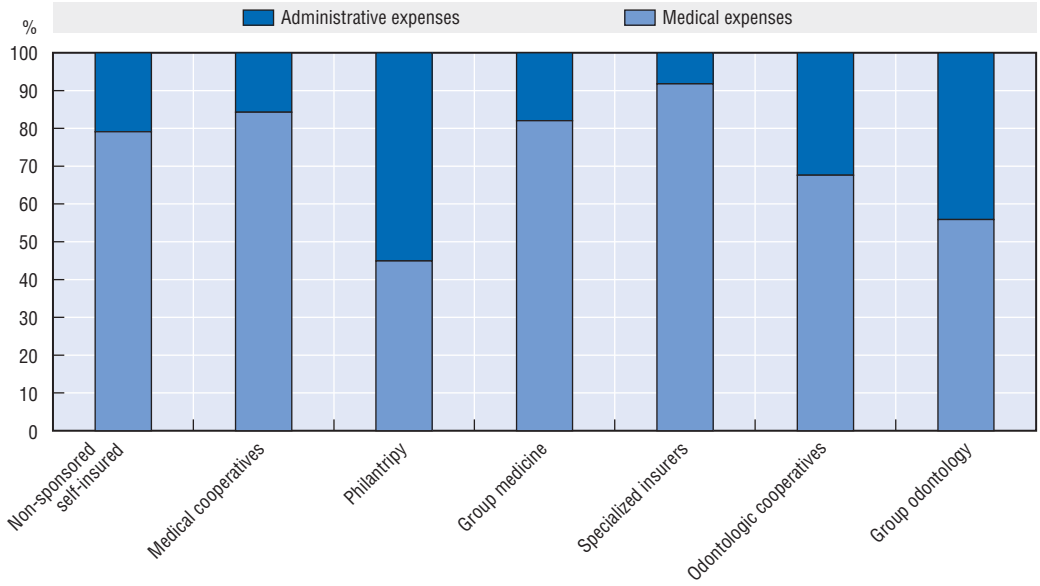
Health insurance is offered by various types of operators, which differ in terms of access, payment system and benefits offered. The different types of operators are:

- Group medicine and group dentistry, which are defined according to Decree 3 232/86 from the Ministry of Labour as a private legal entity dedicated to provide medical-nosocomial services through own resource or through a network of credentialed providers. They account for 32.3% of the market.
- Medical and odontological co-operatives, which are non-profit organisations operating under the Law of Co-operatives (Law 5 764/71).
- Self-management, a form of insurance used by major companies similar to self-insurance in the US context. It covers 14.6% of the population. Self management can also be used by public entities (in that case it is not subject to oversight by the ANS).
- Insurers specialised in health, which insurers cover 11% of the population.
- Philanthropy. This residual type of insurance covers 3.5% of the population. These are non-profit entities that have obtained a certificate as a philanthropy from the National Council for Social Care (*Conselho Nacional de Assistencia Social, CNAS*), and are recognised as being in the public interest at the Federal, State or Municipal level (ANS, 2007).

These operators generally have significant operating costs. According to the ANS data, the Share of non-medical expenses in the operators' expenses has been constant – around 20% in recent years – with significant variation among the different types of operators (ANS, 2006). This is much higher than similar ratios observed in OECD countries, particularly taking into account that group health insurance corresponds to over 70% of the market. The reasons for such differences might require further study, to identify the contribution of accounting differences as well as management practices.

The number of operators has decreased in recent years, with significant market consolidation and concentration. Access to private health insurance is unevely distributed in the Brazilian population. Among the 10% poorest in Brazil, 1.3% have PHI and 1.0% have public employer insurance; these rates increase to 31.1% and 28.6% among the 10% richest.[12] Significant geographical differentials also exist across the five regions in Brazil, as can be seen in Figure 3.7. The South East region, where 43% of the population live, holds

Figure 3.6. **Types of expenses**



Source: ANS, 2006.

Box 3.3. **Private health insurance and the loss and administrative cost ratios**

The insurance companies' administrative costs are included in the premiums. Insurers and analysts usually call this a "loading percentage", which is a kind of overhead. Another, similar ratio exists, that of medical benefit payouts to total the premium, called the "loss ratio". The size of the insurance "loss" is usually a concern from a policy perspective in order to reduce the premiums for some groups.

The lowest of all loss ratios is the one incurred by large social insurance systems, with administrative costs in the range of 5-7%. In the private sector, the lowest loading percentages apply for large employment-based groups, especially self-insured. For such groups, US data would show 5% to 11% of claims for large companies' self-insured plans. For insurers of small health insurance groups, and for small businesses, the amounts are up to 25-27% of premiums, with 4-11% for commissions, 2-3% for taxes and fees, 10-11% for general expenses and 4-5% profits. (Chu Trapnell, "Study of the Administrative Costs and Actuarial Values of Small Health Plans"). In the non-group health insurance market – that is, individual contracts – the selling and administrative expenses and return on risk capital typically consume 30-40% of the premium (Pauly Nichols, "The Nongroup Health Insurance Market: Short on Facts, Long on Opinions and Policy Disputes", 2002).

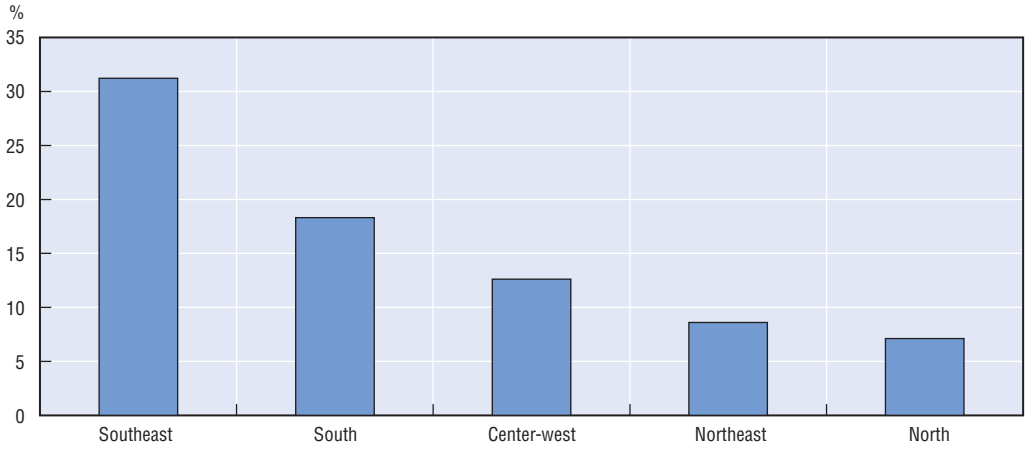
Overall, a US study covering the period 1960-2002 estimated the medical loss ratio to be 0.873. That corresponds to a loading factor of 12.3%, with a range of 8.7% to 15.4% of values observed over the period. These rates are substantially lower than those observed in Brazil during that same period (Born P. and Santerre, R., *Unravelling the Health Insurance Underwriting Cycle,* University of Connecticut, School of Business).

In terms of reference of other countries, Mjay Mahal (Health Policy Challenges for India), reports administrative costs ranging from 18.5% in Chile to up to 20-32% for private insurance in India, *versus* 5-14.6% for the public system in India and 5% in Sweden.

However, plans also differ in the degree of investment they make to control costs and increase quality.

a concentration of 67.1% of the beneficiaries, while the North region has only 2.9% of the beneficiaries for 8% of the population. As a result, the rate of coverage differs across regions. The rate of coverage is below 10% in the North and Northeast while it is above 30% in the South East. Socio-economic differentials in relation to PHI coverage also exist in a majority of OECD countries (Annex 3.A1, Tables 3.A1.2).

Figure 3.7. **Share of the population covered by private health insurance per region**



Source: ANS, 2006.

The institutional and regulatory framework

The institutional setup

The history of private medical insurance in Brazil dates back to the 1960s. With the introduction of major foreign companies at that time, particularly for the car industry, there came the necessity to provide medical coverage for industrial and private sector workers. As a result, in 1967 Law Decree 200 made it possible for companies to contract medical enterprises to implement programmes that were the responsibility of the State. In late 1960, an increasing number of workers began to receive private health plan coverage. In 1966 health insurance was established by the Law Decree 73, but only in 1976 were the insurers allowed to operate. In the sixties and seventies the segment of group medicine and co-operatives grew, while the eighties brought in the insurers as an additional strong player.

Brazil had a significant social insurance system prior to the 1988 Constitution; it did not offer coverage to all individuals, and particularly not to rural workers, even though there had been an attempt in 1979 to establish a national programme of basic health services (PREVSAUDE). Under the new 1988 Constitution, 5 million rural workers were brought into the system, which was transformed and replaced by a universal health system (McLaughlan, 2003). Under the 1988 Constitution, the Federal, State and Municipal levels share responsibility for this universal system, called SUS (*Sistema Unico de Saùde*). The care that is mainly delivered at municipal level does in practice depend on federal transfers. However, due to the economic crisis at the end of the 1980s, federal funding for health declined by USD 5 billion between 1988 and 1992, which resulted in severe restrictions and waiting times (McLauglan, 2003). The universalisation process, combined with strong cost containment, led to a growing demand for private health insurance. This

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situation is not unique in Latin America, or in middle-income countries, as Chile or Argentina also have significant private health insurance systems (Drechsler and Juttings, 2005). The corresponding market started to develop rapidly in Brazil. However, regulation of the private insurance market was virtually nonexistent until 1998 (Jack, 2000), even though the consumer Defence Code did apply. This made public healthcare *de facto* an insurer of last resort. A similar process happened in Chile for example, where a period of ten years lapsed before the government gradually responded and established a regulatory framework setting up an agency. In Brazil, this led to significant abuses and excessive practices, thus stimulating calls for public regulation to correct the unintended consequences and to create trust within the population (Drechsler and Juttings, 2005).

The current regulatory framework in Brazil is set by Laws 9 656, adopted in 1998; 9 961/2000; 10 185/2001; and Provisory Measure 2 177- 44/2001. The reference plans and the plans reviewed in Article 12 were authorised to be commercialised, and other resolutions to protect consumers were strengthened. According to Article 13 it is mandatory that the operators renew the contracts at the end of their term. Article 14 establishes that it is forbidden to reject any client based on criteria of age or illness, which is one of the key aspects of the 1998 regulation. Prohibition of readjustments for individuals over 60 years old having the same contract for more than ten years was settled in Article 15 for those plans signed before December 2003. The variation by age is prohibited above the age of 60 for those plans signed after 1 January 2004. The regulatory framework is also regulated by Constitutional principles – especially Article 199, which states that "healthcare can be freely provided by private services" and by the Consumer Defence Code.

In 2000 responsibility for the entire regulation of the sector was officially given to the Ministry of Health. According to Decree 99 438, the Health National Council (*Conselho Nacional de Saúde* – CNS) is in charge of formulating and monitoring enforcement of national policy on health at the federal level. The Supplementary Health Council (*Conselho de Saúde Suplementar* – CONSU) is a deliberative body composed of the Ministry of Civil House, Ministry of Health, Ministry of Finance, Ministry of Justice and Ministry of Planning, Budget and Management; the president of ANS takes part in the meetings as a Secretary. The National Supplementary Health Agency (*Agência Nacional de Saúde Suplementar* – ANS), created in 2000 by Law 9 961, was charged with enforcing regulations in the sector. These laws are complemented by the Provisory Measure[13] 2 177-44, which changed these two laws and Law 10 185, which instituted the figure of insurer specialising in health. The *Camara de Saude Suplementar* (CSS), a consultative council composed by members from all entities that play a role in the market, was also set up; it is presided over by the president of ANS.

In terms of institutional status, ANS is an autonomous government agency within the Executive branch of government. This institutional setup is also found in countries such as Mexico and Canada, for example – even if regulators in those countries are not specifically concerned with health regulation but rather with the general prudential aspects (see Annex 3.A1, Tables 3.A1.1). The case of the United States is decidedly different, since regulation of private health insurance is operated by institutions at the State level that are not necessarily independent (see Box 3.4). In terms of sectoral responsibilities focused on private health insurance, the Brazilian agency is more similar to the Australian, Irish or Dutch agencies. In Brazil, the regulator, as is the case with other similar agencies, is a special autarky linked to the Ministry of Health with administrative and financial autonomy; decisions are taken by a board of directors that have a legal mandate

Box 3.4. **Private health insurance regulation, the US example**

The United States – a large, federal country like Brazil – offers a health regulatory model different from those of most others presented in this report. Regulation of private health insurance is organised mainly at the state level in terms of institutional oversight. This box briefly introduces the country context, based on examples of regulatory agencies in four US states: California, Texas, New York and Massachusetts.

Structure and organisation

Regulatory activity in the health field falls within the scope of insurance oversight agencies (insurance commissioners), which handle all of the insurance marketplace. Health is only one portion of their overall activity. US regulatory agencies are established at the state level and function independently from one another. However, NAIC (the National Association of Insurance Commissioners) brings together the 50 heads of state agencies to discuss and co-ordinate multi-state issues.

These state agencies are not necessarily independent: insurance agencies are specific divisions within the state government structure and are accountable directly to the state governor. In all examined cases, agencies receive large appropriations from the state budget, although fees and levies also contribute to financing their activities.

Given the context of the government institutional structure, each state agency is headed by a commissioner or superintendent, who may be elected directly by the people (California and Massachusetts) or proposed by the governor and confirmed by the state senate (Texas and New York).

Mission and tasks

All agencies share the same mission: To monitor the insurance marketplace, especially the financial health of the insurance industry; enforce and implement applicable regulations; disseminate information; and protect consumer interests. To carry out their mission, state agencies may:

- Conduct examinations of insurers to determine their financial condition and treatment of policy holders and claimants, and audit each company's annual reports.
- Examine and approve corporate formations, mergers and consolidations within the industry.
- Pursue allegations of misconduct by insurers and issue the corresponding enforcement actions (fines and/or other penalties).
- Collect and analyse statistical data and review and evaluate aspects such as casualty rate filings, rates, corporate governance within insurance firms and risk management practices.
- Disseminate information to consumers, respond to specific enquiries or requests, and help consumers make informed insurance-related decisions.

For additional information:
California: CDI, California department of insurance *www.insurance.ca.gov/*.
Texas: TDI, Texas department of insurance *www.tdi.state.tx.us/*.
Massachusetts: DOI, Division of insurance. *www.mass.gov.*
New York: Insurance department *www.ins.state.ny.us/hp97wel.htm*.
NAIC: *www.naic.org/index.ht*.

established by Article 1 of Law 9 961. It differs from the other Brazilian regulatory agency studied here in a crucial way: it is the only one in the sample that has a mandatory management contract, which has been effectively enforced.

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In fact, analysis of ANS missions shows that ANS should promote the defence of public interests in the healthcare sector; regulate the health insurance sector, including the relationship with healthcare providers and consumers; and contribute to the development of the health system in Brazil. Among the agency main tasks are to establish norms and regulations for the sector according to Law 9 656; issue licences to insurers operating in the market; ensure that all insurance institutions respect the regulations in force, including sanitary and epidemiology requirements, and apply legal penalties in case of non-compliance; establish quality parameters; monitor price evolution; ensure compliance with insurance policy obligations; gather information from private healthcare providers and integrate it with the Public Health System data bank; and to adopt the necessary measures to ensure competition in the private insurance market.

The issue is not to attract foreign investment in the sector, but to oversee a private market in a way that serves the public interest, contributing to overall health policy aspects. Operators also have to have an establishment in Brazil to offer coverage. This institutional setup may explain why the level of independence may differ in this sector. ANS is seen as an institutional tool to attain health policy objectives, for which it needs to work very closely with the Ministry of Health. The implications in terms of independence will be discussed further as part of the governance aspects.

The regulatory framework

Since its creation ANS has developed two cycles of sets of rules regulating the market and the operators. ANS does not regulate providers of care directly, but requires contracts between them and the operators. The first one includes the Board Directory Resolutions 22, 25, 27, 28 and 29, and was adopted in 2000. These set rules for the economic monitoring of operators at the financial end, penalties enforcement, procedures for technical revision, and instituted a technical note for product registration, and readjustment of the premium rates. The second cycle includes the Provisional Measure 2 097-36 and 2 177-44 and Resolutions 38 to 42 and 47 to 93. Lately, other important Resolutions were settled: RN 100, 124, 137, 139, 153 and 159 all have significant implications for cleaning up market conditions. These measures reflect ANS' power, both direct and indirect, in establishing rules for the sector. The particular characteristics and implications of the regulatory framework that has been established as a result will be discussed below.

The regulatory framework considers the health plans according to their classification in terms of their individual/collective nature, their beginning date, and the context of coverage (Box 3.5). The new regulatory framework also established three possible types of (new) contracts:

- The reference plan is a model of supply of service (Article 10 of Law 9 656); it has to be offered as an option by the operators and is relatively complete, but consumers may wish to choose other plans.
- The minimum plan (Article 12 of Law 9 656) contains all possible combinations of the four models of reference plans.
- The amplified plan (Article 12 of Law 9 656) includes additional services to the reference plans.

The reference plan requires that the subscriber of a contract be covered for all diseases classified in the International Statistical Classification of Diseases and Related Health Problems (ICD) from the World Health Organisation. This standardisation of plans is

Box 3.5. **Classification of contracts**

The various forms of contracts are:

- Individual or family contracts. Contracted directly by individuals or their families.
- Collective with a sponsor (when at least part of the premium is paved by a third party).
- Collective with no sponsor.
- Contracts are classified according to their initial beginning date:
  - New: settled from 01/01/1999 onwards.
  - Adapted: settled before 01/01/1999 and adapted to the norms of Law 9 656.
  - Old: settled before 01/01/1999.

Contracts are also classified in terms of the content of coverage:

- Ambulatory.
- In-patient care.
- Obstetrics.
- Odontology.

intended to reduce the issue of information asymmetry between the operators and clients concerning the service offered, even if it may prevent consumers from buying a plan that may better suit their needs. It also allows for better sharing of risks, given the mandatory aspects. In 2004, ANS approved the RN 82, defining the mandatory procedures for the plans, even if consumers expressed some dissatisfaction (IDEC and CREMESP, 2007).

The old plans, which correspond to 35.2% of the beneficiaries (ANS, 2007), are not transferable, and due to a decision by the Supreme Court in 2003[14] they are not subject to the new legislation, as what was settled by the contract prevails. Only a few regulatory rules were extended to these contracts (such as authorisation to function, collection of fees and reimbursement), while the situation was less clear for the prohibition of a maximum number of doctor appointments and a maximum number of hospitalisation days according to judicial decisions. The decisions on how to adapt the contract to the new laws was left to the consumers. A third of the beneficiaries of PHI receive their insurance through a public employer, which is at state or municipal level, and which therefore falls outside of the regulatory oversight of ANS, a federal agency.[15]

The service network operated or contracted by the plan is a crucial factor in ensuring quality and access. Before the approval of Law 9 656, operators could modify their service network freely, even though consumers would have chosen the plan based on the services provided by the network at the time of signature. Under current regulations, the service can only be substituted by an equivalent after giving the consumer 30 days' notice. The new regulatory framework also covered the health service providers giving an extra protection for consumers.

Rate setting

In private health insurance markets, premiums are set based on applicants' risk profile. However, OECD countries may impose a number of restrictions on insurers with issuance-related requirements (OECD 2004a).[16] In some cases, these limits restrict or prohibit the consideration of health status factors in the calculations of premiums in the

entire PHI market (Australia, Ireland, the small employer market in most US states and some of that country's individual markets). Others impose a cap on premiums, tied to average costs in the private market (Netherlands before 2006) or in the public coverage system (German substitutive coverage). In Germany, the privately insured pay a surcharge to help cover the higher costs of the privately insured elderly, along with those of other high-risk persons. In all of these cases, those limits are imposed together with issuance-related requirements. In Germany, the premiums for private substitutive health coverage are funded on a life insurance basis (premiums are calculated according to a mathematical model under which total premiums are to match total benefits paid, and they must include a savings amount to account for rising health expenditures due to age). The savings elements are accumulated separately and accrue interest. Premiums can also take into account a risk surcharge.[17]

In Brazil, regulatory restrictions are imposed on premium differentiation according to risk groups. The only price differentiation that operators are allowed to request for individual consumers subscribing to the same plan is in terms of age. There are currently ten age groups, and there is a maximum ratio set between the highest and lowest premium. The objective of such restriction on further differentiations is to impose a certain level of cross-subsidisation among different risk groups, so that in effect insurance can serve the purpose of redistributing wealth. Usual difficulties that are found in private health insurance markets are related to adverse selection and cream-seeking strategies by the insurers, which can impact on the quality of the product as well as on access for certain groups of consumers. In Brazil, the strategy of market operators was to try to differentiate potential consumers indirectly through the quality of the products offered, which was not an intended effect of the regulatory framework. As a result of offering plans with different standards of quality, the operators can in effect segment their clients into different risk groups.

Extent of regulatory oversight by type of plans

The Brazilian regulatory framework foresees different levels of control by type of plan. The individual contracts are subject to tighter control than the collective contracts, as it is assumed that individual consumers have much less bargaining power. All the regulatory decisions by the ANS, called Resolutions, which concern price readjustment of individual and family plans are in RDC 29/2000, 46/2000, 66/2001, 8/2002, IN/DIPRO 3/2002 and 5/2002, RN 19/2002, and RN 36/2003, 63/2003, 74/2004, 99/2005, 118/2005, 128/2006 and 129/2006. RDC 29/2000.

From a general standpoint, the readjustment of the price of a plan can occur in three situations due to:

- A change in costs of the health services provided.
- A change in the age band.
- A revaluation of the plan, when economic and financial unbalances occur.[18]

However, changes of prices can only occur through annual readjustment and change of age band. According to RN 128 and 129/2006, only individual or family plans, and those operated by self-management entities without an external sponsor, are subject to pre-approval by ANS before making a readjustment, which is the main difference between them and the collective plans. The readjustment of the price of the collective plans is not controlled by the agency, and the readjustments are defined by contract negotiated by the administrator and the association/enterprise/union contracting the plan. The only requirement is that they be communicated to ANS. In addition, Law 9 656 does not

explicitly forbid the termination of the contract by the operator, although this type of conduct is claimed by some consumer defence groups to be prohibited by the Consumer Defence Code (*Código de Defesa do Consumidor*). As the law does not concern price readjustment for collective plans, the current interpretation is that these readjustments should not be subjected to ANS rules. However, the agency regulates collective and old plans in the light of the specific joint contracts.

There has been much discussion in Brazil on the ANS interpretation of the rules concerning collective plans regulation, particularly the fact that the readjustments of the prices for collective plans are not regulated. Despite the fact that Law 9 656 does not explicitly forbid unilateral contract termination, the Consumer Defence Code does, and is applicable to healthcare plans. According to a report by Consumer groups (Cremesp and IDEC, 2007), even large associations or companies may suffer from "abusive" price readjustment. These groups claim that the premise that readjustments of collective plans do not need to be regulated due to a balanced bargaining power between operators and enterprises is false. Even in the United States, some studies showed that large companies experience a link between hikes in their profitability and their health insurance premiums, as if insurers were able to reap some of the corresponding profits (Dafny, 2007). Another issue concerns the fact that some collective groups may sometimes be very small (among the plans with less than 50 beneficiaries the average number of beneficiaries per plan is 15), as some collective plans on the market are proposed for two individuals. Consumer groups call this a window dressing strategy. The plans for 50 or more beneficiaries cover on average 1 412 individuals in individual contracts and 3 545 individuals in collective contracts; the maximum number of individuals in a single contract is 343 365 persons.

The readjustment of old plans is defined by the initial terms of the contract, even if these readjustments have to be communicated to the agency. In September 2003 the Supreme Court (STF) issued a preliminary ruling declaring the unconstitutionality of Article 35-E, which regulated old plans. This was appealed by the government lawyer, the AGU, but the preliminary ruling was maintained. The process is still waiting for a final decision.[19] Since then, the powers of ANS concerning price readjustments for individual and family plans are only guaranteed by the agency's resolutions. These have not yet been challenged, but the possible legal instability that can occur is a matter of concern. The issue of whether ANS can invoke the Consumer Defence Code also needs to be clarified. Consumer defence groups claim that the CDC would give enough provisions for ANS to regulate old plans. The Brazilian Courts have been recognising the application of the CDC to old contracts (Scheffer, 2006). The SDE (see section on horizontal co-ordination) declared in Order 4/1998 that, among other elements, the limits imposed on hospitalisation days below what would be specified by a physician – and the waiting period applied when there is a delay in the payment of the premium – are not valid. The Provisory Measure (MP 148/1998, converted into Law 10 850 in 2004) establishes that in the case of a contractual infraction, the operators would still be subject to the ANS control and penalties specified by Law 9 656, Article 25. However, consumer groups have a suspicion that these penalties and controls have not been fully exerted.

Another sensitive issue is the waiting time that can be applied for individual, familiar and small (under 50 beneficiaries) collective non-sponsored plans. These waiting times, 24 months maximum, have been established as a consequence of the exclusion of pre-existing conditions: according to Article MP 2 177-44/2001, for individual, familiar or not sponsored plans under 50 beneficiaries' collective contracts, it is forbidden to exclude pre-existing

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conditions in the list of diseases foreseen by the provisory measure for more than 24 months. This is regulated by RDC 68/2001.

The issue of portability is been currently debated in the sector. It is not clear, however, whether a Normative Resolution would be enough to approve portability or whether a Law Bill approval by the Congress would be required. One issue is the diagnosis of a pre-existing condition. To have access to procedures not covered during the waiting time, the consumer has to pay a higher premium, but most frequently they respect the waiting time period. From an OECD perspective, the exclusion of particular benefits based on prior or ongoing conditions is not an uncommon practice (OECD, 2004a).

In Brazil, studies on the market concentration of family and small collective non-sponsored plans are lacking to assess the concentration of this market. However, Figures 3.8 and 3.9 (ANS, 2007) suggest a higher concentration in the market of individual plans, excluding small collective plans. In both cases the two biggest operators together have more than 70% of the market revenue.

Figure 3.8. **Collective plans: Premium share by operator**

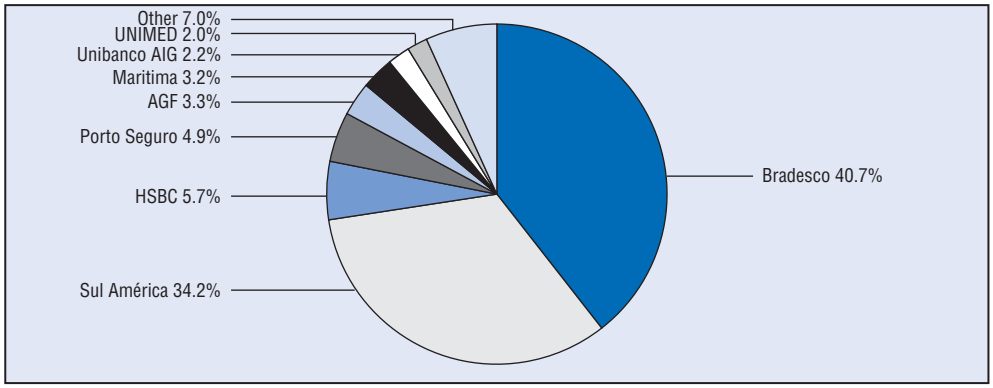
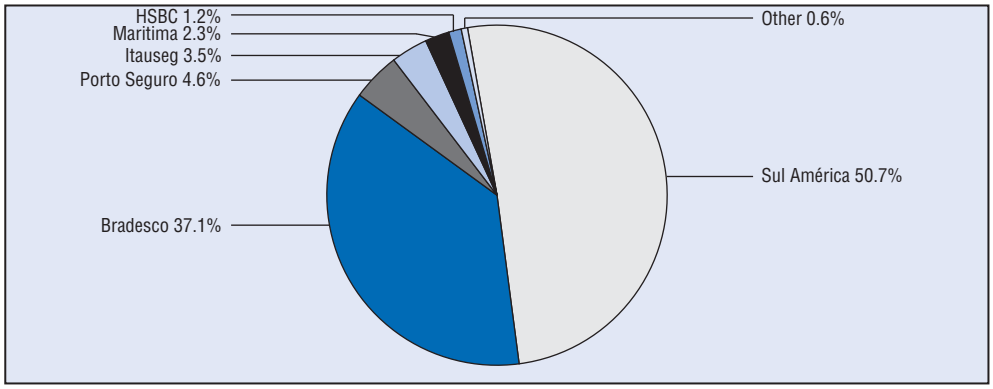


Figure 3.9. **Individual plans: Premium share by operator**



Source: ANS, 2006.

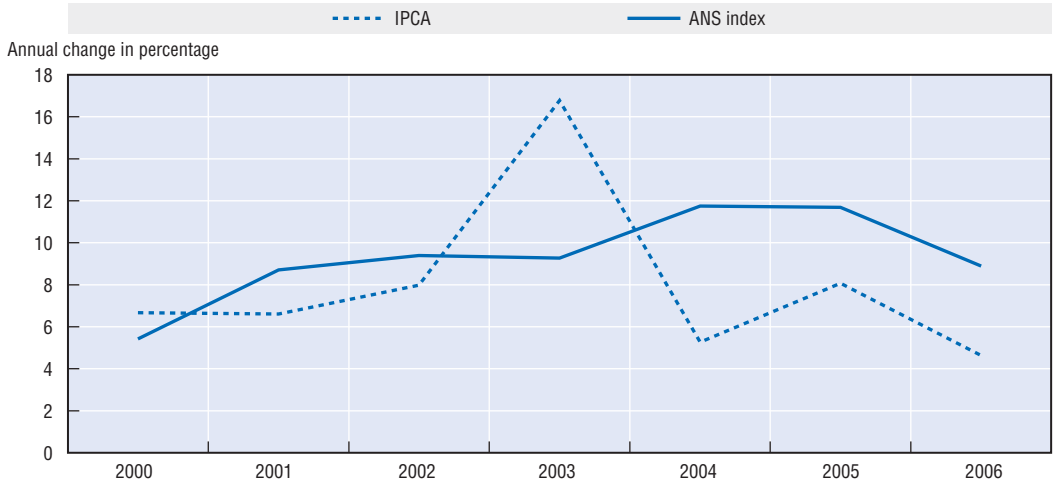
Regulatory oversight of price readjustment

The prices of private plans are reviewed by the ANS, after consulting the opinion of the Ministry of Finance, according to the Provisory Measure MP 2 177-44/2001 and Ministry's Order 75/2003. This concerns individual and family new plans, as the old plans are

supervised in case of a complaint or following an enquiry by the directorate for auditing of ANS (DIFIS). ANS uses a *cost plus* approach to finalise this price readjustment, using the same methodology since 2001: it calculates the average of the readjustment index applied to collective plans by the insurers,[20] which reflects their average costs as revealed following bargaining with the collective plans. This strategy should in theory address the issue of lack of bargaining power for individual consumers and family plans.

According to a report by IDEC and CREMESP (2007), this readjustment still leaves room for significant price increases, as the rate of increase of the cost of health plans, depicted in Figure 3.10, is 50% higher than general inflation, as measured by the IPCA index over the period from June 2000 to June 2005. This phenomenon is not restricted to Brazil; in most OECD countries, the cost of health insurance tends to increase more rapidly than strict general inflation. However, this situation may still be more satisfactory from the consumer viewpoint than the lack of regulation of price readjustments. Price increases for the old contracts, where no regulation applies to the price readjustment, were even higher: The price of the new contracts have increased by 86.17% over six years, while the prices of old contracts from the largest operators were increasing by 115.3% for Sul América; 114.86% for Bradesco and Itauseg; 104.87% for Amil; and 103.43% for Golden Cross, which together cover over 90% of that market.

Figure 3.10. **Price index of health plans**



Source: IDEC and CREMESP, 2006.

Supervision of the insurers and of their relationships with providers and with consumers

ANS is entrusted with direct and indirect supervision of the insurers according to Law 9 656 (Articles 1, 8, 9, 19, 21, 24, 25, 27, 29, 34 and 35). Direct supervision refers to the detection of complaints and, through representation, of preventive and programmed inspections of the operators. Indirect supervision refers to the continuous monitoring and checking of periodic information provided by the operators.

A first aspect of oversight is financial supervision to ensure that the insurers will actually comply with their obligations. ANS has legal attributions[21] to act toward the

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financial stability of operators in order to guarantee consumers' rights. ANS sets the conditions to entry, exit and operate in the market through its own statute and resolutions. This includes standard accounting plans and mandatory publication of firms' accounts by the operators. There are also financial-economic conditions that the operators must guarantee, and those already operating have until six years to provide 100% of the guarantees predicted. While these measures ensure financial stability, they have also been alleged to serve as barriers to entry (Macera and Saintive, 2004). The agency has also the power to demand a recovery plan from a given operator, to institute fiscal or technical direction if required, and to determine the alienation of consumers' plans and to decide on firm liquidation in some cases.

A second important aspect is the regulation of the relationship between health services providers and the operators (RN 42/2003, RN 54/2003, and RN 71/2003). Healthcare providers have strong incentives to provide services to the health plans as they receive a higher remuneration.[22] These relationships need to be defined by contract. ANS also has responsibility for authorising subscribed and unsubscribed healthcare providers and products offered (the plans), as settled by RN 100/2005. RN 94/2005 provides financial incentives for implementing programmes for health promotion and disease prevention measures.

As is the case with other countries with similar private health insurance systems, health plans tend to interfere with providers, generating their dissatisfaction: 93% of the physicians interviewed in a study by Datafolha Institute in 2002 said the health plans interfered with their autonomy.[23] More recent data on doctors' satisfaction with health plans come from research by the Medicine Regional Council of São Paulo, which points to credential loss from plans as the biggest problem these providers face. However, there is a lack of studies on the relation between providers and operators.

A standard procedure for information sharing was introduced in 2006. Exchange Information in Supplementary Health (*Troca de Informação em Informação Suplementar* em Saúde – TISS) attempts to reduce the lack of information and facilitate studies on the relations between providers and operators. The system was developed by ANS in partnership with the Inter-American Development Bank. It is a mandatory procedure for healthcare providers and operators for sharing information. This system replaced seven information systems for the supplementary health sector. The Beneficiaries Information System (*Sistema de Informação de Beneficiários* – SIB) and the Product Information System (*Sistema de Informação de Produtos* – SIP) are both ANS systems; SIB has been in operation since 1999, and it contains data on the beneficiaries of PHI. The SIP, the Health Plan Register (*Registro de Plano de Saúde* – RPS), the Health Plan Register Appropriation (*Adequação the Registro de Plano de Saúde* – ARPS) provide information on features of the plans, and the Periodical Information Document of the Health Plans Operators (*Documento de Informações Periódicas das Operadoras de Planos de Saúde* – DIOPS) and the FIPS.

However, the effectiveness of the monitoring process depends very much on availability to the public of results concerning performance, consumer satisfaction and operators' services. Some of the data may remain too aggregated and individual complaints not detailed. For example, an Index of Complaints of the beneficiaries regarding the operators has been made available on the agency's website. It is important to note that consumers have other options for complaints than to go to the regulator only: They can call on the prosecutor in charge of protecting consumers' rights,[24] go straight to court, or even keep trying to solve the problem directly with the operator. Therefore, additional analysis might be required to

interpret this data, as a low number of complaints may also reflect a lack of confidence of certain groups of consumers to appeal to the agency. The perception of ANS by consumers was generally not very positive, which needs to be borne in mind.

In this context, a positive step should be noted: ANS has started implementing a Policy of Quality in Supplementary Health, which includes the Programme of Quality in Supplementary Health, aiming to increase qualification of all actors involved in the market (operators, providers, beneficiaries and the agency), with an index available on the agency's website. The programme was launched in December 2004. The first step was to create an index in order to evaluate the quality of operators, called Performance Index of Supplementary Health (*Índice de Desempenho da Saúde Suplementar* – IDSS). In each further step, additional indicators were included. The analysis of the year 2006 will conclude the implementation of the programme, and the evaluations will be done systematically every year. The IDSS includes indicators evaluating the quality of the services, the financial and economic performance of operators, and beneficiaries' satisfaction. Divulgation of these indexes helps decrease the information asymmetry of the sector. It is important for these indicators included in the IDSS to take proper account of beneficiaries' satisfaction. Besides the Programme of Quality in Supplementary Health, the policy of quality monitoring includes the improvement of the regulation of ANS, changes in the model of healthcare delivered, institutional qualification and human resource management, changes in the management contract of ANS, improvement in the information system, changes in the special regimes and provisions for market imbalances or for plan closures, and a new approach to supervision.[25]

Overall, the effectiveness of the supervision is linked to the availability of proper and detailed data. Up to now, some of the data published on the website remained rather general, with no detailed information on complaints and with a lack of some information which might have been useful. One example could include the type of complaints by operators, and how many of them were solved, in a disaggregated way. However, the Management Report and the Qualification Programme represent a clear move in the right direction.

Direct and indirect relationships with public budgets

Private health insurance and its oversight have significant implications for public finances. The first involves the relationships with the national health insurance system (SUS), where ANS has competence to fix the level of compensation for services used. The second concerns the issue of the tax breaks for private health insurance, which have a broader relevance to the policy debate.

Compensation to the national health system (SUS)

The normative process of compensation (*ressarcimento)* is under ANS responsibility through the Directory of Sectorial Development (*Diretoria de Desenvolvimento Setorial*, DIDES). It is administratively implemented by the General Management of Integration with SUS (GGSUS). According to Article 32 in Law 9 656, the utilisation of the SUS by beneficiaries of PHI must be reimbursed to the State by the operator if the service provided is covered by the private health plan. ANS has estimated the value to be compensated as BRL 463 582 951 during the first six years. However ANS decisions are being contested by several operators in courts, as they claim that the charge for compensation is unconstitutional. Only BRL 71.2 million had been reimbursed in 2007, and the judiciary made a preliminary order forbidding the charge of operators over BRL 61.1 million. There

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are also BRL 15.8 million of debts from operators in solvency processes.[26] The Directory of Sectorial Development 05 and 06 aims at stabilising procedures. The information used to calculate the compensation comes from the integrated hospital information system (*Sistema de Informações Hospitalares* – SIH-SUS/DATASUS/MS), under the responsibility of the Ministry of Health. The information is then transmitted to ANS. The compensation is regulated by RDC 18/2000, and RN 37/2003 renewed the standard procedures for information concerning beneficiaries from the operators.

Fiscal expenditures

Fiscal expenditures in the PHI market would require a broader discussion in Brazil, which is beyond the scope of this report. The impact of tax incentives with private medical expenses to families and workers affect directly the performance of the supplementary health market. The tax incentive reduces the amount of taxes collected by the Government, which could be used to invest on the sector. This tax incentive can also be considered to increase the take-up for private health insurance, thus alleviating the pressure of demand on SUS. Assessing the impact of incentives on insurance take-up is a complex task, since insurance purchase depends not only on the price elasticity of demand, but also on the responsiveness to other factors such as the perceived quality of public and private insurance.

At least fourteen OECD countries (Australia, Austria, Belgium (self-employed), Canada, France, Germany, Greece, Ireland, Italy, Luxembourg, Mexico, Netherlands, Portugal and the United States) provided some type of tax incentives for purchasers of PHI in 2004 (OECD, 2004a). The type and range of incentives varies greatly across countries (OECD, 2004a). Among European countries, the presence of a significant group PHI market generally correlates with the presence of tax breaks for employers offering PHI coverage, or to employees with respect to employer contributions (OCDE, 2004a).

In Brazil, legislation concerning fiscal expenditures on the PHI market is governed by Law 9 250/1995 and the Income Tax Regulation RIR/99. The Federal Fiscal Authority estimated the total fiscal expenditure on private medical expenses (PHI premium and out-of-pocket expenses) for 2005 to be BRL 2.8 billion. However, few studies exist on this issue in Brazil. Médici (1990) and Anddreazzi (1991) found that the tax incentives resulted in the expansion of the PHI market and the supply of private hospitals (quoted in Ocké-Reis, 1995). Sayd (2003) identified an increase in private expenses for health for families that varies across time and different income levels. The expected conclusion is that those benefitting most from these tax breaks are those with a higher income. This is also confirmed by a report presented by the Ministry of Finance in 2002, which suggests that the tax incentives benefit only the highest-income individuals, as the poorest are not paying taxes. In the XII National Health Conference, the final report presented by the Ministry of Health suggests ending fiscal expenditures of private health expenses, using the corresponding resources to create a national fund to finance urgent actions for basic health. However, this is controversial as the provision of services through the SUS remains precarious given the size and the relative development level of the country. Private alternatives of healthcare provision may be perceived as necessary by many, even if they feel that they are already paying for a service that is the responsibility of the State, thus justifying some tax deduction. All would depend on whether use of the corresponding resources would enhance social welfare to compensate the loss due to reduced access to

private health insurance. Further studies and information on the markets might be warranted on this issue. The issue of tax breaks for private health insurance is also highly debated in other OECD countries, for example in the United States (see OECD, 2004).

Notes

1. These definitions are from Colombo and Tapay (2004), "Private Health Insurance in OECD Countries: The Benefits and Costs for Individuals and the Health System", and from OECD (2004a). See bibliography for more detail. Most of the materials related to OECD countries and of a general nature on Private Health Insurance are also borrowing from this work.
2. The SUS is not discussed in detail as this chapter is focused on the regulation of private health insurance. For more detail, please refer to PAHO (2005).
3. SEAE, Working Paper 31.
4. This definition is extracted from OECD, 2004a.
5. Theoretically, there could be cases of income-related PHI premiums. No such cases have been found in OECD countries. Governments may however give individuals means-tested subsidies for the purchase of insurance, as in the case of primary insurance in Switzerland and complementary insurance in France.
6. This paragraph is extracted from OECD, 2004a; see p. 27.
7. The discussion in this paragraph is extracted from OECD, 2004a; see p. 28. It is supplemented with specific information for Brazil.
8. Even if, from a domestic perspective, the law defines the private health insurance services as supplementary and complementary to the public sector. The reality is that private health insurance provides access to the same services that are included in the basket of the public system, but that in practice, due to issues of implicit quantity restriction or lack of accommodation amenity, may have to be provided through private delivery.
9. This is for example the approach used by Mossialos and Thomson (2002).
10. There are, however, tax incentives.
11. The data for OECD countries are from OECD health data (2007).
12. ANS, from PNAD/IBGE, 2003.
13. A Provisional Measure is an act of the President declaring a law and in a sense reflects the notion of a Law Decree in some European countries. It needs to be validated at a later stage by a Parliamentary Decision to retain full force.
14. The STF declared the unconstitutionality of Article 35E of Law 9 656.
15. SEAE working paper 37.
16. The discussion on issuance-related requirements is extracted from OECD (2004a), see p. 121. The Dutch example was eliminated since this country experienced a major reform in 2006.
17. OECD Regulatory Questionnaire, German response.
18. In the case of plans exclusively odontological, since 2005 ANS doesn't authorise readjustment due to cost variation.
19. As it is an issue related to a normative act of the Constitution, ANS is not part of this process. The AGU is the one in charge.
20. Collective plans which are not sponsored and involve less than 50 beneficiaries are not included in the calculus.
21. Law 9 961.
22. Source: comparison between the table of remuneration to SUS and the tables of the Brazilian Medical Association (*Associação Médica Brasileira* – AMB) and Hierarchical Brazilian Classification for Medical Procedures (*Classificação Brasileira Hierarquizada de Procedimentos Médicos* – CBHPM).
23. Which was conducted before RN 71 approval.
24. PROCON. See section on consumers.

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25. More information on this quality-related approach can be found on the ANS website.

26. Fausto Pereira dos Santos, November, 2006.

Bibliography

Andreazzi, M.F.S., Ocké-Reis, C.O. and Silveira, F.G. (2006), "O Mercado de Planos de Saúde no Brasil: uma Criação do Estado?" (The Health Plan Market in Brazil: a State creation?), *Revista de Economia Contemporânea*, Vol. 10(1), pp. 157-185.

ANS (2002), "Regulação and Saúde: Estrutura, Evolução e Perspectivas da Assistência Médica Suplementar" (Regulation and Health: Structure, Evolution and Perspectives of Supllementary Health Care).

ANS (2005), "Qualificação da Saúde Suplementar" (Supplementary Health Qualification).

ANS (2006), "Caderno de Informação de Ressarcimento e Integração com o SUS" (Information Notebook on the Reimbursement and Integration with SUS)

ANS (2007), "Caderno de Informação da Saúde Suplementar" (Information Notebook on the Supplementary Health).

Baughman, R. and Johnson, R.W. (2002), "Evaluating the Impact of the Earned Income Tax Credit on Health Insurance Coverage for Low-Income Workers", *Journal of Economic Literature*, Code H2, p. 11.

Colombo, F. and Tapay, N. (2004a), "Private Health Insurance in OECD Countries. The Benefits and Costs for Individuals and Health System", OECD *Health Working Papers* No. 15, OECD, Paris, available at: *www.oecd.org/dataoecd/34/56/33698043.pdf*.

Colombo, F. and Tapay, N. (2004b), "Private Health Insurance in the Netherlands: A Case Study", OECD *Health Working Papers* No. 18, Paris.

Dafny Leemore (2007), *Are Health Insurance Markets Competitive? A test of direct Price Discrimination*. NBER Summer Institute 2007. Paper available at: *www.kellogg.northwestern.edu/faculty/dafny/personal/Documents/Working%20Papers/DafnyHC_7_27.pdf*.

Drechsler D., Jutting J.P. (2005), "Private Health insurance in low and middle-income countries: scope, limitation and policy response", OECD, October, DIW discussion paper No. 517.

IDEC and CREMESP (2007), Planos de Saude, nove anos apos a Law 9 656/98. As falhas da regulamentação, A omissão da Agência Nacional de Saude Suplementar, (ANS), O comportamento do mercado, Conselho Regional de Medicina do Estado de São Paulo (CREMESP) and Instituto Brasileiro de Defesa do Consumidor (IDEC).

Jack W. (2000), "The Evolution of Health Insurance Institutions- Four Examples from Latin America", Development Economics Research Group, Washington, World Bank.

Macera, A.P. and Saintive, M.B. (2004), "O Mercado de Saúde Suplementar no Brasil" (The Supplementary Health Market in Brazil), *SEAE Working Paper*, No. 31.

Maia, A.C., Andrade, M.V, Ribeiro, M.M. and de Brito, R.J.A (2006), "Estudo sobre a Regulação do Setor Brasileiro de Planos de Saúde", *SEAE Working Paper*, No. 37.

Mc Laughlan C. (2003), "A history of Modern Brazil, The Past Against the Future", Rowman and Littlefield ed.

Ocké-Reis (1995), *O setor privado de saúde no Brasil: os limites da autonomia*, Tese de mestrado em Saúde Coletiva, Rio de Janeiro, IMS/UERJ.

Ocké-Reis, C.O. (2004), "Challenges of the Private Health Plans Regulation in Brazil", *IPEAWorking Paper*, No. 1 013.

Ocké-Reis, C.O. (2005), "Uma Reflexão sobre o papel da ANS em Defesa do Interesse Público" (A Consideration about the ANS role on Defending the Public Interests), *Revista de Administração Pública*, Vol 39(6), pp. 1 303-1 317.

Ocké-Reis, C.O. and Cardoso, S.S. (2006), "Uma Descrição do Comportamento dos Preços dos Planos de Assistência à Saúde" (A Description of the Price Behavior of Health Care Plans), *IPEA Working Paper*, No. 1 232.

OECD (2004a), *Private Health Insurance in OECD Countries*, Paris.

OECD (2004b), "Private Health Insurance in OECD Countries", *Policy Brief*, Paris, available at: *www.oecd.org/dataoecd/42/6/33820355.pdf*.

OECD (2004c), *Proposal for a Taxonomy on Health Insurance, The OECD Study on Private Health Insurance Study*, Paris, available at: *www.oecd.org/dataoecd/24/52/31916207.pdf*.

Panamerican Health Organisation (PAHO) (2005), "Brazil Health System Profile", available at: *www.lachealthsys.org/*.

Scheffer M. (2006), Os planos de saúde nos tribunais: uma análise das ações judiciais movidas por clientes de planos de saúde, relacionados à negação de coberturas assistenciais no Estado de São Paulo. Dissertação (Mestrado em Ciências), Faculdade de Medicina da Universidade de São Paulo, Departamento de Medicina Preventiva, São Paulo.

ANNEX 3.A1

Regulatory Authorities in the Private Health Insurance Sector

Table 3.A1.1. **General description of regulatory authorities in the private health insurance sector in selected countries**

Scope	Country/regulator	Dates	Laws	Regulated sectors	Institutional framework and status
Health	*Australia:* PHIAC, Private Health Insurance Administration Council *www.phiac.gov.au*	1953	• Section 82B of the National Health Act 1953. • Section 264-1 of the Private Health Insurance Act 2007 (The Act).	Private health insurance industry.	Independent government office.
Health	*Brazil:* ANS, Suplemmentary Health National Agency (*Agencia Nacional de Saúde Suplementar*) *www.ans.gov.br/portalv4/site/home/default.asp*	2000	• Law 9 656/98 defined the PHI sector. • Law 9 961/2000 Established the ANS and determined its nature, structure, powers, income sources and relationship with the Ministry of Health.	Private health insurance industry Note: Old plans (prior to 1998) are protected by ordinary legislation and by the Consumer Protection Code, rather than ANS; however, migration mechanisms to new plans are in place.	Autonomous government agency within the executive branch of government.
Health	*Ireland:* HIA, Health Insurance Authority *www.hia.ie*	2001	• 1994 Health Insurance Act • 1996 Health Insurance Regulations. • Health Insurance (Amendment) Acts of 2001, 2003 and 2007.	Private health insurance institutions.	Independent statutory body.
Health	*Netherlands:* CVZ, College Voor Zorgverzekeringen *www.cvz.nl/default.asp?verwijzing=/speciaal/english/index.asp* Note: all insurers are also subject to registration, financial monitoring, annual reporting and other legal requirements by the Nederlandsche Bank *www.dnb.nl/dnb/home*	1999	• Zvw: Health Insurance Act in force since 1 Jan 2006. The Zvw Renewed CVZ's structure and functions.	The CVZ regulates insurance companies that provide long-term care (AWBZ) and mandatory health insurance (Zvw).	Independent public body.
General insurance	*Canada:* OSFI, Office of the Superintendent of Financial Institutions *www.osfi-bsif.gc.ca/osfi/index_e.aspx?ArticleID=3*	1987	• Office of the Superintendent of Financial Institutions Act, in force 2.07.1987. • Bank Act of 13.12.1991. • Trust and Loan Companies Act of 13.12.1991. • Co-operative Credit Associations Act of 13.12.1991. • Insurance Companies Act 13.12.1991. • Pension Benefits Standards Act, 1985, assented to 27.06.1986.	Banks, federally incorporated or registered trust and loan companies, insurance companies, co-operative credit associations fraternal benefit societies and pension plans.	Autonomous government agency.

Table 3.A1.1. **General description of regulatory authorities in the private health insurance sector in selected countries** *(cont.)*

Scope	Country/regulator	Dates	Laws	Regulated sectors	Institutional framework and status
General insurance	*France:* ACAM, Autorité de Contrôle des Assurances et des Mutuelles *www.ccamip.fr*	2004	• Law 2003-706 (1 August 2003) on Financial Security. • Renamed by Art. 14 of Law 2005-1 564 (15 December 2005) from CCAMIP to ACAM.	Insurance and reinsurance companies, supplementary health insurance companies, complementary/private pension institutions, "prévoyance" (contingency) institutions.	Independent public body with legal personality.
General insurance	*Mexico:* CNSF, Comisión Nacional de Seguros y Fianzas *http://portal.cnsf.gob.mx/portal/page?_pageid=1058,1&_dad=portal&_schema=PORTAL*	N/A	• Federal Public Administration Organic Law, Art. 17 and 19 published 29.12.1976, last reviewed 21.05.2003. • General Law of Insurance Institutions and Mutual Benefit Societies, Art. 108 to 109 published 31.08.1935. • Federal Law of Surety Institutions, Art. 68 and 69 published 29.12.1950. • Insurance and Surety National Commission Internal Rules. Last review dated 20.02.2001.	Insurance and surety institutions.	Autonomous government agency.
General insurance	*Portugal:* ISP Instituto de Seguros de Portugal *www.isp.pt/NR/exeres/97C24D91-5FD7-4874-9D7D-FFE049D206D9.htm*	2001	Law Decree N 289/2001 of Nov. 13.	Insurance and reinsurance companies, pension funds, insurance intermediaries.	State-owned corporate body with administrative and financial autonomy.
General insurance	*Switzerland:* BPV, Bundesamt fur Privatversicherungen *www.bpv.admin.ch*	N/A	• Federal Law on the Supervision of Insurance Companies of 17.12.2004. • Insurance Supervision Act and the modified provisions of the Insurance Contract Act adopted on 9.11.2005, in force on 1.01.2006. • Supervision Ordinance of 9.11.2005, in force on 1.01.2006.	• Private insurance and reinsurance companies providing life, accident and damage coverage. • Private health insurers and health insurance schemes with respect to supplemental insurances. • Insurance intermediaries (since Jan. 2006).	Government office within Federal Department of Finance.
General insurance	*United Kingdom:* FSA, Financial Services Authority *www.fsa.gov.uk*	Created: 1986 financial services. Merged with other sectoral regulators in 2000.	Financial Services and Markets Act 2000.	• Financial service providers, markets and exchanges, insurance firms and pension plans. • Regulates general insurance mediation since 14 January 2005, when the United Kingdom transitioned from voluntary regulation by GISC (General Insurance Standard Council) to statutory regulation under the FSA.	Independent body.

Table 3.A1.2. **Characteristics of PHI subscribers across OECD countries**

	Subscriber characteristics in European countries for VHI
Australia[1]	Income: Higher-income brackets more likely to subscribe (22% of low-income individuals). Age: Coverage increases with age peaking at 45-54 years. Region: Coverage varies across regions (44% in Western Australia *versus* 22% in Victoria).
Austria[2]	Income: Those in higher income brackets more likely to subscribe. Employment: About half of subscribers are self-employed. Another 40% are civil servants or salaried employees. Region: Urban residents are more likely to subscribe. (50% of Carinithia residents are insured compare to 17.5% of Burgenland residents in 2001).
Brazil	Income: among the 10% poorest, 1.3% have PHI and 1.0% has public PHI (for civil servants), while among the 10% richest 31.1% have PHI and 28.6% public PHI (for civil servants). Employment: About 76% of the beneficiaries belong to collective plans. Region: Coverage varies across regions (33.4% in the Southeast *versus* 2.9% in the North). Age: Coverage of collectives plans peaks with age 20-29 years and decreases gradually.
Belgium[2]	Employment: 76% of self-employed are covered with mutuals (about 7.1% of the population).
Canada[3]	Employment: Coverage highly linked to employment status.
Czech Republic[3]	PHI plays a minor role covering less than 1% of inhabitants. Purchased primarily by certain foreign nationals and people travelling abroad.
Denmark[2]	Employment: Subscription is predominantly tied to employment. Age: Students, children and the elderly are less likely to subscribe. Health Status: PHI favours those without pre-existing conditions.
Finland[3]	Age: PHI usually covers children (25% of children and 6.7% adults covered in 1996).
France[2]	Income: PHI enrolment and quality of insurance significantly related to income. Employment: The employed and retired more likely to be covered than the unemployed. Occupational status: 59% of unskilled workers have no or little PHI but only 24% of executives and professionals in 2000. Age: Yyoung adults and the elderly are less likely to be insured.
Germany[2]	Income: Those in higher income brackets more likely to subscribe. Employment: Coverage linked to employment. 1% of the unemployed have PHI (2001). Age: Young, single or married couples more likely to buy PHI. Children account for 16% of membership. Geography: PHI purchasers are more likely to reside in the old Lander (10.1% coverage rate) compared to the new Lander (3.6%) (2000). Gender: 52% of women and 32% of men are covered by PHI (1999).
Greece[2]	Income: Medium to high earners more likely to subscribe. Employment: Subscribers are predominantly employers, professionals, civil servants, white-collar workers and managers working for large private companies and banks. Age: Most subscribers 35 to 45 years old (2001). Region: Typically live in urban areas.
Ireland[2]	Income: Coverage linked to household income (8% in bottom decile, 70% in top decile (2001)). Employment: Coverage highest for professionals and managerial social classes (70% covered) compared to semi and unskilled workers (11%) (1995). Region: Coverage higher in Dublin and lowest in small towns and rural areas. Social status: Higher educational level and married status associated with coverage. Health status: Those in poor health less likely to be privately insured.
Italy[2]	Income: Those in higher income brackets more likely to subscribe. Employment: Subscribers are usually managers and professionals (64% of the privately insured are high-level managers while 9% are blue collar workers (2001)). Age: Non-linear relationship between age and insurance status with 42 years of age being the age at which probability of coverage the highest. Region: Most subscribers live in north east or central Italy. Social status: Highly educated people more likely to be covered.
Luxembourg[2]	The 30-35% of the population without PHI are mostly foreigners residing there (2001).
Netherlands[6]	Income: Primary coverage for one third of the population who earns above a set income threshold. Employment: Employers provide PHI for 20% of the population, or 63% of those with PHI.
New Zealand[3, 5]	PHI covers 33-37% of the population. Coverage has been declining over the past years. Age: a disproportionate amount of young and health population dropping PHI since mid-1980s
Portugal[2]	Income: Purchasers are mostly from high-income groups. Employment: Coverage higher among the working population, especially professionals and the self-employed. Age: Typical subscriber is 28-34 years old. Region: Typical subscriber lives in urban area.
Slovak Republic[7]	PHI insignificant. Only purchase by travellers.
	Subscriber characteristics in European countries for VHI.

Table 3.A1.2. **Characteristics of PHI subscribers across OECD countries** *(cont.)*

	Subscriber characteristics in European countries for VHI
Spain[2]	Income: Those in higher income brackets are more likely to subscribe (30% of the highest income group and 3% of the lowest income group covered by PHI in 2001).
	Employment: Coverage is higher among the employed, with employers and the self-employed more likely to purchase insurance than employees.
	Education: Higher education level is linked with higher coverage rates.
	Region: Coverage rates vary by region, and is higher in urban than in rural areas.
Sweden[2, 3]	PHI plays a minor role covering less than 1% of inhabitants.
	Private companies in the service sector are the most likely to purchase PHI.
Turkey[3, 4]	PHI plays a minor role covering 1% of the population.
	Employment: Over half of the privately insured are offered this benefit by their employer.
United Kingdom[2]	Employment: Coverage is linked to occupational status. (22% of professionals and 23% of employers and managers had PHI in 1995 compared to 1% of unskilled manual workers).
	Age: Coverage highest among the middle-aged.
	Geography: Purchasers more likely to live in London and the southern region. (11% covered in Grater London, 14% in the South East, 10% in South West and only 4% in Scotland (2000).
United States[8]	Income: Those in higher income brackets are more likely to be covered (41.2% in the lowest bracket compared to 90.1% in the highest).
	Employment: 64% has employment-based PHI. Coverage rise with work experience.
	Education: Coverage rates rise with education level.
	Ethnicity: Blacks and Hispanics less likely to be covered by PHI than Whites and Non-Hispanics.
	Age: PHI coverage peaks in the 45-65 age cohorts; lowest among the elderly and young adults.
	Region: Variation by region (79% of those residing in the Midwest; 68.2% in the West).

Note: Data unavailable for Japan, Korea, Mexico, Switzerland. PHI is very limited are breakdown of coverage is therefore not available in Hungary, Norway and Iceland.

1. Colombo, F and Tapay N. (2003).
2. Mossialos, E and Thomson, S. (2002).
3. European Observatory on Health Care Systems. Health Care Systems in Transition: Country Series (various years).
4. Kisa, A. (2001).
5. Bloom, A. (2000).
6. Tapay, N and Colombo, F. (2004b).
7. Colombo and Tapay (forthcoming b).
8. US Census Bureau (2001).

Source: Extracted from OECD (2004) supplemented by specific data for Brazil.

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Table 3.A1.3. **Group and individual purchasers of PHI**

	Policy type (%)[1]		Additional information
	Group[2]	Individual	
Australia	0	100	Predominantly individual market due to historical reasons and disincentives of the fringe benefit tax system. Employers sometimes contribute to individual PHI.[2]
Austria	20.7	79.3	Group policies are employer-paid and gained market share between 1996-2000.[3]
Belgium	60.5(e)	39.5(e)	In 1998, 73.6% of commercial PHI policies were purchased by groups. All mutual and the majority of commercial policies are purchased by individuals.[3, 4]
Brazil	72	28	From 2000 to 2006, the participation of collective plans increased 182%.
Canada	93.4(e)	6.6(e)	Group health, dental care and disability plans partly or wholly paid for by employers (who can deduct cost of PHI from taxable income) are increasingly popular. Group coverage is also available to professional and trade associations, students, creditors and travellers. While historically there was no market for individual PHI policies, this market has been growing. Travel PHI has more than tripled in the past decade to represent almost one-fifth of today's individual PHI market.[1]
Czech Republic	0	100	
Denmark	...	Mainly	The main mutual insurer in the market (Sygeforsikringen Denmark, with a 96% market share) offers mainly individual insurance policies. Group policies are employer-paid and account for more than 80% of commercial policies.[3]
France	52.4	47.6	Group policies lost market share during the 1990s.23.6% of PHI policies (about half of group policies) are a compulsory component of an employee's contract[3]. Provident institutions offer mainly group contracts (mandatory group contracts account for half of their activity). In the life and health insurance industry, PHI represents less than 5% of total revenue with group and individual contracts accounting for comparable numbers of contracts.[5]
Germany	6.6[3]	93.4	Employers can only contribute to substitutive PHI policies offered by private health insurers which specialise in health.[3]
Greece	Mainly		Between 1989 and 1995, individual policies increased by 64% and policies purchased by groups increased by 106%.[3] All group policies are employer-paid.
Ireland	49[6] 80 (e)	51[6] 20(e)	During the 1990s, group policies gained an increasing share of the PHI market. The number of people having their PHI premiums entirely met by their employers has grown over time.[8] In 2000, 20% to 25% of group policies were employer-paid.[3]
Italy	26.3 (1999)[3]		All group policies are employer-paid.[3]
Luxembourg	…	Mainly	In 2000, 95% of commercial policies and 100% of mutuals were purchased by individuals. During the 1990s, group policies gained an increasing share.[3]
Netherlands	60 (e)	40 (e)	During the 1990s, group policies gained an increasing share of the PHI market and now account for over half of all policies.[3] Employers play a significant role in the offering and financing of private health insurance coverage. The proportion of the privately insured with group coverage (not including those with WTZ coverage) has been steadily increasing from 34.4% in 1980 to 62.4% in 1998. Employers provide supplemental private coverage to those covered by sickness funds to a lesser extent. Employers often pay up to 50% of the premiums for their workers, but do not always provide their employees with a choice of benefit packages[1, 7]
Poland	0	100	
Portugal	76	24	During the 1990s, group policies gained an increasing share of the PHI market and now account for a large majority of the market.[3]
Slovak Republic	0	100	
Spain	15-18[3, 8]		During the 1990s, group policies gained an increasing share of the PHI market.[3]
Sweden	90	10	During the 1990s, group policies gained an increasing share of the PHI market.[3]
Switzerland	16.7	83.3	Predominantly individually-purchased PHI policies. However, voluntary daily cash-benefit insurance covering loss of income due to illness is generally taken up as group insurance and covers the obligations they have to continue paying wages in the event of illness or injury.[9]
Turkey	64	36	
United Kingdom	67(e)[10]	33(e)[10]	Estimate based on "subscriber" numbers (heads of family rather than "persons covered").[1] During the 1990s, group policies gained an increasing share of the PHI market. Approximately 59% of PHI policies are purchased by employers.[3]
United States	94	6	Employer-sponsored PHI covers 58% of the population; individual policies 5%.[11]

1. OECD, PHI Statistical Questionnaire, 2000 data, unless otherwise specified.
2. Colombo and Tapay (2003).
3. Mossialos and Thomson (2002).
4. European Observatory on Health Care Systems (EOHCS) (2000). Belgium.
5. Buchmueller, T. and Couffinhal, A. (2003).
6. Amárach Consulting (2003).
7. Colombo and Tapay (forthcoming).
8. Colombo (2001).
9. OECD PHI Statistical Questionnaire, 1999 data.
10. Kaiser Family Foundation, 1999 and 1998 *www.statehealthfacts.kff.org*.
11. Tapay and Colombo (2004b).

Source: Extracted from OECD (2004) supplemented by specific data for Brazil.

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Chapter 4

The Telecommunications Sector

Overview

The telecommunications sector is characterised by the mutual interaction between rapid technological change and a constantly evolving regulatory framework. In the case of Brazil, the strategy for the sector was to implement a "big bang" restructuring in the mid-1990s: dismantling the former TELEBRÁS state-owned system, liberalising the market, allowing entry of additional players, expanding the existing network and supporting fast emergence of additional communication paths, while also setting up a state-of-the-art regulatory authority. On the whole, the Brazilian reform process was exemplary and has enabled the sector to signal the country's commitment to open trade and investment policies while expanding its telecommunications network. Today Brazil accounts for 43% of all telephone lines in Latin America and has the highest teledensity (OECD, 2007). Thus, at the current stage, transition to a private system has already been accomplished. While from a comparative perspective the Brazilian regulatory structure followed international best practice in general terms, the hurdles of implementation in a large middle-income country facing macroeconomic crises and significant external exchange rate fluctuations were significant. The definition of universal service goals remains at the heart of the policy debate, because the regulatory framework has not fully caught up with technological advances such as the diffusion of broadband Internet and the rapid expansion of access to mobile phones. While the structure of the regulator is relatively solid, the pathway to transition highlights complex socio-political challenges derived from rapidly fluctuating exchange rates and a certain lack of attention to consumers' concerns. Hence, ANATEL currently faces a situation where additional regulatory action is needed in order to prevent and solve market bottlenecks, facilitate universal access in the context of modern technologies, and better integrate the consumer perspective.

The international dimension from a global perspective

Growth in demand of telecom services in past decades has been partly linked to the fact that they are an important component of, or input into, trade or tradable services. Thus, telecommunications demand has developed hand in hand with global interdependence. In addition, technological innovation in equipment (including internet and mobile hardware), service ranges and pricing mechanisms (including the use of pre-paid) has made obsolete the traditional monopolistic approach of the sector.

In the United States, the modified final judgement of the Court of the District of Columbia in 1982, which led to the dismantling of AT&T's former integrated monopoly in the United States, spurred swift technological changes. These changes led the United States to open up its market completely in 1996 by abolishing the regulatory barriers between the local and long-distance markets, given that cable providers could provide telecommunications services and Internet users could place calls without using the public switched telecommunications networks. Brazil's vertical separation of TELEBRÁS and unbundling were partially derived from this US experience. Similarly to the United

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Box 4.1. **The European transformation**

In Europe, the telecommunications situation evolved from a context where national postal and telecommunications administrations provided services to full market setting. The separation between postal and telecommunications services was first established in the United Kingdom in the early 1980s, in particular with the 1984 act that allowed privatisation of the historic operator, liberalisation of the sector and establishment of the first independent regulator for network industries, OFTEL. Competition was introduced in the long-distance market. At the EU level, the initial "Green Paper" published in 1988 promoted openness by recommending a partial liberalisation of the sector, excluding infrastructure. Progress towards liberalisation went through a number of stages. The first was the initial liberalisation and setting up of regulatory authorities in the mid 1990s:

- 90/388/EEC liberalised all markets, except for voice telephony.
- 94/46/EC liberalised satellite services.
- 95/51/EC lifted restrictions on the use of cable networks for telephony services.
- 96/2/EC opened up the mobile telephone market.
- 96/19/EC supplemented liberalisation by lifting restrictions on the use and installation of parallel infrastructures.

The second stage in 1998 consolidated earlier efforts and harmonised the regulatory framework:

- 90/387/EEC, amended by Directive 97/51/EC specifies the functioning and powers of National Regulatory Authorities (NRA). These must be independent from network operators and equipment and service providers. A structural separation is required in member states in which the state owns shares in or controls the historic operator.
- 97/13/EC on licences lays down harmonised criteria for the issuance of general licences, which may be replaced by individual licences under certain circumstances.
- 97/33/EC on interconnection specifies that the conditions for access and interconnection must be guided by market forces. It imposes a number of obligations on operators having significant market power.
- 92/44/EC on leased lines specifies that tariffs must reflect costs and be transparent.
- 95/62/EEC was amended by Directive 98/10/CE on voice telephony.

Local loop access was approved in 2000, with the European Commission adopting a recommendation asking member states to adopt all legislative and regulatory measures to implement unbundling by July 2001. Regulation 2 887/2000 then established harmonised conditions for unbundled access to the local loop. It also gives NRAs the power:

- To impose changes on the reference offer for unbundled access to the local loop and related facilities.
- To require notified operators to supply relevant information.
- To intervene on their own initiative in order to ensure fair, non-discriminatory competition.

In 2002, a new regulatory framework was adopted in the field of electronic communications to consolidate the independence of the National Regulatory Authorities: "Framework" Directive 2002/21/EC. This defines the rights, responsibilities and powers of NRAs and policy objectives, and lays down objectives of transparency, consultation and access to information. Operators that have significant market power will be subject to obligations specified in the directives on universal services and access. Therefore, these go further than the WTO requirements for European countries. Directive 2002/20/EC on "authorisation" also imposes a general authorisation for all types of networks and electronic communications services; individual rights are only granted for the use of radio frequencies and numbers.

Box 4.1. **The European transformation** *(cont.)*

Directive 2002/19/EC on "access and interconnection" ensures that relations between operators concerning the conditions for access and interconnection are guided by market mechanisms. NRAs are empowered to intervene in cases where these mechanisms are insufficient. In return, NRAs must co-ordinate their actions at the national and Community level. In order to ensure end-to-end connectivity and accessibility of digital radio and television broadcasting services for end-users, NRAs may:

- Impose obligations of transparency in relation to interconnection and/or access; publication of a reference offer; non-discrimination and cost recovery and price control.
- Require operators to give third parties access to specified network elements or facilities; to negotiate with undertakings requesting access; not to withdraw access to facilities already granted; and to interconnect networks or network facilities.

Directive 2002/22/EC on "universal service and users' rights" defines the scope of universal service and the rights of end-users. NRAs are empowered to enforce these rights. Designated undertakings shall be subject to public service obligations. Undertakings can recover the net cost of providing these services. Directive 2002/58/EC on "privacy and electronic communications" protects the interests of end-users in terms of the security of networks and services, confidentiality of communications, and traffic and location data.

Source: OECD (2006), *Regulatory Reform in Switzerland*.

Kingdom, Brazilian's liberalisation system limited entry to two companies initially, liberalising gradually afterwards. Much of Brazil's regulatory framework designed to assist entrants also came from the UK experience.

While most of the Brazilian regulatory framework was established in the early stages of liberalisation, it did not evolve significantly afterwards; this was mainly due to the national debate questioning the rationale of independent regulatory authorities. Meanwhile in the EU, additional steps were taken to further the liberalisation process. Measures included unbundling of the local loop, facilitating further Internet access using broadband technologies, ensuring the independence, powers and responsibilities of the national regulators, overseeing interconnection and third party access, and finally defining the scope of universal service and officially entrusting national regulators with the remit of protecting the rights of end-users. While these measures provided a significant boost to market developments in a number of European countries, (penetration rates for mobile phones or broadband access in some EU countries now surpass those in the United States), they have not yet exerted significant influence in Brazil.

The global aspects of telecommunications services are also relevant for Brazil, as the WTO also involved a number of steps concerning telecommunications. These have been generally followed by countries such as Brazil, with significant economic benefits: countries that have implemented GATS commitments in basic telecommunications tend to outperform those countries that have not made commitments in the sector, with respect to both fixed and mobile penetration as well as sector revenues as percentage of GDP. This relatively enhanced performance holds true even when one compares only those countries that have privatised their incumbent on the fixed side and only those countries that have introduced competition on the mobile side. While the results cannot be interpreted as indicative of causation between GATS commitments and sector performance due to methodological and data shortcomings, the study provides some initial insights into possible impact.

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Box 4.2. **Liberalisation of telecommunications in the WTO context**

GATS Annex on Telecommunications (1994). Negotiations on basic telecommunications were not completed during the round because at that point supply of basic telecommunications services was still in the hands of state-owned operators or state-sanctioned monopolies in many countries. Hence, while the GATS Annex touches on issues concerning interconnection, market conduct safeguards and transparency, most of the obligations members contracted in their Schedules were limited to what is commonly referred to as "enhanced telecommunications services", which include electronic mail, online information, facsimile services and data processing.

Reference Paper to the GATS Agreement on Basic Telecommunications. The Reference Paper consists of a set of pro-competitive regulatory principles for basic telecommunications services akin to international best practice. Accordingly, it attempts to define interconnection rights more specifically, seeks market conduct safeguards to protect new market entrants against possible abuse of dominant position by incumbents, and establishes transparency requirements such as the independence of regulatory bodies *vis-à-vis* telecommunications service providers, to ensure information availability and trouble-free interconnection. Members remain competent to establish a specific administrative structure for regulation. In addition, the Reference Paper recognises government's right to regulate the sector to ensure public policy objectives. Thus, it explicitly confirms the right of members to define the kind of universal service obligation government wishes to maintain and determines that such obligations will not be regarded as anti-competitive *per se*.

Agreement on Basic Telecommunications (ABT) (in force 5 February 1998). The ABT commits countries to progressively open up their markets to competition and foreign investment. The ABT builds on the GATS commitment of: MFN and national treatment linked to schedules of commitments; transparency; disciplines on the abuse of a monopoly position by a monopoly supplier; and multilateral dispute settlement. In addition, the ABT incorporates the Telecommunications Annex to the GATS, which addresses issues of access and use of public telecommunications transport networks and services. Similarly, the ABT incorporates the Reference Paper and hence its references to anti-competitive practices and interconnection.

Source: OECD (1999), *Implications of the WTO Agreement on Basic Telecommunications*; OECD (2005), *Liberalising Network Infrastructure Services and the GATS*.

The pathway of transition in Brazil

The reforms took place in an uncertain macroeconomic context in Brazil, where the former national monopoly, TELEBRÁS, was facing significant capacity constraints. In this context, most analysts concur that the Brazilian transition was relatively well managed, particularly compared with other countries in Latin America and beyond (Mattos and Coutinho, 2005, pp. 449-466). The reforms were implemented in the right sequence. When privatisation of TELEBRÁS, the Brazilian state-owned holding entity, occurred in July 1998, a comprehensive regulatory framework had already been settled, including the General Guidelines for Opening Telecommunications in Brazil (GGTB) and the General Law of Telecommunications (GLT) in 1997.[1] The telecommunications regulatory body, ANATEL, was already operating. This was intended to reduce the perception of institutional risk by strategic investors in the privatisation. This contrasts markedly with the experience of other countries – Argentina for example, where the regulatory framework did not receive

the same level of attention,[2] or Mexico, where the Federal Law of Telecommunications came into effect five years after the privatisation (OECD, 2004b, p. 123), with significant implications for follow-up (Mariscal, 2002). The GGTB outlined the foundations of the Brazilian reform, stressing as its three main targets universal service, quality of service and the introduction of competition, in order to attract foreign capital and skills.

Several steps were taken to implement the reform: Constitutional Amendment 8 of 1995, which eliminated the Brazilian statutory monopoly in telecommunications; the concessions to private entrant mobile operators in 1996; the approval of the GLT in 1997; the restructuring and privatisation of TELEBRÁS; and the issue of licences to private entrant operators in wired telephone services.

Restructuring TELEBRÁS to prepare it for sale involved significant work. The GGTB justified this process based on economies of scale (attraction of strategic foreign investors), scope (specialisation) and transaction costs (interconnection savings derived from single ownership). The restructuring also intended to eliminate management constraints derived from TELEBRÁS' public ownership.

In the local communications segment, there was a mild horizontal segmentation: The 27 previous concessions (one per state) of TELEBRÁS were aggregated into three regional wire companies. National and international long-distance services were first consolidated into a new company, EMBRATEL. The wireless segment was split up into ten areas. Up until 1997, only TELEBRÁS system companies and four independent companies offered wireless services. The promulgation of Law 9295/96 – the Minimum Law, which enabled the entry of new providers for this service – developed a model to establish competition for the areaThe objective of the model was to introduce full competition. In order to accomplish this goal, the model defined a transition from a monopoly situation to a duopoly, and finally to full competition. The duopoly established in 1997 through the competitive bidding process for B-Band in the ten areas into which the country was divided. TELEBRÁS companies were in turn split up, which gave rise in each case to a second company created specifically to provide mobile cellular service, the A-Band companies. Thus, eight companies were created and privatised in 1998. Vertical break-up was the most relevant feature of the restructuring of TELEBRÁS, in order to facilitate access to interconnection. TELEBRÁS auctions contained restrictive cross-ownership rules, which prevented the same groups from buying different companies, and thus from mitigating TELEBRÁS restructuring strategy. They also potentially provided more income to the auctioneer. The same shareholders were not allowed to acquire control of more than 20% of the voting capital of more than one of the four companies in the wire system (the three regional companies and Embratel). Mergers among the components of these companies were also forbidden, and their owners were not allowed to participate in the auctions of the entrant wire companies. Cross-ownership constraints lasted until 2004 and 2002 for the privatised companies and the entrants respectively, although incumbents could advance these deadlines to 2002 provided they fulfilled their universal service obligations (all except one of them did). Furthermore, none of the eight mobile privatised companies could be bought by a group already operating in the same area. Cross-ownership restrictions also applied between cable and wire operators.

The next step was the granting of new licences, which occurred through public auctions. Wire system auctions were held after privatisation, to give enough time to privatised incumbents to be ready for competition; meanwhile in the mobile segment,

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auctions for entrants took place before privatisation, enhancing entrant's chances. The system designed was similar to the duopoly model in the United Kingdom.[3] Each privatised wired company, local and long-distance, would face only one competitor owning a licence in the same geographical area until the end of 2001, when the government promised to eliminate entry constraints. Entrants were called "mirror companies". There were no cross-ownership constraints among them.

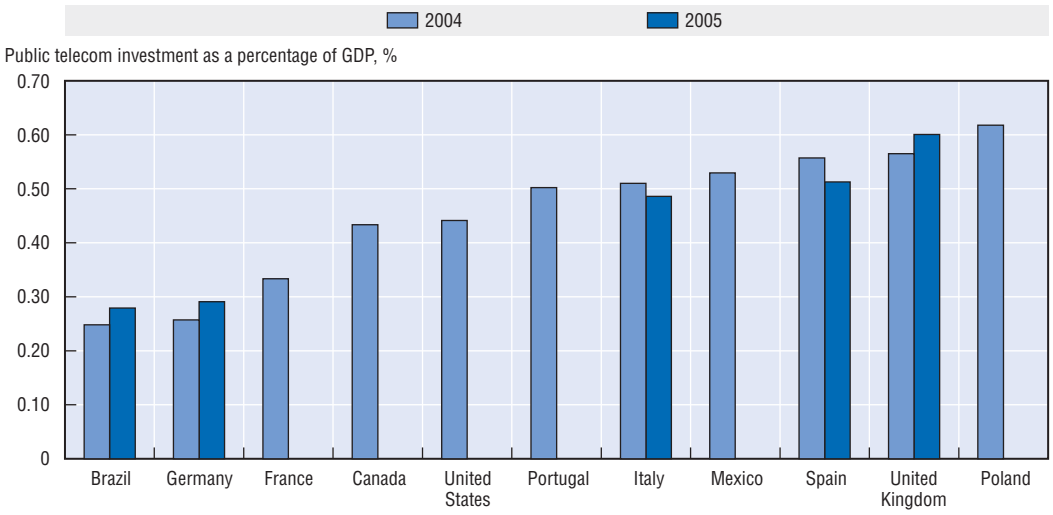
Several regulatory rules for the mirror companies were less stringent than for the incumbent companies, to outweigh first-mover advantages. The main duties of the incumbents, not imposed on the entrants, were fulfilment of universal service targets, compliance with a price cap control, stricter fulfilment of non-interruption of the service, and accounting separation. The main rights conferred on the mirror companies not shared by the incumbents were the permission to use wireless local loop technology and acquire cable TV companies.

Brazilian market trends from a global perspective

While much still needs to be done to further universal goals and reach the level of access found in OECD countries, since the liberalisation of the sector, Brazil has experienced high growth in the number of telephone lines. Technical performance also reflects considerable productivity improvements. Indeed, the total number of lines per employee has risen almost five times (World Bank, 2007), and total staff employed in the sector increased until 2000. After the economic slowdown and the crisis that affected telecommunications worldwide, the total number of staff was reduced by a quarter between 2000 and 2003, but has fully recovered its pre-crises level since then. Total investment in telecommunications, measured as a percentage of GDP, is lower but comparable with that of other OECD countries. The telecommunications sector remains a significant part of Brazil's economy, with revenues equivalent to 3% of the country's GDP.

Figure 4.1. **Public telecommunications investment per GPD**

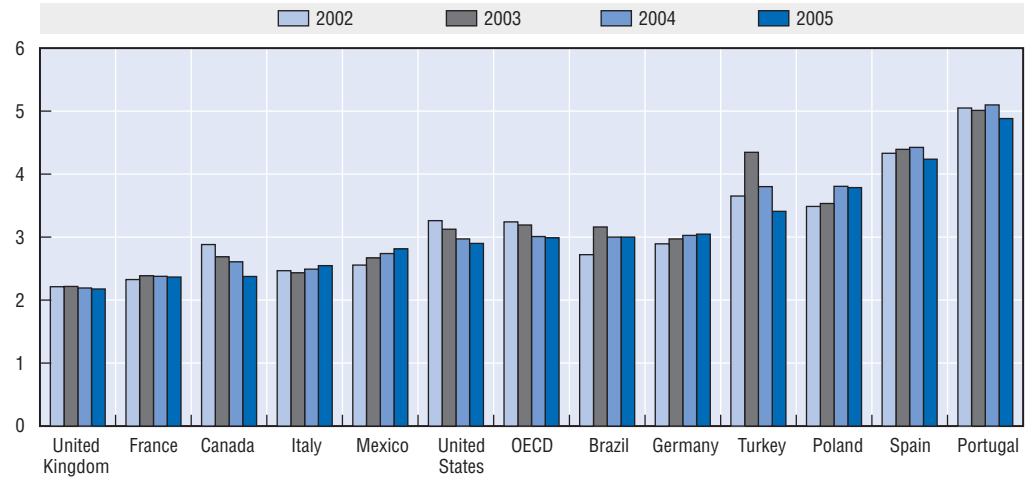
2004-2005



Source: OECD Communications Database, supplemented by data for Brazil.

Figure 4.2. **Telecommunications revenue as a percentage of GDP**

2002-2005

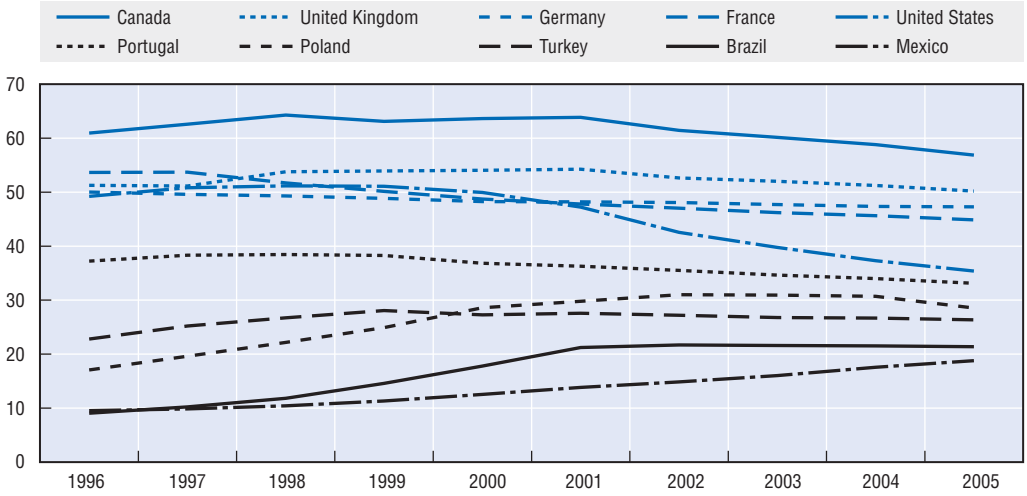


Source: OECD Communications Database, supplemented by data for Brazil.

Basic telecommunication fixed lines, or fixed access paths

Brazil's fixed telephony has seen a drastic change following liberalisation. In 1994, Brazilian teledensity was 8%, lower than Argentina's, Mexico's and even Latin America's as a whole. These figures changed in 2001, with the teledensity difference between Brazil and Argentina having dropped to 7.5%. Brazil also surpassed Mexico and Latin America by, respectively, 59% and 61.3%. In 1997 Brazilians owned 22% of total telephones in Latin America against 13% for Argentineans and 17% for Mexicans. In 2001, Brazil's share jumped to 43% with a simultaneous fall for Argentina and Mexico. Brazil's 23 lines per 100 inhabitants are still below an average of 39 per 100 inhabitants in OECD countries. Those figures range from Sweden's 60 lines per 100 and Canada's 57 on the higher end to Mexico's 19, or Turkey's 26, on the lower end (OECD, 2007). Brazil's access was still higher than Mexico, and below the next OECD countries – Turkey, Poland and Portugal (Figure 4.3).

Figure 4.3. **Fixed line subscribers as a percentage of the population**



Source: OECD Communications Database, supplemented by data for Brazil.

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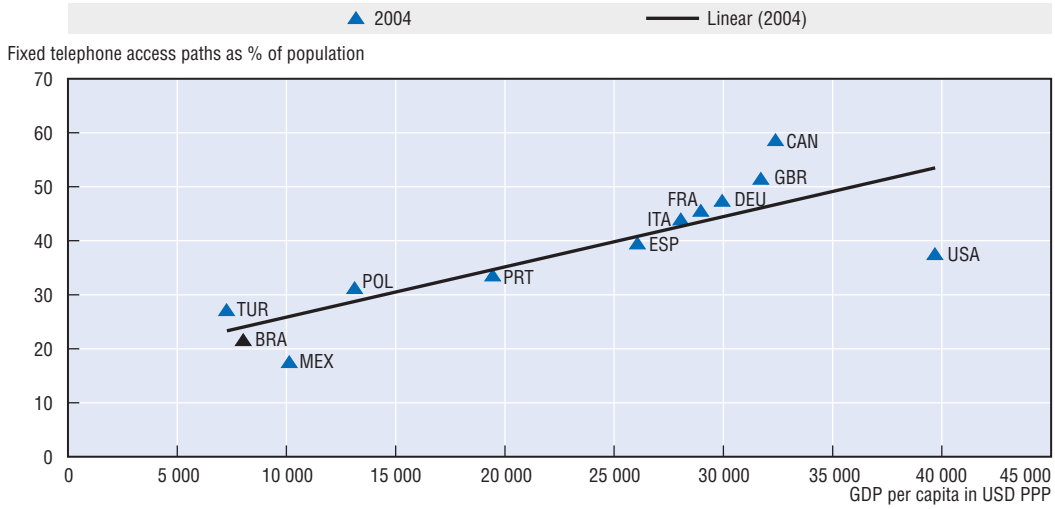
Figure 4.4. **Fixed line penetration in relation to GDP per capita in USD PPP**



Source: OECD Communications Database, supplemented by data for Brazil.

While, as noted, Brazil experienced considerable growth right after privatisation, fixed line density has remained considerably stable since 2001. This may be partly because after a period of "catching up", Brazil has almost reached an equilibrium level relative to its GDP per capita, as illustrated in Figure 4.4. That explanation is consistent with analyses performed by the World Bank, indicating that during the 1997-2003 period, the estimated average returns for telecommunications investment were negative (–26%). Low returns would be partially explained by the high investment levels in the initial concession years, induced by the concession contracts, and by the market concentration operations that ensued. Return volatility would also indicate that telecommunications infrastructure investment in Brazil is expensive because it is risky [Brazil has the fourth-highest average cost of capital and the fifth-highest cost of equity among a group of ten Latin American countries, according to 2004 data (World Bank, 2007, Volume 1)]. In addition, Brazil has one of the highest opportunity costs of investing in infrastructure among Latin American countries, 9 percentage points above Mexico in 2004 (World Bank, 2007, Volume 1). This is a marked difference from OECD countries, where telecommunications infrastructure investments are long-term, low-risk/low-return alternatives for conservative investors. Despite these conditions, Brazil's premium risk has been declining since 2001, which should make it easier to attract private capital investment in the future. One other contributing factor to lower returns during this period may have been the 1999 exchange rate devaluation. While prices declined when measured in US dollars, they increase substantially in real terms when measured in local currency. The General Market Price Index (IGP-DI) had been used to index tariffs for concessionaries in order to protect them against the exchange risk, as the production costs of this sector, which is technology-intensive, are sensitive to the exchange rate. Following the shock observed on the exchange rate in 1999, there was a strong increase in the tariffs of telecommunications services; there were political implications, with price adjustments that were deemed "unjustified". In order to mitigate the need for adequate readjustment while reducing the exposure to the exchange risk, the IGP was replaced by another price index in 2006. The telecommunications sectoral index (*Indice Setorial de Telecomunicaçoes*, IST) was designed to adequately reflect the structure of production costs of companies in the sector. Aimed

especially at the incumbents' tariff annual adjustments, the index is a basket combination of existing indices. The transition to the new price structure linked to this index should be fully implemented in 2008.

One of the arguments operators allege for the low expansion of fixed services is that due to the current universal service goals, portions of the fixed telephony concessions are not profitable. Since additional investment in fixed lines has significant sunk costs, fixed operators fear that mobile telephony competitors, who are not subject to universal service obligations, could adopt *cream skimming* strategies, stealing away lucrative customers. As a result, operators maintain that universal service goals are not feasible and suggest revision or substitution by another set of goals. It is important to note that a significant number of fixed line accesses are available at present, but there is no demand to activate them. This may have to do with the high level of the subscription fee relative to the income of potential subscribers, and also to the substitution that is occurring with mobile phones.

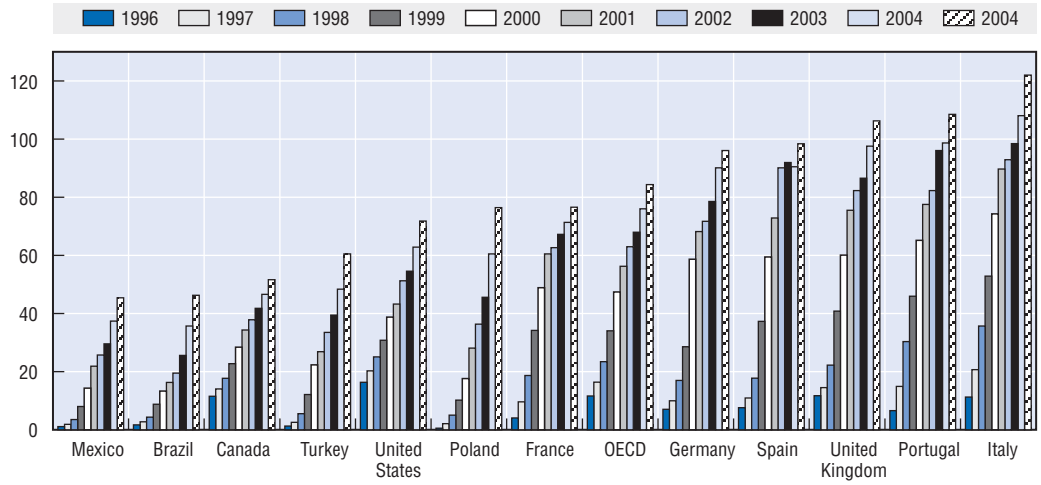
Cellular mobile penetration

Brazil has experienced annual increases in mobile penetration of more than 50% a year in the last decade (OECD, 2007) to reach 47 lines per 100 inhabitants in 2005 (ANATEL, 2007) and a total of 86 million subscribers. The rate is thus significant but has remained below the penetration rates observed in OECD countries such as Poland or Turkey. At the end of 2007, the rate had increased further in Brazil, reaching 60.4% with 115 million subscribers. This is part of a catch-up process; there is scope for further mobile penetration increases in the future.

About 80% of cellular phones in Brazil are pre-paid, a lower percentage than Mexico's 90%. The predominance of prepaid telephony matches well with the profile of a middle-income developing country that has a strong informal economy sector where a majority of users may prefer to avoid fixed monthly charges. Among OECD countries, those nations whose regulatory frameworks facilitate low-cost operator strategies (using pre-paid

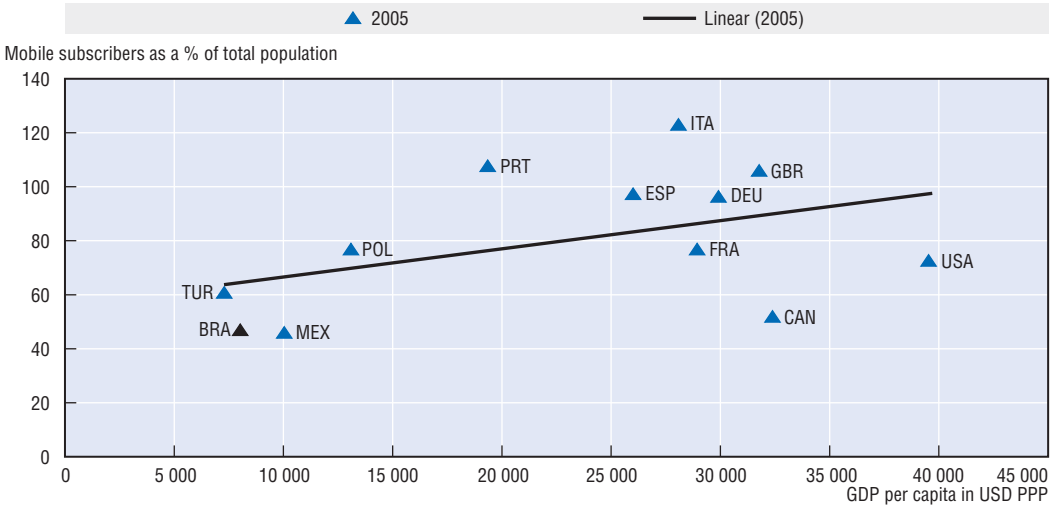
Figure 4.5. **Cellular mobile subscribers as a percentage of the population**

1996-2005



Source: OECD Communications Database, supplemented by data for Brazil.

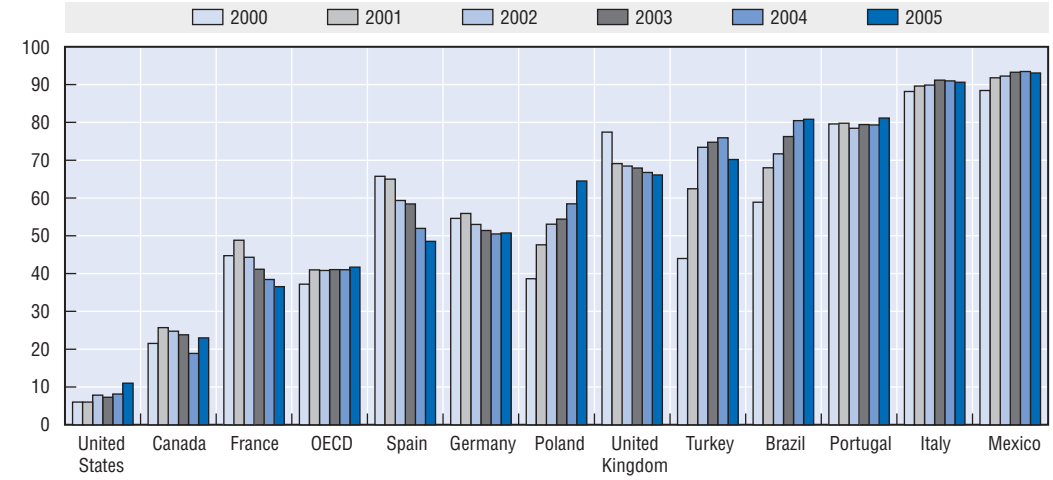
Figure 4.6. **Mobile subscription rate in relation to GDP per capita (PPP)**



Source: OECD Communications Database, supplemented by data for Brazil.

schedules) have achieved the highest penetration levels. This is indeed the case in Italy, Portugal and the United Kingdom, which have some of the highest rates of pre-paid accesses – but also, consistently, the highest mobile penetration rates among OECD countries: in excess of 100%.

Figure 4.7. **Share of pre-paid mobile subscription in total mobile subscriptions**

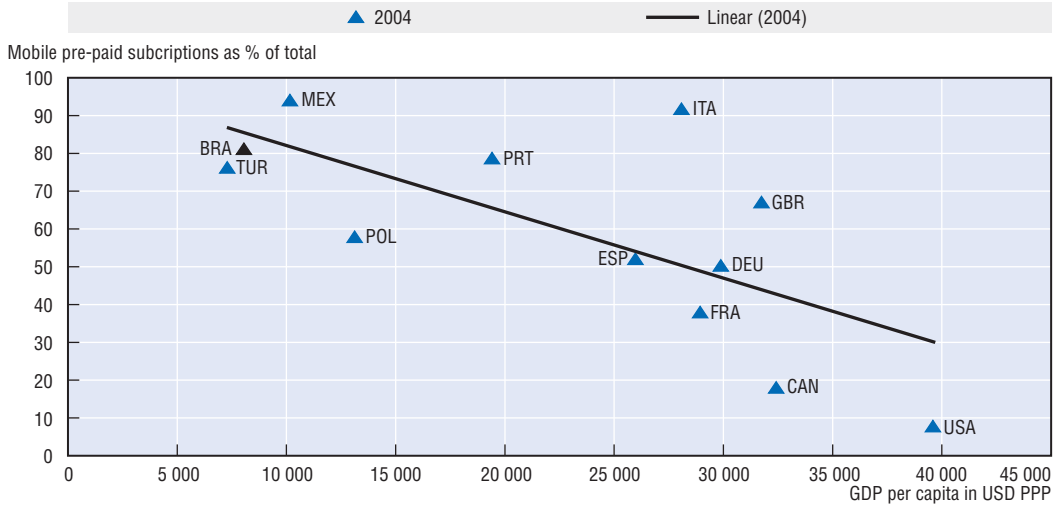


Source: OECD Communications Database, supplemented by data for Brazil.

Strong mobile penetration growth is accompanied by negligible increases in the number of fixed lines during the 2001-05 period. Since Brazil's four largest mobile operators (Vivo, TIM, Claro and Oi), which together control 90% of the mobile market, also own the largest fixed operators (Maciel *et al.*, 2006), this means that operators have opted to invest more on expanding their mobile coverage than on their fixed accesses. This circumstance may be partly explained by the lower sunk costs necessary to develop a wireless network and high market demand for mobile telephony, but also by the current

Figure 4.8. **Share of prepaid subscription in total mobile subscriptions in relation to GDP per capita (PPP)**

GDP per Capita



Source: OECD Communications Database, supplemented by data for Brazil.

regulatory framework, and the absence of universal service obligations in mobile lines compared to fixed accesses. Mobile expansion may also be anticipating a trend, observable in OECD countries, where the number of fixed access paths fell by 4% from 2003 to 2005. The decrease in these countries is mainly attributable to substitution, as mobile phone subscribers give up fixed lines that they may now view as redundant. OECD countries are also experiencing convergence between fixed and mobile telephony. Fixed operators in some OECD countries already provide an integrated service using a single telephone terminal and sometimes a single telephone number for fixed and mobile telephony. In turn, a number of mobile operators are beginning to enter the fixed market to provide multiple play offers, including wireless broadband to provide an incentive for customers to use their mobile terminals at home. As convergence progresses, the ability to differentiate operators according to type of network will be more difficult and also less useful as a metric, in particular because fixed and mobile operators are expected to migrate to similar technologies. Brazil is also experiencing those trends, with mobile operators starting to offer converging services with fixed lines.

Internet access

Internet subscribers increased by 67% a year over the decade ending in 2004, reaching 26 million or an estimated 14 Internet subscribers per 100 inhabitants (OECD, 2007). While Brazil seems to be making good progress compared to countries at similar development levels, in absolute terms figures are still far from the United States' 93 million Internet subscribers (31% of the total population) or the EU15's 95 million, pointing to a possible penetration lag. Brazil's 2.3 million broadband subscribers in 2004 represented a slightly higher broadband penetration rate than its GDP per capita would lead one to expect. The penetration percentage slightly surpassed Turkey and Mexico. Penetration of broadband is increasing rapidly however, reaching 3.5 million subscribers in 2005 and roughly doubling to 6.8 million at the third quarter of 2007, with 20 million total Internet residential users. While these represent impressive increases – and should be considered in light of the

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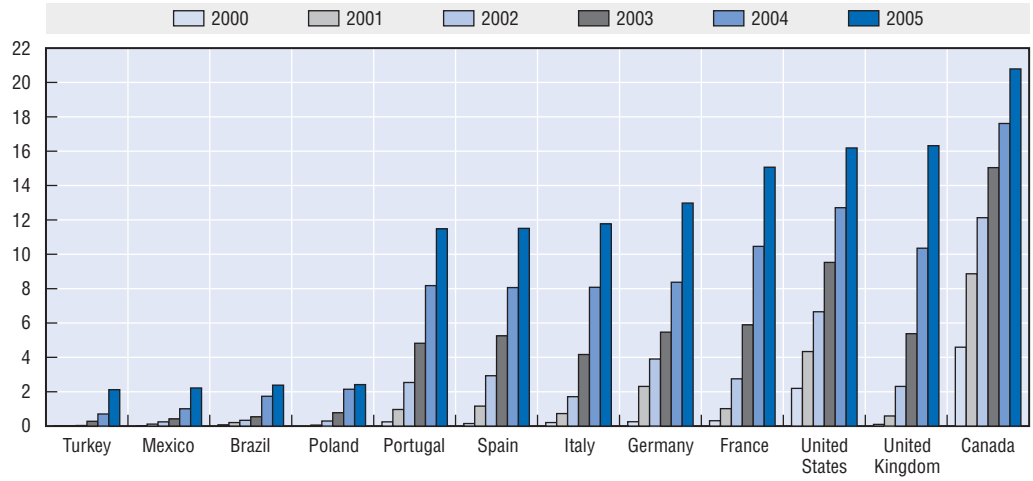
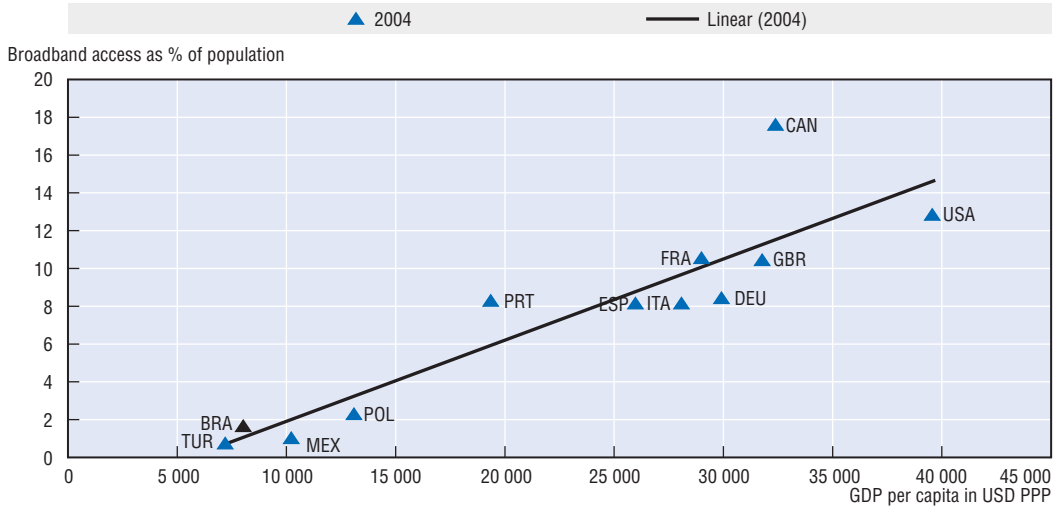
Figure 4.9. **Broadband access as a percentage of the population**

2000-2005



Source: OECD Communications Database, supplemented by data for Brazil.

Figure 4.10. **Broadband access as a percentage of households in relation to GDP per capita (PPP)**



Source: OECD Communications Database, supplemented by data for Brazil.

geographical and socio-economic differentials of the country – the overall level of penetration remains below those observed in a majority of OECD countries.

Since Internet connections (whether ADSL or dial-up) tend to be based on fixed telephone line access, Brazil's slower Internet development may be partly explained by its lower level of fixed line subscription compared to that of most OECD countries. While broadband access reached 3.5 million in 2005, against a total number of 39 million of fixed line subscribers, difficulties in the implementation of local unbundling and high tariffs imposed on new entrants wishing to utilise the local loop may be producing a bottleneck to the wider diffusion of ADSL broadband.

Current trends among OECD countries point to new developments that may permit operators to skip existing fixed telephone lines altogether by rolling out next generation fibre optic broadband networks capable of transmitting voice, video and data directly to customers. The two largest fixed telecommunications operators in the world by revenues, NTT and Verizon, have announced large capital outlays to build such networks. BT notes that it will put USD 5.66 billion (GBP 3 billion) into capital expenditures in 2006, mainly towards network construction. For BT, the investment in the new network is a way to open new revenue streams and move towards a long-term structural cost reduction based on a simpler, more versatile architecture. Verizon predicts that the new fibre network will save approximately USD 1 billion annually in operating expenses by 2010, owing to fibre's operating efficiencies. Cable operators are also becoming more involved as multipurpose broadband access providers based on their existing client bases. Following these developments, OECD country governments are placing increasing emphasis on broadband as an important infrastructure for economic growth and social development. As a result, municipal authorities in large metropolitan areas (Amsterdam, Paris, Vienna) and areas where infrastructure investment is considered necessary to provide adequate broadband speeds, have been investing directly or through joint ventures in municipal fibre networks.

As broadband penetration increases, Voice over Internet Protocol (VoIP) usage by operators and consumers, a substitute for fixed lines, tends to increase. The past several years have seen a number of decisions by regulators on the treatment of VoIP use. A number of these made VoIP subject to the same regulatory framework as fixed telephony voice services, and in particular imposed the same obligations on VoIP operators. Issues regarding the treatment of VoIP are likely to continue evolving as next generation networks develop and there is a wider range of applications that support voice. In fact, several countries are already considering incorporating broadband into the range of universal access services.

Institutional and regulatory aspects

Regulatory framework

The legal framework for the sector includes the following laws:

- Law 9 295 from 19 July 1996 (specific law).
- Law 9 472 of 16 July 1997 which approves the general law on telecommunications, modified by Law 9 691 of 22 July 1997, which modifies some of the fee schedules received by ANATEL

These laws are supplemented by decrees and sub-regulations that approve the internal organisation and functioning of the agency, as well as its code of conduct. The agency's activities are ruled by Presidential Decree No. 2 338 of 1997 (*Regulamento da ANATEL*), which determines the regulator's competencies and general organisation structure, and by ANATEL's Resolution 270 of 2001 (*Regimento interno da ANATEL*), which establishes internal rules and further details about powers, organisation and administrative procedures.

ANATEL is part of Indirect Federal Public Administration, subject to special government agency rules and connected to the Ministry of Communications. As with the other regulators, ANATEL is legally qualified as an "*autarquia especial*", a special figure characterised by administrative independence, non-hierarchical subordination, financial

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independence and a fixed mandate determined by the GTL.[4] In this context, ANATEL is expected to implement the policies of the Ministry. This structure is generally similar to that observed in a number of OECD countries.

The Brazilian legal framework treats broadcasting and telecommunications as separate areas and submits each to regulation by distinct organs. Thus, ANATEL regulates telecommunications markets in general, excluding broadcasting services. More specifically, ANATEL is responsible for "implementing national telecommunications policies established by the executive and legislative branches of government, which includes the regulation of the performance, commercialisation and use of services and the implementation and operation of telecommunications networks, as well as the use of orbit resources and radio frequency spectrum".[5] There are more than 60 modalities of telecommunications services under ANATEL's supervision, legally classified as "collective interest" services commercially offered to the public under non-discriminatory conditions, or "restricted interest" services intended for the use of the provider itself or offered to groups of users in a selective manner.

An important element concerns the classification of the legal regime under which the services are being rendered. They may be provided under the "public regime" by means of a concession contract, or under the "private regime" as a result of private enterprise through a simple authorisation from ANATEL. This has significant implications, as the public regime links to the constitution and the notion of public service, with a more restrictive understanding than that of universal service. It is also subject to institutional constraints, where ANATEL can give concessions to existing services but cannot create new public services, under the "public regime".

The issue of public service

ANATEL's mission is to extend universal service at reasonable prices, foster competition and increase service quality. The situation of Brazil differs from that of other OECD countries, where privatisation occurred when universal access was more or less achieved through the former incumbents, and where universal service policies have focused on the affordability of such services.[6] In Brazil by contrast, universal access policies aim to spur capital investments in infrastructure expansion in places that private operators will not serve, which are poor and rural areas, and mainly in the Northeast.

This represents a key challenge in Brazil, reinforced by the strong social and economic inequality among Brazilian regions. For instance, in the Northeast region income per capita is only 35% of the income per capita of the Southeast region and 50% of the Brazilian average. Population densities also differ: They are 20 times greater in the Southeast than in the North.[7] These differences make private operator investment less profitable in underdeveloped regions. At the same time, access to telecommunications services is a key factor for economic development, which is considered to increase social wellbeing significantly. This is also the reason why service licences are regional rather than national. Had the regulator opted for national licences, buyers would have had a clear incentive to provide service and compete only in the most profitable areas, forsaking investment in the poorer, predominantly rural states.

The challenge is to the balance competing objectives of leveraging public policy goals, minimising market distortion, triggering private investment and ensuring the operator's profitability and sustainability. The mechanisms that countries have opted for with respect

to universal service obligations reflect the national attitude towards the importance of competition, the maturity of the network, the existence of alternative infrastructures such as cable, and the information available on the cost of universal service.

In order to fulfil universal service goals, OECD countries have adopted a variety of measures. In some countries, incumbent telecommunications companies have often been assigned the role of "carrier of last resort" – either at their cost (Japan, Sweden, Finland, and the United Kingdom) or with compensation determined by the regulators (France). In other cases, asymmetrical interconnection charges, whereby incumbents charge higher rates for new entrants to connect to their network, have often been used to fund obligations (Canada, France and New Zealand).

The role of the public regime

Under Brazilian regulation, universal service obligations only affect services rendered under the public regime, and thus only fixed switched telephone services. Accordingly, the GTL determines the preponderance of services rendered under the public regime over those rendered under the private one (including mobile services and Internet access).

The main guideline of universal service policy in Brazil has been explicit control of the State over minimum quantities supplied by the new private owners of the privatised regional companies. Law 9 998/2000 created a universal service fund (FUST), whose main funding is a 1% tax on the net operational revenue of the telecommunications companies. This tax is supposed to bring less distortion to relative pricing than internal cross-subsidisation. However, the current system implicitly assumes cross-subsidisation, since there are regions where revenues do not cover costs.

Limiting universal service to fixed lines contrasts with the reality of the Brazilian market, as well as with recent convergence trends observed in OCDE countries. By the end of 2005, Brazil had 23 fixed phone lines per 100 inhabitants. This figure contrasts with annual increases in mobile penetration of more than 50% a year in the last decade (OECD, 2007), to reach 60 lines per 100 inhabitants in 2007 (ANATEL, 2007) and a total of 115 million subscribers that year. Indeed, trends observed in OECD countries speak of increasingly blurred lines between fixed and mobile telephony as well as net decreases in the number of total fixed lines.

While Brazil is not at the same stage, there is a significant gap between the institutional concept of *public service* and the existing social need for *universal service*. According to earlier OECD work (2004a), mobile access, because of its characteristics (portability and availability of pre-payment options that are widely used in Brazil, where 80% of mobile phones are pre-paid) may have better potential to attract consumer use and spur the economy of rural areas than traditional fixed lines. Expanding the obligations of universal service to mobile providers may not only prove feasible and economically sustainable, but also conductive to economic growth for Brazil's rural areas.

Universal service and broadband access

In Brazil, access to the Internet is one of the key factors in social development for many rural areas. Broadband is also becoming the vehicle of choice for voice, data and video transmission in many advanced countries.

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Box 4.3. **Budget planning and FUST**

Law 9 998 of 1998 established the *Fundo de Universalização dos Serviços de Telecomunicações* (FUST). The fund, which is to be used as a non-recoverable subsidy, aims to provide resources to fulfil universal service obligations in those areas where investment cannot be recouped with service revenue income (villages of less than 100 inhabitants, low-income communities, public institutions such as libraries and hospitals).[1] Revenues for FUST come from a 1% operational tax over operational revenue imposed on telecommunications service providers. More than USD 2.1 billion (BRL 4.3 billion)[2] have already been collected by FUST, yet, the fund has not been used.

It is up to the Ministry of Communications to formulate the policy and establish the guidelines for the use of funds, while ANATEL would execute and monitor the implementation of the programme. At the current stage, the argument revolves around the design of an adequate strategy for the use of the funds and the legislative, political, and budget constraints of each alternative. Two alternatives have been put forward:

- Create a new concession modality within the current public regime framework to cover the beneficiary institutions of FUST funds.
- Review the current legal framework to allow the existence of a generic concession that would cover several services, including those funded by FUST.

The first option would consolidate a legal framework based on different concession regimes, based on the nature of the services provided. The trend towards platform convergence using next generation broadband for the transmission of voice, video and data, and the consequent consolidation of operators providing multiplay services, is rendering this strategy obsolete in most advanced OECD countries. However, since implementation of this option does not require Congressional participation, FUST funds could be more rapidly invested.

The second option would involve a significant overhaul of the current regulatory framework, including the FUST law. That would necessitate the intervention of Congress, and could considerably lengthen implementation. However, this approach not only simplifies the current regulatory framework but also incorporates the most recent global trends.

1. Article 5, Law 9 998 of 2000 (FUST Law).
2. 2006 ANATEL Annual Report.

Source: Anàlise de alternativas para Promocão do acesso banda larga com recursos do Fundo de Universalização dos Serviços de telecomunicações – FUST; ANATEL 2006, Alternativas regulatorias para uso do FUST.

Regulatory implications of broadband and broadcast convergence

The issue of technological convergence is also coming into the national debate, in Brazil as elsewhere. Broadcast digitalisation has provided an extra reason to expand broadband access. Broadcast generates new business areas for network operators, which are among the new entrants to broadcasting markets. Impediments to market competition are likely to surge as long as telecommunications and broadcasting regulators act independently, implementing different regulation for sectors that are likely to provide the same services. A number of OECD countries have already taken concrete actions to increase the flexibility of the regulators and meet the requirements of convergence, as reflected for example in OFCOM in the United Kingdom, or the setting up of the Australian communications and Media Authority (ACMA) effective from 1 July 2005. At the moment in

Brazil, broadcast is handled directly by the Minister of Communications, while broadband is part of ANATEL's prerogatives. Convergence of both sectors may have significant policy implications in the future.

Notes

1. Law 9 472/97.
2. Cesar Mattos and Paulo Coutinho (2005), *The Brazilian Model of Telecommunications reform, Telecommunications Policy*, Chapter 29, pp. 449-466; Abdala and Hill (1996), pp. 203-204.
3. While the reasons to limit market entry and impose different obligations to incumbents and entrants are clear (to avoid market asymmetries), the success of such policies is less clear and subject to academic controversy (Equipe da Seade (2002), "O Modelo Brasileiro de Telecomunicacoes", Aspectos Concorrenciais e Regulatorios).
4. GTL Article 8, Paragraph 2.
5. GTL, Article 1.
6. This includes both fixed line access and mobile telephony. All OECD countries have 2G mobile coverage for over 90% of their populations. Even large countries with extensive rural areas typically have excellent coverage of places where people live (OECD, 2007).
7. See Ferreira (2004) for a detailed analysis of social and economic inequalities in Brazil.

Bibliography

AMCHAM Brasil (2006), *Relatório sobre a Ágência Nacional de Telecomunicações ANATEL.*

ANATEL (2007), *Annual Report.*

de Braganca, Gabriel Fiuza *et al.* (2006), *A Taxa de Remunieracao do Capital e a Nova Regulacao das Telecomunicacoes.*

Equipe Tecnica da Seae (Secretaria de Acompanhamento Econômico) (2002), *O Modelo Brasileiro de Telecomunicações: Aspectos Concorrenciais e Regulatórios.*

Ferreira FHG, Velez CE, Barros RP. 2004, *Inequality and Economic Development in Brazil*, Washington DC, World Bank.

Maciel, Marcos *et al.* (2006), *Foreign investment and consolidation in the Brazilian Mobile Telecommunications Market.*

Mariscal, Judith (2002), *Unfinished Business: Telecommunications Reform in Mexico.*

Mariscal, Judith *et al.* (2005), *New Trends in the Latin American telecommunications Market: Telefonica and Telmex.*

Mattos, Cesar (2006), *Unbundling Policy in Telecommunications a Survey*.

Mattos, Cesar *et al.* (2005), *The Brazilian Model of Telecommunications Reform.*

OECD (1999), *Joing Group on Trade and Competition, Implications of the WTO Agreement on Basic Telecommunications.*

OECD (2003), *Regulatory Authorities in South East Europe,* OECD, Paris.

OECD (2004a), *Leveraging telecommunications Policies for Pro-poor Growth Universal Access Funds with Minimum-subsidy Auctions*, DAC Network on Poverty Reduction, OECD, Paris.

OECD (2004b), *Progress in Implementing Regulatory Reform – Mexico*, OECD, Paris.

OECD (2005a), *Liberalising Network Infrastructure Services and the GATS*, Working Party of the Trade Committee, OECD, Paris.

OECD (2005b), Working Party on Telecommunication and Information Services Policies, "Telecommunication Regulatory Institutional Structures and Responsibilities", OECD, Paris.

OECD (2007), *Communications Outlook,* OECD, Paris.

Piragibe, Clelia (2001), Competition and Globalization: *Brazilian Telecommunications Policy at Crossroads*, Anatel Brazil.

Telebrasil (Associação Brasileira de Telecomunicações (2006), *O setor de Telecomunicações no Brasil Uma Visão Estrutural*.

Universidade de Brasília, Flavio Rogério da Mata Silva (2004), *A relativa Independência Decisória da Anatel e o Poder de Supervisão do Ministério das Comunicações sobre Matéria de Políticas Públicas para o Setor de Telecommunicações*.

World Bank (2007), *How to revitalize infrastructure investments in Brazil*, Washington DC.

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Chapter 5

The Land Transport Sector

Introduction

Transport is a key means by which public investment can contribute to overall economic growth. Infrastructure services, including roads and railroads, are critical to the operation and efficiency of a modern economy. Major inputs in the provision of goods and services, they have a significant impact on the productivity and competitiveness of the economy. This is why adequate investment and increased efficiency in this sector are crucial to improving the living conditions of the population at large, particularly in a middle-income and geographically vast country such as Brazil. A potential lack of long-term investment in this sector could have negative implications. Indeed, this sector is part of the main objectives of the Brazilian Growth Acceleration Programme – PAC.

Traditionally, provision of infrastructure services in Brazil and in most of the developing countries has been provided by state-owned enterprises. There has generally been a lack of adequate planning, even though the transport system is crucial for the structuring of the country and, as just stated, its economic development. Recent research shows that improvement in interregional transport, with lower transportation costs and greater productivity, is one of the main factors contributing to city growth in the country.[1] State-owned enterprises had, moreover, often demonstrated a lack of efficiency. A first step to improve the provision of insfrastructure services was the beginning of a general trend towards privatisation, mainly affecting railroad companies in the mid-1990s. Another step was to increase the supply of private sector investment, which has helped to supplement public sector funding and improve performance and coverage, particularly with the introduction of road concessions.

Infrastructure levels and quality significantly affect economic growth and poverty alleviation. As illustrated by a recent publication of the OECD ECMT (2007),[2] the first major empirical work by Aschauer (1989) confirmed that the elasticity of output to public capital ranged from 0.36 to 0.56, which would translate in a very high per annum gross result. These results, which at first seemed implausible, were further confirmed by later studies, given the large externalities of transport infrastructure investment that are uncounted by conventional microeconomic project evaluation procedures. Transportation infrastructure may have a profound impact on the breadth of the market, and the ability of producers to exploit economies of scale and specialisation. Wider markets bring benefits in terms of competition and contestability, as well as dissemination of knowledge and technology.

More robust and recent econometric studies have confirmed significant rates of return – albeit lower than the initial results produced by Aschauer – with a social rateof return of infrastructure of around 7.8% in the US manufacturing industry for the period 1955-86, compared to 8.7% return to private capital. However, these rates of return are much higher at the initial phase of investment, in Brazil as elsewhere. In ECMT (2007), Hulten has produced results for India that show a positive return of return of 2% in 1974, increasing to 5% in 1996. The overall infrastructure effects are much larger: There is a

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combined highway electricity effect of 9%, and even more if implied spillover elasticities between Indian states are taken into account. Investment in infrastructure has clearly more significant effects in countries such as India, or Brazil, than in a built-up infrastructure-rich investment environment. These results are confirmed by cross-country econometric regressions, produced by Canning in ECMT (2007), which show much higher rates of returns for developing countries. These results should be borne in mind in the policy debates – particularly in Brazil, where much of the policy attention has been on the microeconomic cost/benefit ratios, which are clearly underestimating the overall economic effects.

Investment and infrastructure need to be supported by an adequate regulatory framework. This framework should be implemented before transferring rights to operate; provide adequate incentives for competition and for protecting users' rights where natural monopoly conditions exist; and, to the extent possible, prevent opportunistic behaviour by the government and the operators. A strong regulatory framework is required both to secure adequate private sector incentives, and to protect consumers' interests given information asymmetries.

Although privatisation, competitive restructuring and regulatory reforms may improve infrastructure performance, several issues must be considered and conditions met for these measures to achieve their policy goals. In a number of countries, infrastructure inefficiencies have constrained domestic economic growth, impaired international competitiveness, and discouraged foreign investment.

In Brazil, the transport sector represents about 2% of GDP. The Brazilian economy is disproportionately dependent on road transportation: according to 2005 data, 58% of the country's freight in terms of ton-km moves by truck, 25% by rail, and 13% by coastal navigation and inland waterways. The paved federal highway network (58 000 km) is the cornerstone of the country's transport sector.

Infrastructure investments in Brazil fell between 1980 and 2002 due to a contraction of public spending. Public investments in infrastructure fell from 3.6% of GDP during 1981-85 to 1% during 1996-2000.[3] Consolidation of Brazilian public finances, which was also required to ensure long-term economic stability, came at a high price in terms of the infrastructures needed for long-term economic growth. In a context of shortages, there is evidence that better access to infrastructure services is strongly correlated with superior educational performance, and poverty with poor access. According to a World Bank Report,[4] returns on infrastructure concessions in Brazil, as measured through microeconomic ratios, have not been sufficient to compensate for opportunity costs in the past. That reflects the risk associated with investment in this sector and the need for a strong and reliable regulatory framework to reduce the cost of capital for the country – the fourth highest among ten Latin American countries in 2004 according to the World Bank. However, conditions may now have changed. The rate of return of projects in the past was about 16-17% in 1996-97, which is much higher than that of the most recent bid (8.95%). Macroeconomic conditions have improved as well.

Railway

From an overall perspective, the rail industry poses unique problems in terms of regulation (IDEI, 2003), a multi-product activity with a potentially monopolistic cost structure; it has inputs and outputs that are indivisible; it involves environmental and

social externalities. The natural monopoly elements imply that there needs to be some kind of public intervention – a need that also arises when private management or ownership is introduced. Rail activities involve significant economies of scale, scope, and density. Fixed costs are large because of the infrastructure – track, stations, and the like – required for trains to run. Rail infrastructure has little value for other purposes and hence its fixed costs are largely sunk, creating significant barriers to entry. The multi-product nature of railroads implies that the same facilities, equipment, and labour are often used to produce different services. For example, passengers and freight are transported on the same track. In terms of freight, low-value commodities and high-value manufactured goods often share the same services and facilities. These shared costs confer economies of scope on carriers offering a multiplicity of transportation services: a carrier that provides an array of services can do so at lower cost than a set of carriers producing each service separately. The multi-product nature of railroads also implies that a large portion of rail costs cannot necessarily be attributed to a particular service at a particular point in time. Rather, a significant portion of costs are incurred on behalf of several activities, and do not vary with the amount of the service provided.

The key factor is striking a balance between preserving the economies of scale and scope inherent in the network and infrastructure, and introducing a degree of market pressure and openness to competition that will make it possible to optimise the service provided using this infrastructure. The ECMT (2004) considered that on the whole, the experience with mandated access and vertical separation remains limited, with a low level of competition. ECMT has provided an overview study of freight sector regulation (2001); this was followed by an ECMT roundtable (2004) and a best practice roundtable on competition policy (OECD, 2005).

However, the issues in Brazil differ from those in Europe. The railway sector in Brazil, under the jurisdiction of ANTT, is operated under long-term concession contracts, and concerns mainly freight transport. Passenger rail transport is essentially suburban transport in the large cities and, as it is within the boundaries of a single state, it does not fall within the remit of the federal agency. In this context, private companies need predictable financial conditions to ensure future investment in the sector, conditions that rail regulatory regimes have to fulfil if they are to be successful in the long term. Large cost savings can be brought about by creating a regulatory framework that gives management the freedom to optimise investments and the size of the network. The transparency and accountability of the regulator is fundamental to securing more investment in the rail system – and investment, in turn, is essential for achieving a transfer of freight from roads to railways in order to reduce the unbalanced nature of the transportation matrix.

An international overview of the regulatory experience

Brazil is closer to the case of the United States, Australia and Mexico, which have limited regulatory regimes, large commercial freedom, and a railway sector concentrated on long-distance freight transport (See Annex 5.A1, Table 5.A1.1). In North America, regulatory intervention has been more limited since the Staggers Rail Act of 1980, which significantly reduced the federal regulatory burden on freight transport. It also opened possibilities of judicial appeal if a party considers that it has been injured and government intervention in the event of a merger. Competition takes place between

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vertically integrated companies. The deregulation of freight transportation in the United States led to a drop in prices of approximately 50%; corporate mergers resulted in higher productivity, reduced duplication of costs, and the development of seamless services nationwide (ECMT, 2001). The industrial structure that has developed on this market reaps economies of scale, while keeping unnecessary regulatory intervention to a minimum. The comparative data show that in Europe, traffic in ton – kilometres has generally stagnated since 1970, while it has recovered significantly (ECMT, 2007a) in the United States since 1982 and improved markedly since 1992 (ECMT, 2001). The evaluations available (Ivaldi and McCullough, 2001) show that although vertical integration does not provide any specific technological advantage, competitive access alone does not necessarily lead to effectively competitive results on rail markets. The cost ratio between freight and infrastructure, which involves transaction costs, determines the appropriateness of vertical integration. In any event, railways appear to be a natural monopoly. Competitive access can be seen as a complement to administrative regulation, which is necessary with regard to the large companies operating on integrated networks.

The US experience has also had implications for Canada – a geographically large country like Brazil, with densely populated areas concentrated in some parts of the country.[5] A major company, CN, was privatised in 1995, and federal subsidy programmes were terminated. The North American Free Trade Act has had implications for Canadian companies, (CN and CPR) integrating their operations across North America. Since the 1987 National Transportation Act increased commercial freedom and competition, average freight rates have also declined, with a reduction of 35% between 1987 and 2000 in real inflation-adjusted terms. The ratios of the Canadian companies compared favourably to those of their US counterparts. The Canadian Commissioner of Competition has argued for regulatory oversight, which would prevent railways from charging excessive rates to captive shippers. Many rail shippers generally regard themselves as captive, and this lack of modal choice results in inappropriately high freight rates. The discussions also focused on ways to expand access to rails and on regulatory instruments. Canada has an independent Canadian Transportation Agency, which since the 1996 National Transportation Act oversees all transport activity in Canada under federal jurisdiction. This agency is an independent, quasi-judicial tribunal that makes decisions on a wide range of economic matters involving federally regulated modes of transportation (air, rail and marine); it has the powers, rights and privileges of a superior court to exercise its authority. Along with its roles as an economic regulator and aeronautical authority, the agency works to facilitate accessible transportation, and serves as a dispute resolution authority over certain transportation rate and service complaints.

The Australian approach is also interesting, for it combines aspects of the European and US approaches. It consists of an interstate railway that connects the various state networks. Each has had its own regulatory structures and regimes since the reforms introduced in the early 1990. Regulation combines elements of free access, as in Europe, with the regulatory flexibility of the US model. This is important for states in which the rail's share among transport modes is large and in which freight accounts for a large segment of traffic in relation to passenger transport. The interest of the Australian approach is that it makes it possible to evaluate alternative institutional solutions. It has been the subject of a major study (Productivity Commission, 1999; Owens, 2003), which

shows that different access and regulatory regimes are necessary for different types of rail activity. The report concludes that for urban passenger networks, there is no obvious advantage to vertical separation. Management can be franchised and granted to private companies in order to keep the level of public subsidies to a minimum. For freight transport in a situation in which a local operator has a dominant market position, an access regime should be implemented with vertical integration, which is the case in Brazil. For freight transport in a situation in which no operator is dominant (as in the United States), a reduced regulatory regime will suffice. Lastly, for interstate freight transport, when there is intermodal competition and many network managers, vertical separation is recommended, with a single network manager and an access regime supervised by the competition authority. The entire regulatory regime should be subject to high-quality regulatory standards.

The larger geographic areas of the countries mentioned in these examples also allow them to have a number of competing lines to serve freight markets. Interesting lessons can be drawn from this experience, in particular regarding the need for access to major infrastructure.

The European approach is different, with dense national networks, resulting often from the nationalisation of former private companies. There is a prevalence of passenger transport, and a strong public service dimension for the activity. In some cases, regulatory reform has also raised costs because of the fragmentation of activities, and has led to insufficient levels of investment, as was illustrated by certain aspects of reform in the United Kingdom at the beginning of the 1990s. However, new entrants may also be more efficient than historic companies because of more flexible management methods. The choices made in the United Kingdom[6] represent one of the poles of the European approach, comprising a public strategy, a separate network manager, companies operating on this network, an independent regulator responsible for safety, performance and costs, and transit rights for freight on the most frequently used train paths. On the other hand, some European countries remained relatively sceptical and cautious about liberalisation and the comparative advantages of vertical disintegration.

Europe's goal has been more to foster the building of a railway market, through a number of directives. Independent regulatory authorities have been established to oversee this activity and third party access to national networks. One key issue is whether there should be vertical separation of infrastructure from service management, coupled with management of access rights and the establishment of regulatory authorities. The ECMT (2001) considers that the EU approach seems to be most appropriate in small countries that have significant trade with each other. Free access for passenger transport still appears to be a distant prospect in Europe; it is mostly developed for freight. In economic terms, the challenge is to obtain the efficient management of freight transport paths and to establish a non-discriminatory access-pricing system for the management and pricing of infrastructure use. This requires the intervention of independent regulatory and arbitration authorities, which have been reflected in European directives.

In Mexico, the rail network is mainly used for freight services (OECD, 2005). As in Brazil, the inefficiency of the previous state-owned operator, FNM, led to privatisation and divestment in 1997. As a result of privatisation, the share of traffic lost in favour of road freight transport recovered, and the performance of the sector generally improved.

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However, significant inefficiencies have arisen; regulatory conflicts have been brought to the regulator and the competition authorities, as well as to courts. However, an independent sectoral regulator does not exist in that country, and licences are managed by the relevant Ministry, the *Secretaría de Comunicaciones y Transportes* (SCT). Access to key infrastructure is a major issue in Mexico, where the 1995 Railroad Services Law and the 1996 Regulations to the RSL established statutory interconnections and empowered the SCT to impose mandatory trackage rights and haulage agreements. There have been cases of difficulties of access, and decisions by the Ministry were challenged in courts. These have concerned general trackage rights, specific rights, and controversies over interconnection and terminal services. The competition authority had to intervene. Overall, operative improvements have been gained from privatisation, even if interlineal traffic has fallen as a result of strategic behaviour concerning interconnection, resulting in a sub-utilisation of existing facilities. The Mexican experience illustrates the need to have guidelines to resolve disagreements among concession holders, with sufficient powers for the sectoral regulator to implement these regulations, and a clear framework for interconnection fees and access conditions.

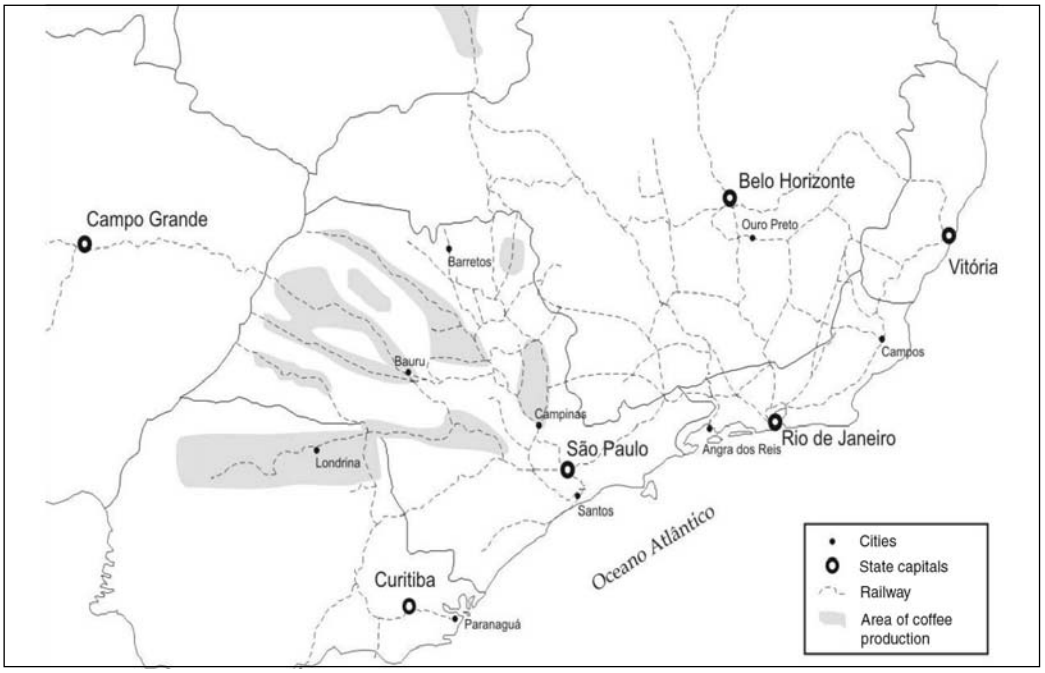
Brief history in Brazil

Due to a tight control over tariffs by the Federal Government as part of various adjustment plans, and the long-lasting fiscal crisis, there arose difficulties in investing in and even maintaining what ended up being one of the less-used rail systems of the Latin America, in spite of its tremendous potential.

The history of railways in Brazil started in the middle of the 19th century. It began with a railway network designed to link the agricultural production centres in the countryside to the production areas of São Paulo and Rio, and to the ports. The first railroad was completed in 1854, relatively late compared to the rest of Latin America. The overall railroad network was built to serve export markets, especially for coffee, which resulted in integration at the regional rather than national level. Figure 5.1 shows the close link between coffee production centres and railway lines. The centres started west of Rio de Janeiro, towards Saõ Paulo and south of Minas Gerais. Investments increased steadily from 1890 to 1914 and remained concentrated in the South East, but the network remained limited by international standards (26 000 km). The slow growth was a result from the low rate of return on investment of private (to a large extent foreign) capital, and from the lack of attention of Brazilian authorities (Leff, 1982). Although two-thirds of the railroads were privately owned at the start, this was followed by extensive nationalisation: more than half of the network was in public hands at the end of the 1920s.

This was followed by a period of stagnation in the context of the great depression, which affected coffee consumption. There were excesses of production, partly compensated by a national coffee policy and an import substitution strategy. The Second World War stimulated the industrialisation of Brazil with difficulties related to imports, and there was greater focus on the expansion of the road network. In 1957 the Federal Railway Network (*Rede Ferroviária Federal* – RFFSA) was a mixed-economy company under the control of the Ministry of Transport. Five private rail companies in São Paulo were nationalised in 1971, becoming the FEPASA. However, these enterprises lacked capacity and resources to compete for the market, which led them to concentrate the supply on large users through special agreements, leaving remaining expenses to the Federal and

Figure 5.1. **Map of railway network linking countryside agricultural centres to productions areas of SP and RJ, and to overseas export markets**



Note: The map displays the areas of coffee production early in the 20th century while the first railways were constructed in the 19th century.

Source: Vencovsky, 2006.

State public owners. Rail freight activity increased as a result of the oil crisis in the mid-1970s, when it substituted for road freight. However, the sector experienced no structural change; it was under a system of price controls, with price levels and structures set by the government until 1989.

In the 1990s, the revenues of the main companies, RFFSA and FEPASA, were high compared to most of other freight railroads in America. However, the revenue/cost ratios were low and deficits had to be constantly underwritten with public subsidies. This resulted in a lack of investment and a deterioration of the tracks, rolling stock and power capacity. Railways were losing ground in its competition with other transport modes, as the market share of trucks and road transport increased.

Privatisation and regulatory reform

Privatisation in this sector, as in other sectors of the Brazilian economy, was driven by the will to reduce public debt, increase investments, improve resource allocation, develop market-based services and enhance the quality of services generally. Decree 473/1992 included RFFSA and AGEF in the National Privatisation Programme (*Programa Nacional de Desestatização* – PND). The BNDES was in charge of the sell-off. Privatisation included RFFSA, FEPASA and Ferroeste. RFFSA was horizontally divided in six companies before being sold off.

There were no pre-qualification requirements for candidates. The only measure to avoid excessive concentration of ownership was a 20% cap on the nominal capital share in

terms of ownership. This can result in complex management processes, as it is more difficult to obtain agreements and decisions. However, no restrictions were imposed on cross-holdings in different concessions or on the participation of major rail shippers or suppliers as shareholders in privately operated concessions. There were no specific provisions concerning the nationalities of individual shareholders. Concessions were granted for 30 years, with a possible extension for an additional 30-year period. The concessions established performance targets to be reached instead of specifying levels of investment. Some targets were established in the contracts, such as increase in production (TKU) and reduction in the rate of accidents.

This privatisation model of selling vertically integrated railway companies resulted in a situation of practically no direct competition between enterprises. Traditionally, rail freight transport has competitive advantages for long distances (over 800 km). However, this was undermined by the low cost of road transportation in Brazil, which reduces the relative modal competitiveness of rail freight transport.

Privatisation was accompanied by an update of the regulatory framework, which started in 1996 with the Decree 1 832. This includes the following elements:

1. Operators are allowed to freely set their prices for services if they face effective competition, including tariff differentiation to account for the needs of individual shippers.
2. Operators are required to enter into reciprocal switching when possible; otherwise they must quote unbundled rates and provide connecting service for joint hauls.
3. Regulators must allow operators to set prices that are responsive to differences in demand and in marginal costs, and to enter into voluntary shipper contracts with individualised terms and conditions.
4. Prices sets for captive shippers of a railway company, where it has monopoly power, are constrained using a revenue ceiling defined by the stand-alone cost of providing the service.
5. Concessionaires have to seek permission from the Federal Government before closing rail lines.

This created a relatively light regulatory framework on a fragmented and vertically integrated rail system. There are a number of economic arguments that tend to support vertical integration of railway companies under the condition that adequate competition exists or that third party access can be ensured (Box 5.1). There was also at first no regulatory authority in charge of ensuring third party access. Vertically integrated operators could both own rail companies and control ports. CVRD, the world's largest iron ore exporter, represents one example. It holds a major share in two railways, EFVM and EFC, and controls several ports in areas closed to its mines: competitors have to use CVRD railroads and ports.[7] This form of light non-interventionist regulation lasted until the regulatory agency ANTT was established in 2001.

The new concessionaires were mostly US investors and Brazilian industrial groups and banks. Many of the shareholders of the new concessionaires have direct or indirect interests in companies that are rail service customers. The main results from the concession programme are shown in Table 5.1.

Box 5.1. **Vertical integration**

Vertical integration is a key issue in a regime of regulated access to track infrastructure. When promoting competition in a given rail service through regulated access, an important question is whether the infrastructure provider should be allowed to compete for provision of track services *and* remain vertically integrated. When the infrastructure provider is allowed to provide certain services, it has a potential incentive to use its position to deny or restrict the quality of access to third parties. Experience from the rail sector shows that it is often difficult for the regulator and/or the competition authority to control such behaviour. Many examples exist where integrated incumbent rail service providers have sought to use their position as the owners of the tracks to restrict or deny access to competing operators across OECD countries.[1] Competition authorities, which usually intervene *ex post*, are often ill-equipped to ensure timely or effective access in the face of incumbents determined to slow competition.[2] Access requires specific regulatory oversight *ex ante* from a sectoral regulator. Vertical separation, if it can increase competition, may also result in increased production costs, through the loss of economies of scope. It also increases the importance of effective regulatory incentives on the infrastructure provider.

Network companies have generally remained integrated in the majority of OECD countries, even in North America, where competition operates between vertically integrated companies. Many countries have accompanied mandated access to the tracks with various forms of separation of the infrastructure management from train operations. For example, Italy has noted that "guaranteeing conditions of equal access in freight services would require introducing a greater separation between the incumbent freight service operator and RFI. In practice this would imply privatising the freight service arm of Trenitalia. Vertical separation is not necessarily "all-or-nothing". It is possible to apply vertical separation on a service-by-service basis. For example, vertical integration may be preserved for passenger services while prevailing for freight services (Denmark). This often takes the form of accounting separation or corporate separation. In Europe, EU directives require at least accounting separation between infrastructure and train services, as well as the complete separation of certain key regulatory tasks, such as train path allocation. In Italy for example, the former FS was separated into two parts, RFI and Trenitalia, which are under a single holding company. Switzerland also has accounting separation between passenger services and infrastructure services (cargo services of SBB are provided through a subsidiary). In Germany the rail path allocation body (Trassenagentur) will be established within the Federal rail regulator. In few countries, the owner of the infrastructure is not allowed to provide certain services and therefore is vertically separated for these services only. Very few have cut the link completely. In Europe, the United Kingdom and Sweden have prevented the infrastructure provider from providing all train services.

There are pros and cons to vertical separation. A decision whether or not to prevent the infrastructure provider from providing certain (or all) train services therefore depends on the answers to the following questions: *i)* What will be the effect on competition? *ii)* What will be the effect on the long-term utilisation of – and the provision of quality, reliability and enhanced capacity of – the infrastructure? *iii)* What will be the effect on production costs (through loss of economies of scope)? Vertical separation will be more beneficial if it results in a significant increase in competition. This depends in turn on the degree of competition that is likely to emerge in train services and the ability of the regulator to prevent anti-competitive behaviour by the incumbents. In the freight sector, entrants have tended to remain small. Incumbent freight operators have retained a significant market share, even with

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Box 5.1. **Vertical integration** *(cont.)*

a high degree of vertical separation. For example, Germany, which is said to have one of the most open rail markets in Europe, has 120 railway companies offering freight transport services, but in 2003 the market share of new entrants was only 6.8%. This small market share may also be the result of underestimating the importance of non-discriminatory access to rolling stock as well as essential facilities like stations and terminals, service and maintenance facilities, marshalling yards, etc. Finally, vertical separation will be more attractive if increases in costs due to the loss of economies of scope remain moderate. Econometric studies have estimated those economies to be significant. Studies of US railroads have suggested that production costs could be as much as 20-40% higher as a result of total vertical separation.

1. In Germany the Bundeskartellamt found that an early version of the track access charging system used by Deutsche Bahn, which included volume discounts, favoured its own passenger subsidiary (DB Regio) over rivals. There were also complaints relating to access to the so-called "last mile" (loading, unloading and shunting facilities). In Switzerland an entrant, Lokoop, complained to the Swiss Competition Authority about SBB's failure to provide access to certain lines or access to shunting in SBB's stations.
2. Mexico observes that "It is difficult for [access] problems to be resolved through resolutions and sanctions by the Federal Competition Commission… It is not enough to require concessionaires to provide compulsory access; it is essential to strengthen the regulator so that it can intervene effectively when needed and have sufficient powers to define clear market rules."

Source: OECD, *Journal of Competition Law and Policy*, Vol. 8, No. 2, Paris.

Table 5.1. **Results from the concession programme**

	Oeste	Centro-Leste	Sudeste	Tereza Cristina	Sul	Nordeste	Paulista
Auction date	05-03-96	14-06-96	20-09-96	22-11-96	13-12-96	18-07-97	10-11-09
Transfer date	01-07-96	01-09-96	01-12-96	01-02-97	01-03-97	01-01-98	01-01-09
Number of bidders	2	1	1	2	4	4	2
Private operator	FNV	FCA	MRS	FTC	FSA	CFN	FBN
Main shareholders	Noel Group	min. Tacumã, Railtex, Ralph Partners, Judori and CSN	CSN, MBR, Usiminas	Banco Interfinance, Gemon G Eng Mont, Sta. Lucia	Ralph Partners, Judori	CSN, ABS, Taquari, CVRD	CVRD, PREVI, FUNCEF
Minimum bid (BRL million)	60.2	316.9	888.9	16.6	158	11.5	233.4
Actual bid (BRL million)	62.4	316.9	888.9	18.5	216.6	15.7	245
Premium (%)	3.5	0	0	11.3	37.1	37.9	4.9
To government	3	15.8	44.4	0.83	7.9	0.5	11.6

Source: Estache, Goldstein and Pittman, 2001.

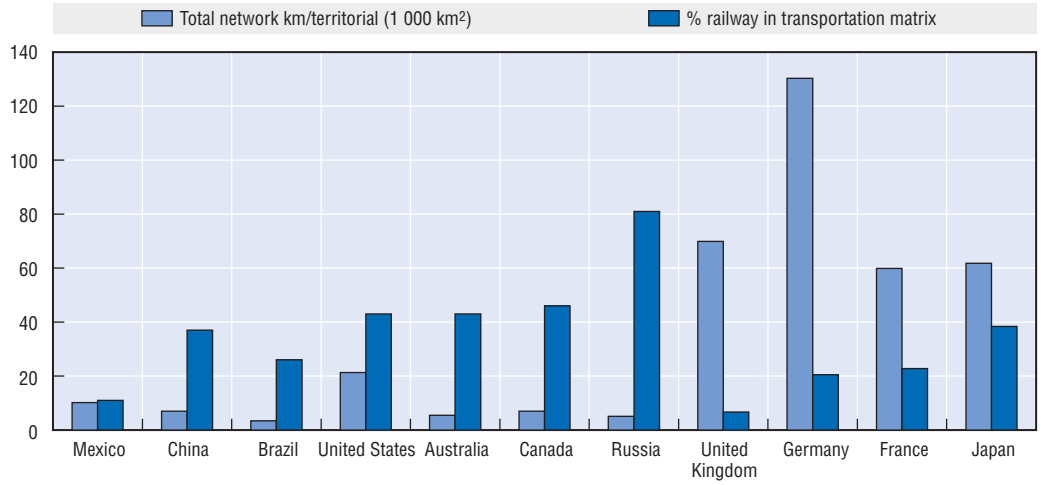
Performance of the sector

Modal competition

The participation of railways in the transportation matrix is lower in Brazil than in a number of OECD countries, including Canada, the United States, Australia and Japan, or in two major non-OECD countries, Russia and China. However, the density of the network is also very low compared with most other countries.

This is confirmed by Figure 5.3, which compares only countries of a continental dimension, and also by further results from a report by CEL/COPPEAD (see Bibliography). Brazil's transportation matrix is more similar to relatively smaller European countries, such as Denmark, Belgium, France, Germany and Hungary. This reflects the priority given to highways and the lack of investment in railways over the period 1955 to 1975. The low

Figure 5.2. **Participation of railways in the transportation matrix and total network**

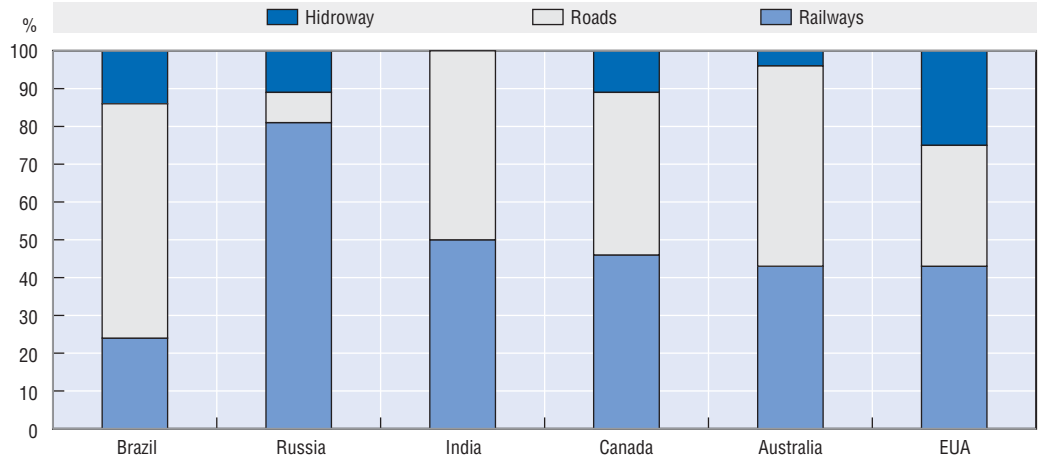


Note: Data are for 2005 and 2006.

Source: Lang, 2007.

cost of road freight transportation, which is also associated with the low quality of transport on roads, is another factor preventing a rebalancing of the matrix. The national plan for logistics aims to address the issue of the imbalance of the transport matrix.

Figure 5.3. **Modal distribution of freight transport across major countries**



Note: Data are for 2004.

Source: XXXV Seminário de Fusão, Refino e Solidificação dos Metais e V Seminario de Fundição.

For agricultural products characterised by high volume and low aggregate value, and whose production centres are far from the ports, the railways should be preferable to roads. Logistic cost is an important factor for the competitiveness of the Brazilian products. However, in 1999, 81% of the agricultural crop was transported over roads (GEIPOT, 2001), and more recent data indicate that this share is still 60% (COPPEAD, 2002). According to ANTF, the participation of railways in the transport matrix was 19% in 1999 and 24% in 2003 – and there is a demand for more, as 78% of the freight transport on railways are of exports

(ANTF, 2003), and estimates suggest that the demand for Brazilian agricultural products will grow further.

The disequilibrium of the share of each mode leads to a high logistical cost. According to a study by the World Bank, this cost represents 20% of Brazilian GDP, higher than in countries such as Mexico (18%), Canada (12%), and the United States (10.5%).[8]

Multimodal transport

Besides the lack of balance within the transportation matrix, there are other problems of access to ports and railways terminals, which prevent smooth implementation of multimodal transport. The issue is exacerbated by the fragmented nature of the regulatory oversight, as two agencies are involved: ANTT for land transport and ANTAQ for ports. Regulatory instruments do exist. The law regulating multimodal freight transport is Law 9 611/1998. Decree 1 563/1995 establishes the terms ruling multimodal freight transport between Brazil, Argentina, Paraguay and Uruguay. ANTT Resolution 94/2004 establishes the bureaucratic procedures to become a Multimodal Transport Operator (OMT).

Nevertheless, access to ports and railway terminals remains an issue. According to a survey conducted by CEL/COPPEAD, access is more difficult than in the United States, whatever the criteria. An efficient transport system would require connected roads, railways and waterways, through efficient terminal transfers that are not costly. Fragmented administrative procedures are hindering such an integrated approach to multimodal transport.

Activity

Rail transport activity is focused on a reduced number of products. Seven of the 11 concessionaires were monofunctional in 2004, which is to say they had over 50% of their railway service production dedicated to two predominant products. Soy seeds and grain are two of the five main products. This production is seasonal, which may lead to an uneven pattern of use of the network.

The activity for railroad freight transport has significantly increased between 2001 and 2005 – by over 37%, up to 222 billion tons/km in 2005 against 162 billion in 2001, with the annual increase over 8.1%. Privatisation has brought in major improvements to the activity. However, this performance also reflects the increase in Brazilian exports, as most of the goods transported are raw material: iron ore, coke and mineral coal represented 71.4% of the goods transported in 2004, and soy 7%. The main factors affecting the use of rail were the relative costs, reliability of deadlines for delivery and the existence of "Take or – Pay" contracts,[9] according to a survey by the National Committee of Transport (CNT).

From an international perspective, Brazil had the third-largest activity of a sample of OECD countries, behind the United States and Canada but above all the other countries, including a set of large European countries. Brazil also had the steadiest increase over the 2001-05 period, with the average annual increase 8.2% above Australia, 5.6% another producer of raw materials, and above Germany which had the fastest increase in Europe. During the same period, the activity only increased by 1.7% a year in the United States, and decreased by 5.8% a year in France and by 2.3% a year in Italy.

The volume of containers transported by rail, although still much lower than the volume that goes through the ports, has more than doubled from 2001 to 2005 (Hijar and Alexim, 2006). A survey carried out by COPPEAD in 2005 shows that most of the 26 main

Table 5.2. **Activity in rail freight transport, in million tons/km**

	2001	2002	2003	2004	2005	*Average annual increase*
Australia	136 910	150 460	161 110	165 590	170 200	5.6
Brazil	162 000	170 000	183 000	206 000	222 000	8.2
Canada	274 434	282 074	289 928	298 000	306 000	2.8
France	50 344	49 977	46 758	45 035	39 659	–5.8
Germany	76 165	76 283	79 841	86 409	95 421	5.8
Great Britain	19 400	18 700		21 000	22 100	3.3
Italy	24 352	23 060	22 457	23 271	22 199	–2.3
Spain	12 322	12 247	12 411	12 018	11 641	–1.4
United States	2 334 980	2 344 032	2 341 159	2 459 266		1.7

Source: ECMT, supplemented by Brazilian national data.

railway terminals are located in the south and South East of the country. The survey suggests that the main problems of road access to the railway terminals are the pavement conditions and signalling on the roads leading to these terminals. The managers of the terminals identify the lack of investment from the government as the central problem. The national plan for logistics (PNLT) has identified as a main issue the lack of logistical integration centres that would be connected to the overall economic and transportation network of the country.

Besides an increase in volume transported, other key indicators have also improved, such as the variety of services offered and the level of investment. The turnover of concessionaires has more than trebled over the period 1997-2005, with most of the increase in the past four years (CEL, COPPEAD). The number of fatalities and rate of accidents have decreased. However, the average distance covered by the trains and their speed have not improved significantly (Vencovsky, 2006). Moreover, the average productivity of each wagon measured in tons/km/year decreased in the early period of privatisation, from 1997 to 2004, as a result of an increase in rolling stock that was not accompanied by an expansion of the network. The number of locomotives increased from 1 365 in 1997 to 2 541 in 2004. This may also reflect a level of saturation in certain parts of the network, linked to the very high productivity of the railway system overall. Track quality is not the only factor explaining the difficulty of increasing speed: The tracks and railway are still suffering problems related to conflicts with illegal urban occupation.

The railway sector is mainly controlled by large national companies. A few are both controlling and using the tracks. CSN and CVRD are the main companies: Together, they use 53% of the network, produce 85% of the total traffic, and are responsible for 68% of the total investment in the sector. Even if privatisation had a generally positive impact in the sector, the gross revenue per wagon remains at a third of the US level, as is the case for total investments. The average traffic density and wagon productivity is still less than half those in the Unite States, even if the activity per km of network is higher.

Private investments are efficient to foster the competitiveness of some markets, mainly private ones. They can handle the development of the infrastructure necessary to enhance the competitiveness of Brazilian products. However, they cannot take into account all the economic and social externalities of transport, so as to promote regional

integration and foster development of the country as a whole. That requires a long-term strategy, planning, and government involvement.

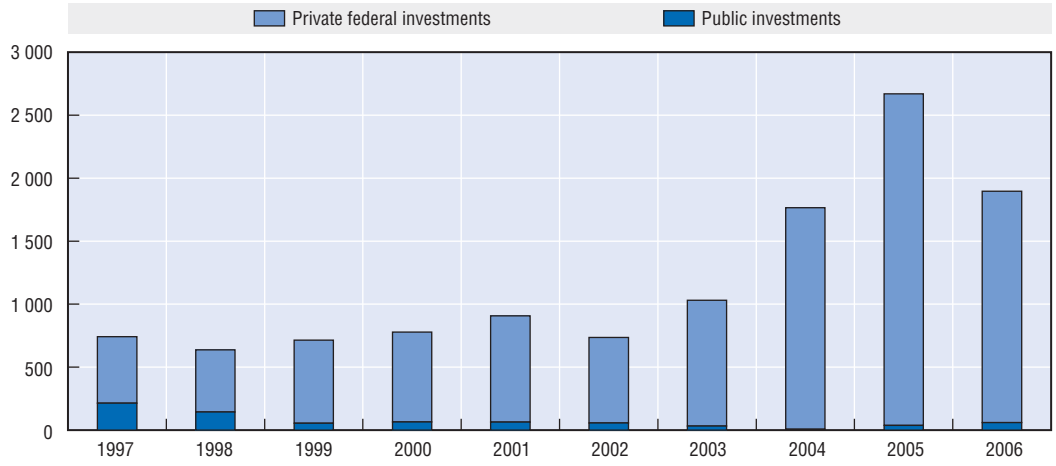
Railways also have an impact in terms of structuring local communities. These grew and consolidated around the tracks at the time of construction. Since then the communities have often invaded the area of the tracks, as a result of lack of urban planning. This reduces the speed of trains in some sections. According to the concessionaries, the State did not fulfil entirely its responsibility, stated in the concession contracts, for constructing the surroundings (railway belts) of the cities where the track area is being invaded.[10] The Brazilian Growth Acceleration Programme – PAC includes nine projects in this area. The points of crossing between railroads and highways are another critical issue, which results in constant traffic interruption. This would require a highly sophisticated signalling and security system. A national programme for railway safety in urban areas was launched in 2001 to address this issue, but it was modified and relabelled as an overall programme for rail safety (*Programa Nacional de Segurança Ferroviária em Áreas Urbanas* – PRONURB). The national association of freight users (ANUT, *Associação Nacional dos Usuários do Transporte de Carga*) points to this issue, as well as the problem of invasion of the track areas, as the main factor slowing down the trains.

The concessionaires associated with the National Freight transport association have indicated a need of BRL 4.5 billion for priority projects to address logistical bottlenecks. These projects would not only enhance productivity, but also have the potential for improving the quality of life of the surrounding communities.

Investment

Since privatisation, total investments in the rail sector have increased, and they are now almost entirely private.[11] Around 80% of the investments on railways were bound to transport for export purposes (ANTF, 2003). The efforts made by Federal and State governments to enhance the fluidity of soy seeds and derivative products also illustrate the focus on investment in the transport sector for exportation purposes, facilitating the global reach of producers of commodities against the objective of national integration (Castillo, 2004).

Figure 5.4. **Public and private investments**

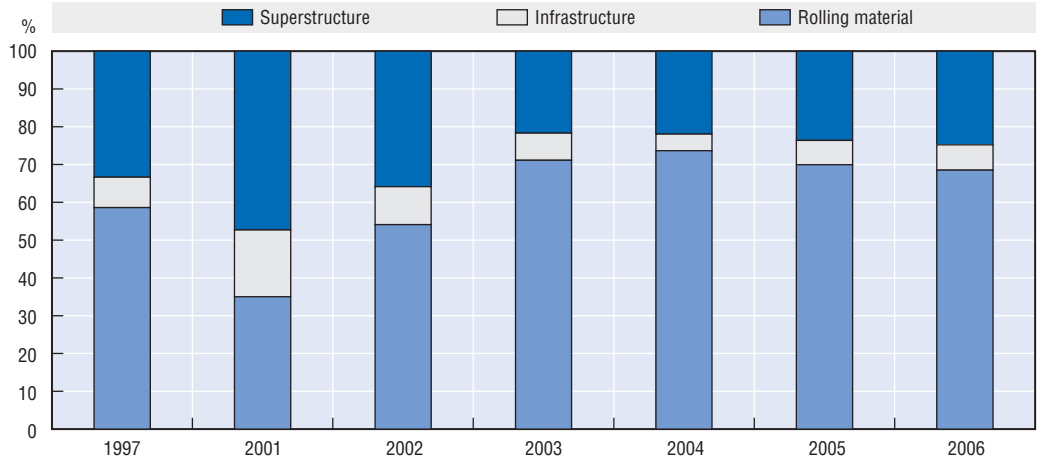


Source: CNT, (USD PPP, using FMI PPP index).

A linear model was applied to the debt payments of the concessionaires. This can restrict their ability to deliver higher investments in the beginning of the concession period, when revenues are smaller and the necessity for investment is high. The national association for rail transport, ANTF, has been trying to negotiate with the Federal Government a review in the lease contracts, in order to direct the payment of concessions to structural investments in the network.[12] COPPEAD (2002) points to this as one of the factors slowing down the sector's development. In addition, differences across states in the level of the ICMS – the tax on the movement of goods and service provision – result in inefficient logistics choices.

Privatisation improved the management of rail operations and increased investments in maintenance. Labour productivity significantly increased. This helped the existing networks to recover but did not result in network expansion.[13] The size of the network was 28 717 km in 1994[14] and 29 487 km in 2006 (of which 27 917 km is for freight transport).[15] The new investments were generally more focused on the rolling material, as illustrated in Figure 5.5.

Figure 5.5. **Structure of investment in Brazilian railways**



Note: Rolling material are all types of vehicles which can circulate over a track.
Source: ANTT, 2007.

The attractiveness of investment in the sector depends on a number of factors. One is the overall interest rate in the country, which is relatively high in Brazil even if it has tended to decrease recently. As a result, concessionaries have to generate high rates of returns: The operational margin of the four main concessionaires (ALL, FCA, MRS and Ferroban) is relatively high – the average margin was 31% in 2000 against 15% in the United States (CEL/COPPEAD). However, the return on equity was negative for all companies but one, which had a ROE of 5%. The average ROE in Brazil was –34%, while in United States it was 9% for the same year.

Roads

Roads represent a major economic sector, in terms of assets, employment, and turnover. The sector represents the largest assets in some developing and transition countries, with replacement costs of well over USD 500 billion (Heggie and Vickers, 1998).

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In many countries, both OECD and non-OECD, roads are for the most part publicly managed and financed. However, traffic congestion and lack of maintenance represent important challenges. The costs of poor road management and inadequate financing are borne primarily by the users. Rural areas are also highly dependent on roads, and agricultural output suffers when the roads become impracticable due to bad weather conditions. The deterioration of roads also involves an increase in costs, as each dollar deferred on road maintenance increases vehicle-operating costs (VOCs) by about USD 2 to USD 3 (Heggie and Vickers, 1998). As a result, in many countries some roads with special characteristics are privately managed and sometimes privately owned, often where specific investment is required and there is significant commercial potential.

Road transport is the main transport mode in most countries, both for passenger and freight. It has also been generally growing at a faster rate than other types of transport. The possibility and scope for intermodal competition with rail, air or inland water transport depend on the availability of alternatives, on the type of goods or passengers being carried, on the origin-destination combination, and on the importance of timeliness. Charges for the use of infrastructure also affect intermodal competition. They should ideally be neutral, not distorting intermodal competition. Each transport mode should pay for its full infrastructure and environmental costs.

The road transport industry consists of many smaller sectors with very different characteristics. The most important distinction is between the passenger and freight markets. In the passenger market, further important distinctions can be made between long-distance and local services, between regular and charter services, and between buses and taxis. In the freight market, distinctions can be made between truckload and less-than-truckload services and between "own account" and "for hire or reward" services.

This section addresses the areas mainly affected by the Brazilian regulatory framework. It will not develop a full analysis of all the factors affecting the efficiency of road transport, but focus on two major aspects:

- The involvement of private capital in road construction (infrastructure).
- The regulatory framework for long-distance passenger transport. This will mainly correspond to interstate transport in Brazil (service provision).

As a result, urban transport and taxis will not be considered and road freight (trucking) only briefly discussed. The emphasis is on infrastructure; long-distance passenger transport will be discussed later.

An international overview of the concession experience

Many countries have provisions for private road concessions (Annex 5.A1, Table 5.A1.2). This is the case in a number of European countries, including France where there has been a general concession law since 1955, but also Italy and Spain. Further studies show that toll roads are widespread in Europe for interurban travel, or for specific bridges or tunnels, in Austria, Denmark, Spain, France, Greece, Italy, Norway and Portugal (Bousquet and Fayard, 2001). Toll roads exist in many countries outside Europe, such as Australia, Chile, Argentina and Mexico. They are only found to a limited extent locally in the United States, where most of the network is publicly financed at the federal level. One example is the Orlando Orange County Express Way authority (Lawther, 2000). Fewer countries have specific regulatory authorities to oversee the road concessions. This is the case in Argentina, and also in Spain and Australia with local agencies. Supervision is

ensured directly at the state level in France, Chile and Mexico. Such an authority was proposed at one point in Italy in the 1990s but, given the fragmented nature of the sector and the limited privatisation, it was abandoned. A consulting advisory expert authority internal to the Ministry of Economy was created instead (NARS). NARS was charged with infrastructure, excluding ports. This authority was facing both the regulated companies and the sectoral ministries allied with the regulated companies.[16]

Italy, France and Spain are the three major countries in Europe with a tolled motorway. There are 8 000 kms of tolled roads in France, managed in the past through semi-public companies, which have been partly privatised; 4 400 kms in Italy; and 2 500 km in Spain. (See Annex 5.A1, Table 5.A1.3). The size of the existing tolled network in Brazil is 1 500 km at federal level, and 8 500 km at the state level; the network is therefore very significant at the international level, even if small compared with the size of the country. In the United Kingdom there are less than 600 kms of tolled roads, and less than 400 kms in the United States. The only countries with a significant tolled network in the sample outside Europe or the United States are Argentina and Chile: 9 400 kms and 2 300 kms, respectively. The duration of concessions is relatively long: generally 30 years, with a minimum of 20 years and a maximum of 75 or even 99 years. The duration of the concession in Brazil is within average range. Few countries as of yet are making use of shadow tolls, with public authorities reimbursing the providers directly according to traffic. This is only the case in the United Kingdom, as part of public private partnerships that involve a specific risk sharing scheme, which differs from a concession.

Toll roads provide a significant share of overall investment and funding for national road systems in Europe. In France, over the period 1973-95, the state budget contribution dropped from 56% to 22% while toll revenue increased from 32% to 57%. In Spain, the equivalent figure is 46% (Bousquet and Fayard, 2001). The total income for toll roads in Brazil is relatively significant, much above the level observed in Argentina, about a third or half of the levels in Italy or France, and comparable to that of Spain (See Annex 5.A1).

Toll charges represent about EUR 0.05-0.06 per km in France and Italy, and up to EUR 0.086 in Spain. Comparatively, toll charges are USD 0.01 to USD 0.015 in Argentina, USD 0.02 to USD 0.03 in Chile, and were equivalent to USD 0.04 in Brazil, in line with other Latin American countries, and also with the European experience, once adjusted for relative differences in income per capita. In the United States, tolls for the tolled sections, which are rare, were about USD 0.15 to USD 0.20. Generally, the toll charges are two to three times higher for heavy vehicles (Bousquet and Fayard, 2001).

However, introducing toll roads also involves a number of challenges, some of an economic and regulatory nature: How to define a long-term concession contract? How to share risk? How to make contracts attractive for private operators while protecting the interest of consumers? It is often the task of the supervisory authority to define an optimal set of parameters. There are, however, other political and economic challenges, revolving round social acceptance of the tolls (ECMT, 2002). Lack of acceptance may lead users either to choose alternative routes, or to generate political pressure to be exerted on the concession companies. As a result, in many countries the construction of a toll road is considered only where an alternative non-tolled route already exists. However, in Brazil, given the general shape of the network, users of a main "tolled" highway may find themselves captives of the toll. In Spain, rejection of the tolls led to a cut in tariffs of 30-40% (Izquerido Vassalado in ECMT, 2007) in 1997, to bring them closer to European

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levels. This was accompanied by compensating measures, such as possibilities of licences, new sections, a VAT tax cut, and state aid to the concession companies, as well as extension of the concessions to 75 years. This also shows that even when tariff revisions occur, they may be brought about through negotiation, facilitating social acceptance without undermining the economic balance of the concessions and increasing the regulatory risk.

Economic aspects of road freight

While long-distance passenger transport is regulated and will be discussed separately, this section provides a short overview of the international experience of road freight. In theory, trucking can sustain a high level of competition with few regulations (OECD, 2003), and most of the remaining controls are related to safety, cabotage or rights of foreign firms. A minority of countries have pricing or entry regulation guidelines, and public ownership (see Annex 5.A1, Table 5.A1.5). The sector was regulated as a device for protecting the rail industry. However, following the US experience as early as 1980, the United Kingdom, Australia and other countries have liberalised their markets, with significant economic benefits and a 15-25% drop in tariffs. Over the past ten years in Europe, during a period of liberalisation of road freight, this segment of the transport industry has increased its activity, while other modes of inland transport remained static at best (ECMT, 2002). In Mexico, deregulation led to an increase in the number of vehicles and a fall in prices. This reflected an increasing gap between small companies unable to modernise their fleet, and large companies able to take advantage of deregulation through a diversified set of services. However, within a deregulated environment, markets have tended to be increasingly concentrated for less than truckload and express services.

Brief history in Brazil

The early phase

Until the 1950s, all plans for transport emphasised that roads should not compete with rail, even though the rail system was known for being deficient. Roads were seen as necessary, but only as a complement to rail. A report by the National Department of Highways (DNER) released in 1946 criticised this view as having resulted in a rail monopoly in certain regions where parallel railways and roads were not allowed. A shift occurred in 1951, when the National Transport Plan specified that roads should have the lead. From then on, roads developed very rapidly in Brazil. In the 1970s road transport represented 73% of freight transport in the country[17].

Construction of roads was financed by public funds. The National Road Fund (FRN) was created in 1945, and initially included fuel and lubricant fees. Another tax was levied in the 1960s on passenger and freight transport, adding a fee for the ownership of a vehicle. These resources were collected by the Federal Government to support the National Road Fund and to provide financial support to the States as well. The resources of the FRN were progressively transferred to the National Development Fund (FND) after 1974. This connection to the road sector was completely lost in 1982. Finally, the 1988 Constitution forbade the specific allocation of resources from fuel fees.

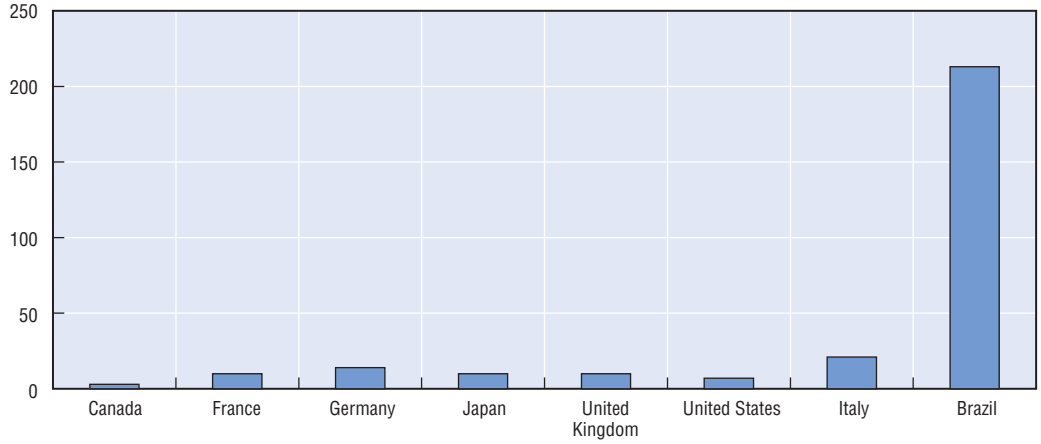
As a result, investment in roads became dependent upon the national budget from 1988 onwards. Investment in roads became more dependent on the Federal Budget. The tax on fuel and lubricant and the tax on transport services were transformed into the

tax on goods and services circulation (ICMS). The collection of this tax was left to States and Municipalities. The tax on vehicle property was transformed into the IPVA, with resources allocated to the States. These resources transferred to States and Municipalities were greater than the corresponding transfer of responsibility for intra-state and local roads to the local levels of government. The situation was exacerbated by the fiscal consolidation of the national budget. As a result, the quality of roads deteriorated from 1988 onwards, posing a number of economic and safety problems.

In 2001, a tax was created with the goal of financing transport infrastructure: The Contribution of Intervention in Economic Domain (CIDE), on the import and commercialisation of oil, natural gas, alcohol fuel, and related derivative products. However, most of the corresponding resources were retained for meeting fiscal targets relating to primary surplus. It is estimated that only 40.4% of the collection was used for investments in roads by the Federal Government over the period 2002-07.[18] As a result, public investment in the road network per km represented only 7% of the corresponding investment in the United States (CEL, COPPEAD). Since 2006, the use of CIDE contribution for transport has increased again.

This led to a significant deterioration of quality, which can be measured through a number of indexes. For example, 80.3% of the network analysed was said to be in a terrible or deficient state according to a research by the National Transport Confederation (CNT) in 2000. (Recent figures (CNT, 2007) show that some improvements have been made, since 26.1% were found to be in good condition while 40.8% were regular and 33.1% in poor condition.) The rate of accidents and the case fatality were very high, much higher than in all OECD countries.[19] More than 38 000 people die each year in Brazil from traffic accidents. The mortality rate is among the highest in the world and three to four times higher than in developed countries. The economic and social costs of traffic accidents exceed USD 3.3 billion per year (World Bank, 2007). Maintenance costs for trucks are 50% higher than normally estimated, according to a report by CEL/COPPEAD (BRL 0.23 to BRL 0.16) – a reflection of the poor quality of roads.

Figure 5.6. **Fatalities on roads per 1 000 kms**



Source: World Bank, 2007.

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The role of privatisation in the 1990s

Brazil privatised its transport sector – as did many other developing countries, and particularly in Latin America – through a concession programme involving different terms for each concession and the participation of all levels of government, Federal, State and Municipal. Besides raising funds, the main goal of privatisation in the sector was to attract additional private investments, and also to facilitate maintenance and safety through private management.

The choice was to transfer the high-traffic-density sections to the private sector, as these were the most likely to be economically viable. The DNER published edicts for the concession of five federal roads, which had been previously tolled in 1993. The Concession Law 8 987 in 1995 established rules for the relations between the licensing authority and the concessionaires of public services, which cleared the way for an effective transfer. Five sections of federal roads were offered to concession for 20 to 25 years between 1994 and 1997. The concessions were managed by the DNER. The winners of the biddings were selected on the basis of the lowest toll. The concessionaires had to present an investment plan. Another concession was offered by the Government of Rio Grande do Sul State in 1998, which was afterwards transferred to Federal Government responsibility. As a result, a total of 1 493.2 km of federal roads were transferred under the responsibility of the private sector.

DNER had initially defined two stages for the concessions and foreign participation was limited. The first stage resulted in five sections, with an investment of BRL 871 million [USD 1 228 million (PPP)], of which 41% was financed by the BNDES (Table 5.3). The concession model used for highways was based on franchise bidding. In the auctions organised for privatisation at the federal level, a minimum level of investment was set, and the concession was offered to the bidder with the lowest toll rate. These initial concessions were not subject to public criticism, as they were relatively new.

Table 5.3. **Overview of main road concessions**

	Size *(kms)*	Term *(years)*	Basic tariff *(USD PPP/km)*	Number of tollbooths	Internal rate of return %	Concession companies	Start
Rio – Juiz de Fora	179.7	25	0.076	3	16.5	Concer	Oct-95
Ponte Rio – Niterói	13.2	20	0.069	1	16.6	Ponte	Aug-96
Presidente Dutra	406.8	25	0.045	5	17.9	Nova Dutra	Aug-96
Rio – Teresópolis – Além Paraíba	144.4	25	0.059	5	23.3	CRT	Sep-96
Osório – Porto Alegre – Acesso Guaíba	112.3	20	0.038	3	24.0	Concepa	Oct-97

Source: Pires and Giambiagi, 2000.

In addition to the concessions, Law 9 277 from 1996 also authorised the Federal Government to delegate administration of federal roads to the States. Supervision of the delegation process was under DNER responsibility. The State Concession Programme led to the concession of 9 253 km to the state level.

A second stage of concessions, with 7 093.3 km, was planned to be proposed by the DNER to the private sector in 2000. However, this could not be implemented then due to the lack of a regulatory authority and uncertainty on how to define the rules over the tariffs and the bidding process. Although the first stage had been quite successful in terms of enhancing the quality of privately operated highways, public concerns remained concerning expansions of the network using this model. The possibility of extending the

concession model further to the rest of the network was also constrained in terms of the economic viability of the remaining sections of the network. The issue of regulatory risk had been faced in two road concession programmes (Paraná and Rio Grande do Sul). The high tolls necessary to construct costly new roads may reduce demand and increase political risk.

However, optimistic tariff forecasts, related investment obligations and generous contract renegotiation rules have led to negotiation of contract amendments, resulting in tariff increases for the users – who in a sense have borne part of the risks.

The second stage of concessions was launched again in 2004 by the Ministry of Transport. This programme foresaw the transfer of 2 600.88 km of publicly managed roads to the private sector. However, due to a number of delays, and questioning by auditing authorities, including the National Audit Office (*Tribunal de Contas da União* – TCU), bidding occurred only in October 2007. The new concessions were granted to the lowest proposed bid. They did not generate revenue for the government and incentives for expansion of the network were reduced, while the users will benefit more due to the lower tariffs. The outcome of this last concession is described in Tables 5.4.

Table 5.4. **Results of the October 2007 Concessions**

	Concession companies	Size *(Kms)*	Number of tollbooths	Toll (BRL)	Toll per Km (BRL)
BR-116 (Régis Bittencourt) São Paulo-Curitiba	OHL (Spain)	401.6	6	1.26	0.019
BR-381 (Fernão Dias) Belo-Horizonte – São Paulo	OHL (Spain)	562.1	8	0.99	0.013
BR116/PR, BR-376/PR, BR 101/SC Curitiba-Florianópolis	OHL (Spain)	382.3	5	1.02	0.020
BR-101 Rio de Janeiro	OHL (Spain)	320.1	5	2.25	0.024
BR-153 São Paulo	BRVias (Brazil)	321.6	4	2.45	0.024
BR-116 Curitiba until device SC-RS	OHL (Spain)	412.7	5	2.54	0.018
BR-393 Device MG-RJ until the crossing point with Dutra	Acciona (Spain)	200.4	3	2.94	0.038

Source: Brazilian Press, October 2007.

Different models of concessions have been adopted at the state level, such as awarding to the bidder offering the highest payment for the concession (Rio de Janeiro and São Paulo), or to the bidder offering to maintain the largest extension (Paraná and Rio Grande do Sul). BNDES was also involved in these concessions; it had contracted loans with 23 concessionaires by 2001, with a total value of BRL 1.8 billion. Some states also cross-subsidise toll roads, including Paraná and Rio Grande do Sul.

Performance of the sector

The network represents 1 610 038 km in total – with 72 800 km Federal, 225 323 km State and the rest Municipal. One hundred ninety six thousand, two hundred and forty four kilometres of the roads are paved (12%), mainly at the Federal level: 80% of the Federal roads and 51% of the State roads are paved. The share of the private sector overall is quite limited, as only 2.6% of the paved Federal roads, 7.2% of the State roads and 0.1% of the Municipal roads are under private concessions.

From an international perspective, Brazil has the second-largest road network of a sample of OECD countries, just behind the United States, and ahead of Canada and all European countries. In terms of raw activity, the index (billion tons/km) was also second across OECD countries, representing one-fourth that of the United States, but equivalent to the total of those for France and Germany in Europe (Table 5.5).

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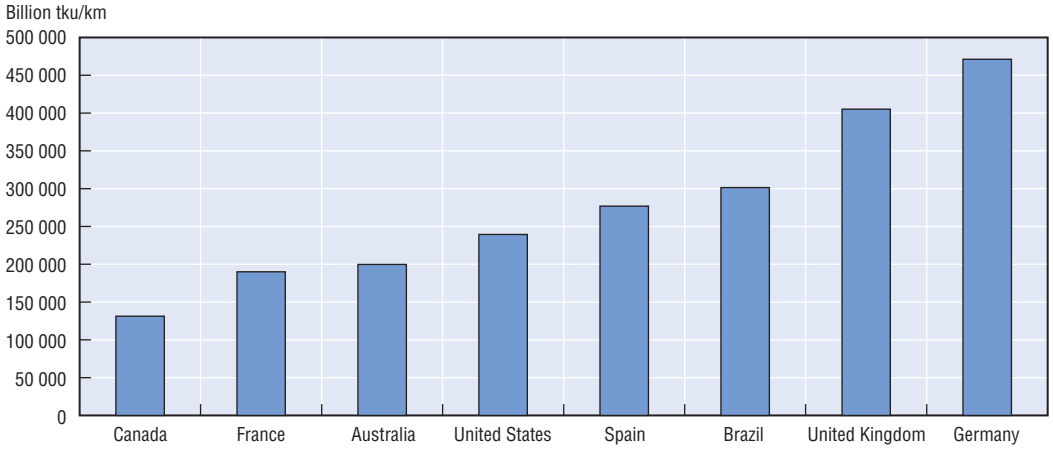
Table 5.5. **Data on activity and length of road networks**

	Billion *Tku*	Length (km)	Tku/length
Australia	168	810 624	207 247
Brazil	485	1 610 077	301 414
Canada	185	1 408 800	131 317
United States	1 919	6 407 622	299 487
France	193	998 001	193 539
Spain	227	666 204	341 308
United Kingdom	160	412 838	388 312
Germany	310	644 467	481 194

Note: Data are from 2005 for Australia, Brazil, Germany, France and the United Kingdom, and 2004 for the United States.
Source: UNECE Handbook, Trends in the Transport Sector, [ECMT and CNT/COPPEAD].

Freight transport on roads represents 58% of the total freight transported in Brazil. The intensity of use of the network for freight is also high, in terms of tons/km of network, as it is similar to the measure for the United States, another large country. It is higher than that for Australia and Canada but remains below the United Kingdom, Germany and Spain. However, the labour productivity of the sector still has scope for improvement, at 1.8 million TKUs by worker in 2004.[20]

Figure 5.7. **Intensity of use of the road network for freight purposes**



Note: Data are for 2005 for Brazil and Germany; 2004 for Canada, France and the United Kingdom; and 2003 for Spain and the United States.
Source: Handbook UNECE, Trends in the transport sector, ECMT and CNT, COPPEAD.

Road freight is only lightly regulated in Brazil. There are no specific quality requirements, such as the maximum time for renewing vehicles, security, or qualification of the workers. Eighty three per cent of the operators registered were autonomous shippers in 2006, representing 57% of the total fleet (CEL/COPPEAD). These are mainly small operators that have lower costs, and seemingly also a low level of maintenance – equal to 70% of the adequate level, according to a CNT report. As a result, road transport has taken a large share of the overall freight transport due to its low cost. This may be seen partly as a result of high use and high productivity, but it may also reflect lack of quality and maintenance.

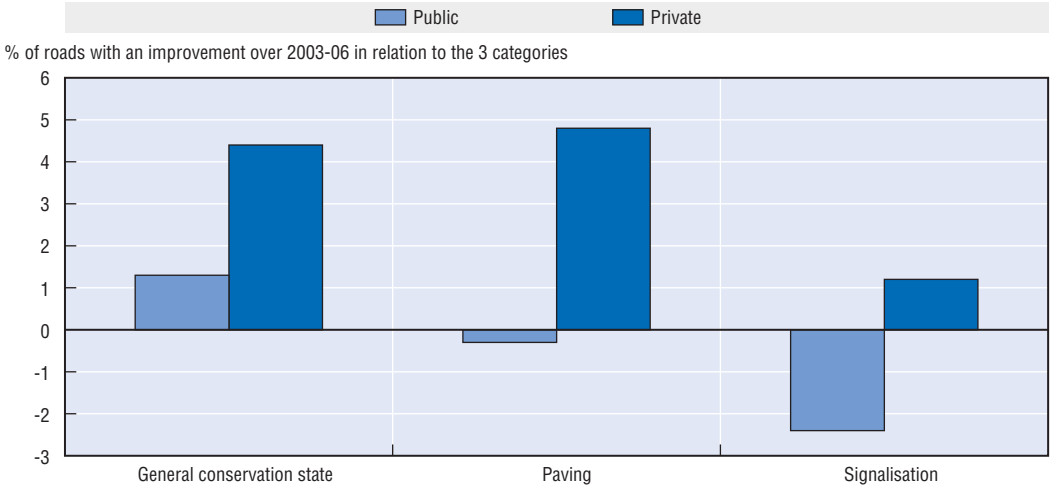
However, this intensity of use may also be linked to the high level of accidents, as well as other problems. For example, the bad condition of the roads also facilitates robbery, as the speed is very low, the lack of signalling may induce errors, and accidents in remote places also facilitate robbery. There were 10 650 cases of stolen freight reported in 2005 (CEL/COPPEAD), which is 53.4 occurrences for 1 000 km in the paved roads. This raises the need for the operators to increase security, with associated costs. Accidents also increase the probability of losing the transported goods.

Impact of the concessions

In this global context, the concessions have had a favourable impact, mitigating the effect of lack of investment in those sections that were under concession. For example, the concessionaires had invested BRL 1.1 billion by 1999 and also created 13 000 new working places.[21] Capacity and quality indices improved for those roads under concessions, which was monitored by the DNER and altered by the ANTT.

The conditions of highways were improved. The performance of the roads under concession improved more than that of the ones under public management according to the results of a survey conducted by CNT in 2003 and 2006 (CEL/COPPEAD; see Figure 5.8): 79.7% of the roads under concession in good or great condition, against only 16.9% for those publicly managed. Only 16.3% of the roads under concession are in regular condition and 3.9% in bad or terrible shape, against 41.7% and 41.4% of those publicly managed.

Figure 5.8. **Improvements on roads 2003-2006**



Source: COPPEAD, CEL.

Passenger transport

A large share of long-distance passenger transport is handled by buses, as rail is not very developed for long-distance transit.[22] Long-distance rail transport is in relative decline due to a number of factors. One is the development of small cities in Brazil, which means that more amenities are on offer during a journey than in the past and there is less need to travel to larger urban centres. Another is the increase in private car ownership due to raised living standards, which facilitates private journeys. This type of transport is also affected by the development of illegal transport, particularly the vans, which can offer a

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more customised service. Other factors hampering the activity include the condition of the road terminals, the difficulty in accessing them, and the lack of flexibility of the route in case of traffic jam. These result in relatively slow travel, decreasing the willingness to travel and moving part of the demand to illegal transport and private cars. Another factor is the increasing market share of the low-cost airlines, which shifts some of the demand away.

An international overview of the regulatory experience

In the bus industry, long-distance bus services are liberalised in some countries, where they have enjoyed economic success. (For an international overview of Road passenger transport regulations, see Annex 5.A1, Table 5.A1.6). Economies of scale and scope in network operation have a significant influence on the market (OECD, 2003). In certain countries, market opening has led to the emergence of single market operators. The United States the United Kingdom and Australia have only a single nationwide operator, even if competition remains on smaller networks and on certain routes. However, competition may also be ensured in OECD countries through intermodal channels, with air transport in the United States or Australia, and rail transport (together with passenger car) in European countries.

Meyer and Gomez-Ibañez (1993) provide a general overview and Banister and Berechman (1992) focus on Europe. The interurban services were generally less regulated than the urban services. The United Kingdom's experience has been the most closely studied. After deregulation was enacted in 1984, road service licensing was reduced to notification, the national bus company was broken into separate companies that were privatised, and subsidies were cut for urban travel. This industry was in relative decline before privatisation due to the joint rise in private car ownership, similar to the Brazilian case (Darbera, 2004). Following privatisation and deregulation, output increased and bus operating costs fell by 30%, compared to the previous publicly managed company. However, opinions differ. Glaister (1993) and Beesley (1997) are very positive, as productivity was increased and earnings reduced. Competition increased in a first phase, and safety was maintained as deregulation did not suppress the need for inspection and safety controls by the traffic commissioners in order to obtain the licence (White, 1985). For some time, deregulation was able to stop the relative decline of the industry, increase supply and stabilise total turnover. Other analysts were more reserved. An industry that was fragmented at the time of deregulation could be expected to lead to the emergence of regionally dominant operators (Nash, 1993; Mc Kenzie Nash, 1995). Market analysis shows that economic barriers to entry exist, but are not sufficient to prevent entry in many places. In a second phase, there was a process of re-oligopolisation (Langridge and Sealey, 2000). The industry reformed itself into larger groups: six in the mid-1990s, providing a variety of services, including express delivery. This confirms the existence of some economies of scale and scope, and the fact that the market is imperfectly contestable. Concerning the long-distance interurban passenger market, one company, National Express, was a dominant carrier, accounting for 95% of the total passenger revenue in the mid- to end-1990s. Some of these companies may also have the ownership or control of adjacent rail lines (White and Farrington, 1998).

In Europe, some countries had retained controls on entry and prices (Switzerland, Greece, Ireland and Italy (Bannister and Berechman, 1992). Some of these controls may be justified by the need to protect rail transport, a concern that may not exist in Brazil. In

Europe, bus services are seen as a complement, bringing the passengers to the nearest mainline station.

When countries maintain exclusive rights on certain routes, an alternative is to have calls for tender. As reviewed by Hensher and Wallis (2005), this is the case in a large number of countries, including Norway, Sweden, Finland, Denmark, the Netherlands, and some cities in Australia, New Zealand and Australia. The Scandinavian experience shows a clear alternative to full deregulation with calls for tender and bidding processes (Andersen, 1992). The tendering process might specify the frequency of service, or the quality of the bus, with a tender on the price of services. This competition "for the market" also has the potential to reduce rents offered to operators. Hensher and Wallis (2005) find a significant reduction of costs, from 15% to 40% across countries. However, bus operators are still limited in their ability to initiate new services, to withdraw from old services and to rationalise their networks at short notice in order to better serve demand. Brazil is very similar to this category of countries.

Besides Europe and other OECD countries, interurban buses were also deregulated in Chile starting in 1977/79 (Brown, 1993), after a system of concessions and maximum bus fares. The number of concessions increased, as well as the number of companies. After the 1982 financial crisis, the number of buses had to be cut. After an initial period of increase, fares dropped after the entry of new companies in the market and were, on the whole, stable. Large companies have tended to grow larger, with an increasing concentration of the market; the experience shows that maintaining a competitive market is a challenge, with operators having exclusive access to their own bus terminals.

Finally Chinese Taipei, where this mode of transport covers 60% of intercity passenger trips, also experienced deregulation of interurban passenger transit in 1995 (Chang and Yeh, 2005). The experience brought lower fares and more frequent services. However, econometric analysis shows evidence of a safety decrease, as deregulation was not accompanied by strict safety regulation, as was the case in the United Kingdom. Despite newer buses, which improved safety, other characteristics of the bus companies led to some deterioration.

Overall, market analysis shows that competition and efficiency may require a combination of liberalisation associated with re-regulation to ensure that competition works. That might entail pro-competitive measures such as ensuring non-discriminatory access to bus terminals and other essential facilities, but also aspects such as loyalty schemes or travel agent incentive schemes of incumbent operators (OECD, 2003).

Performance of the sector

Multimodal aspects

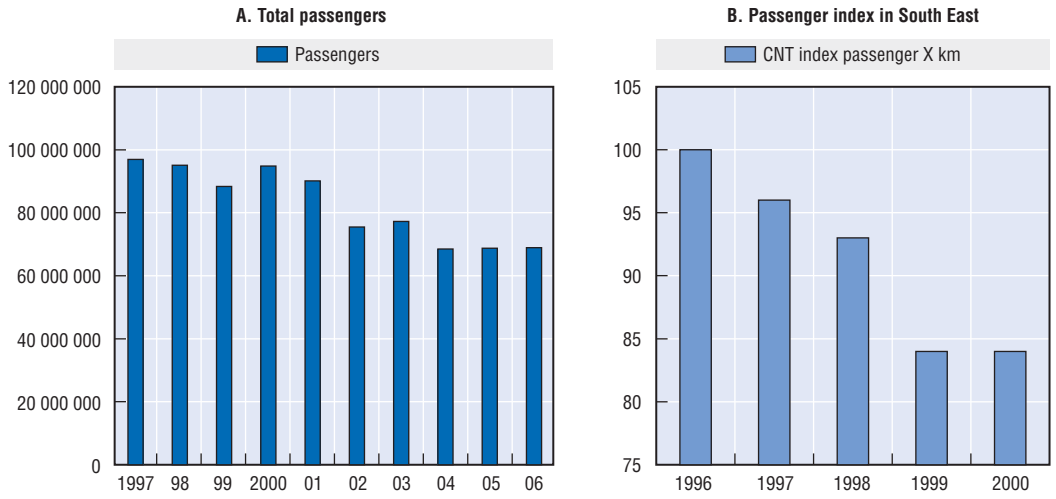
This sector is in competition with air transport and private passenger cars, apart from informal transport. Air transport was deregulated in the early 1990s: Liberalisation effectively started in 1992, although some areas had been deregulated since 1989 (fare bounds, for example). As a result, traffic more than doubled in ten years, to 26.7 billion passenger-kms in 2002 against 11.8 billion in 1992, with a yearly growth rate of around 7%. An estimate of passenger transit between the large city markets shows that air transport grew by 87% between 1998 and 2004, while interstate road passenger transport decreased by 2% over the same period.[23] Demand studies on passenger road transport should take into account the evolution of the air industry, as substitution does occur.

Another factor is the development of informal transport, and the taxation and regulatory framework. Informal transport is not subject to taxes, while interstate operators are facing a tax rate of around 40% of their total revenues (COPPEAD, 2002) and they also have to enforce labour regulations. The poor conditions of roads facilitate assaults, which are frequent on some sections of the roads.[24] Between 2000 and April 2007 the State of Bahia had 130 assaults to passenger buses reported.[25]

Recent activity trends

This resulted in a decline in passenger demand for interstate collective transport. The total traffic has declined by around 30% since 1997, and is now around 65 million passengers.[26]

Figure 5.9. **Passenger transport**



Source: COPPEAD, 2002 and Fundação Instituto de Pesquisas Econômicas (FIPE).

The network also allowed the transportation of 30 244 960 000 passenger-km through collective services in 2006.[27] In terms of overall activity, the bus and coach network provided a service of around 30.3 billion passengers-km in 2006, only counting passengers for interstate and international travel.[28] The sector had about 600 000 employees in 2006, with a productivity of 49 600 passenger-kms per worker.

The regulatory framework after 2001

The general regulatory oversight for the sector was remodelled in 2001, only after the privatisation and deregulation that had taken place earlier. The Ministry of Transport was restructured by Law 10 233/2001: The DNER disappeared, and three bodies were created for the administration of transport: The National Department of Transport Infrastructure (DNIT) as part of the Ministry, and two regulatory agencies: The National Waterway Transportation Agency (ANTAQ) and the National Surface Transports Agency (ANTT). Before this restructuring, the bodies playing this role were the Land Transport Secretary (STT) and the Federal Commission of Railways Transportation (COFER). The original project for regulatory oversight, which was conceived by the government and sent to Congress, involved only one regulatory agency instead of two. The project was modified afterwards;

the argument for splitting into two agencies was that this would allow appropriate attention to be paid to port regulation.[29] However, the initiative was criticised at that time, due to lack of intermodal integration and the fragmentation of the regulatory oversight. DNIT is in charge of executing the transport policy defined by the Federal Government, and of performing construction tasks related to the maintenance and operation of infrastructure in the segments of the SFV under direct Federal administration in the roadway, railway and waterway modes. All these agencies were first staffed by the employees from the former organs. A process of admitting new public employees started in 2006.

In this context, ANTT is a regulatory agency charged with enforcement and responsible for implementing policy. In theory, guidance on the policy framework should be provided by CONIT (the National Committee on Transport Infrastructure, which has not yet been implemented). ANTT is in charge of regulating the rails and roads conceded to the private market, freight transport, multimodal transport and interstate and international passenger road transport. ANTT oversees the exploitation of the railway infrastructure and

Box 5.2. **The issue of analytical capacity for transport planning**

Transport systems require strategic long-term planning, as transport is a service that structures all the other economic activities and that also needs to take into account a large set of constraints and needs. Most OECD countries have specific analytical centres, either in or outside their ministries, to help with transport planning. Brazil had established such a unit, called GEIPOT, with the support of the World Bank in the 1960s, which was located within the Ministry of Transport. Its role related to the planning, formulating and assessment of transport policy.

In the move to create the regulatory agency, and in the aftermath of the privatisation process, this unit was dismantled. Various bodies, including the Ministry's autarchy DNIT and the agencies ANTAQ and ANTT, took responsibility for some of its tasks. After the extinction of GEIPOT, ANTT assumed the duty of promoting research and studies on traffic and demand of transport services, and on tariffs, prices, costs, investments and freights. Article 9 of Resolution 1/2002 establishes that ANTT has to elaborate an annual report of its activities.

This led to the unhealthy situation of the Ministry being deprived of most of its strategic planning capacity while the regulatory agency, despite its limited resources, was called upon to conduct research and assessment on the transport sector. However, ANTT is an agency primarily charged with enforcement and regulatory oversight; as a regulator, it is not normally charged with policy development. Partial solutions are also being found, for example with the Transport Ministry relying on the Ministry of Defence for planning capacities and on some independent academic centres to develop strategic planning.

This situation bears some resemblance to that in the electricity sector. In the latter however, crises and the power shortages led to a restructuring of the planning and analytical capacity of the sector through the creation of the EPE. No similar move has yet been made in the transport sector, even if there are encouraging signs. In 2006-07 the Ministry developed a new National Plan for Logistic and Transport – PNLT, as part of a process of rethinking long-term planning and policy making – one of its main responsibilities. This is also leading to a discussion about the creation of a specific transport planning body.

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the leasing of the corresponding assets. ANTT is also in charge of registration and authorisation for enterprises providing charter services. The launch of the agency operations was delayed, as it only functioned effectively in 2002. As a result, the sector was left without regulatory oversight for a time.

Regulatory framework for railroads

The regulatory framework for rail regulation includes, in addition to the general ANTT Law mentioned above, Decree 1 832; Decree 98 973 and Resolution 420, which regulate the transportation of dangerous goods; Concession Law 8 987; and Law 9 074/1995, which establishes norms for grants and prorogation of concessions and permissions. These decrees are rather general in nature and were established before the creation of the ANTT. Many other aspects have to be determined later and framed by ANTT through a number of resolutions.

ANTT has to share oversight of the transport of dangerous products with the Environmental Protection Agency, IBAMA, according to Decree 78/91, and Law 7 735/89 related to the IBAMA that must be licensed by this authority, according to Article 4 of Resolution 237/97. The prices are regulated through a system of price caps, reviewed every year and adjusted for inflation with the IGP-DI (Resolution 1 212/ANTT), after consulting with the Ministry of Finance, SEAE.

ANTT has also a clear responsibility for ensuring third party access and mutual traffic, which is important in the case of the fragmented Brazilian network[30] (Resolutions 433/2004 and 895/2005). The concessionaires are in charge of negotiating the Specific Operational Contract, which must be sent to ANTT no later than 30 days after its conclusion. ANTT is in charge of solving the issue if the parties cannot reach an agreement. The Law does not establish any specific terms for the contracts, such as maximum tariffs and minimum level of service. Current rules for third party access and mutual traffic could still be improved to facilitate efficient use of the rail network (CNT, 2003, 2006). ANTT had to intervene in 2006, setting the conditions and tariffs for access of EFC from CVRD (through Resolution 1733/2006).

This system still leaves the transport users dependent on the network owners, as often substitute solutions do not exist. That gives significant market power to the owner of the tracks, which needs to be managed by ANTT according to Law 10 233; potential abuse is to be referred to the competition authorities when detected. Other countries are also wrestling the issue of ensuring third party access. Brazil at least has an explicit independent regulator in charge of facilitating access, which for example does not exist in Mexico or in some European countries. Access to third parties is relatively recent as it was established in the 1990s for many OECD countries (excepting Canada and Australia, where it occurred earlier).

Management of the rail and road concessions

An important responsibility of the agency is to award and design infrastructure concessions, including both the rail and road aspects. This refers to a sensitive aspect of the regulatory framework in Brazil: The notion of "*Poder de Outorga*" which, according to the Constitution, is in essence a prerogative of the Executive. The current Law Bills on Agencies (Box 6.2) would transfer this power back to the Ministry, while the implementation could be delegated to the agency. However, the current lack of capacities of the Ministries (Box 5.2) has often meant that regulators were charged with most of the related aspects.

In transport, the current concessions include the first wave of road concessions as well as existing rail concessions. In Brazil, the rate of contract renegotiation is relatively high compared to other Latin America countries, 57% in the transport sector. In addition, the first renegotiation occurs relatively earlier: one year after the signature of the first contract, against three years in Latin America and the Caribbean Region; the share of renegotiations initiated by the government is also higher, 73% against 26% for the infrastructure sector.[31] This rate of renegotiation initiated by the government has the potential to increase uncertainty and regulatory risks, translating into higher long-term interest rates. There are also strategic implications for future contracts, as investors may factor this into the negotiation process. However, after the creation of the agency, the renegotiation level decreased considerably, even if investment programmes for the concessionaires are revised annually. As a result, the establishment of the agency has contributed to clarifying the regulatory framework and to reducing the level of regulatory risk.

In the rail sector, the issue is more for the existing concessionaires to maintain their infrastructure. The association of the concessionaires outlined that the conditions to obtain loans with the BNDES are not sufficiently attractive, hindering the development of the rail industry (ANTF, 2003). In situations where rolling stock and locomotives are imported, market players are calling for relaxing the possibilities of importing used locomotives, as well as for reducing import taxes on the components that have to be imported.

Penalties can be applied by the ANTT to the rail concessionaires that do not comply with the production and accident targets specified in the contracts (Resolution 288/2003). However, the results of the supervision are not publicly released by ANTT. In 2006, Terms of Conduct Adjustment (TAC) were signed between the agency and the concessionaires that had not reached their target.

At a general level, ANTT had established partnerships with other institutions to contribute to the supervision and oversight the Federal Road Police (DPRF), as well as state ministries and agencies: The Regulatory Agency of Goiana (AGR), the Secretary of Infrastructure of Piauí (SEINFRA/PI) and of Tocantins (SEINF-TO), the Regulatory Agency of Mato Grosso (AGER/MT), the Regulatory Agency of Mato Grosso do Sul (AGEPAN), and the Regulatory Agency of Transport Services of São Paulo (ARTESP), the Department of Transport and Terminals of Santa Catarina (DETER/SC), the Regulatory Agency in Bahia (AGEBRA), and the Secretary of Transport of the Federal District (SETRAN/DF). Other partnerships with academic entities have also been established for analytical purposes.

Regulatory framework for road transportation

ANTT has the following responsibilities for road transportation:

- To regulate and supervise current concessions.
- To elaborate and suggest new concessions and realise the bidding of federal roads.
- To promote studies and surveys related to truck fleets, enterprises and autonomous operators.
- To keep a national registration of road freight transport.

Supervision of road freight

There is little regulation on road freight transport. In Brazil, domestic operators need only to register in ANTT. For international freight transport an authorisation from ANTT is

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needed, and there are restrictions for foreign operators to provide cabotage transport. Brazil is not that unlike a number of other countries, including the United States. The main difference is that safety regulations are more strongly enforced in other countries, and their overall network is better maintained than the Brazilian one. The issue is more to bring the level of safety oversight in Brazil in line with that of other countries than to discuss the possible extent of economic regulation.

This light regulatory framework has facilitated price competition and increase in traffic, albeit with implications for quality and safety. A first step towards consolidating regulatory oversight has been to establish a National Register for Freight Road Carriers (RNTRC). This will imply mandatory registration for operators.

The issue of the new concessions

Although ANTT elaborates the terms of the concession contracts in view of its technical expertise, these terms are subject to approval by the National Audit Office (TCU). Highway concessions are a sensitive political issue, given the impact of tolls on consumers' budgets. The temptation is great for the government to change the terms of the concessions, as happened in Paraná: 50 days after the beginning of a tollbooth operation, the government reduced the tariffs by 50%, unilaterally. This caused disequilibrium in the contract, with a need for subsequent readjustments.

These concessions are subject to intense scrutiny *ex ante*. The Audit Courts can require a copy of the bidding act, and have the power to suspend the bidding, to give recommendations and to require more information.[32] This power has already been exercised, when TCU requested changes in the foreseen toll tariffs in the acts for the second stage of concessions. In July 2006 the TCU suspended the bidding, requesting more information concerning the tariffs. The government and the regulatory agency make the point that tariffs have to be attractive for the private sector to buy in, otherwise there is a need for subsequent readjustment. However, the TCU claims that it is not interfering with the contracts, simply requesting technical information about the terms.[33]

Another issue is the type of institutional framework for delegating the supply to the private sector. Until now, Brazil has focused on traditional-style concessions. However, the government stated in 2006 that it intended to use Public Private Partnerships (PPPs) for investment in the road sector (BR-116 and BR-324). After one year, public authorities modified their view, considering that a balance could be obtained under a traditional concession model, and they turned back to this model.[34] That hesitation reflects the difficulties in implementing a PPP approach. PPPs (or sponsored concessions according to Law 11 079/2004) would be interesting since they open the possibility of the direct remuneration of the private party, through a form of shadow toll, for the traffic on the road (although the shadow toll was not considered in the BR-324/116 case). They would offer the possibility to extend the delegation to the private sector further in some sections, where traffic and direct financing by users may not be enough to cover all the investment required during the concession period.

A new impetus for the second stage of road concessions was given by the Growth Acceleration Programme (PAC), launched by the government in early 2007. In the transport sector, its strategy is consistent with the Transport National Logistic Plan (PNLT).[35] The programme defines directions for the next 15 years, and among its goals it aims at transferring part of the freight transport from roads to railways and waterways. It indicates

that from 2015 to 2023 the financial resources will be more focused on railways than on roads. The plan foresees BRL 503.9 billion of infrastructure investments over the 2007-10 period. This should include the construction and improvement of 45 000 km of roads, together with a consolidation of the regulatory framework, a reduction of the loan rates, and improved co-ordination across levels of government.

The first analysis of the PAC, performed in May 2007, showed that the TCU had approved the viability studies of concessions. However, there was a lack of agreement on the internal rate of return, and on the determination of the price caps for tariffs.

Much of the dispute concerns the internal rate of return, given the constraint of the country's relatively high long-term interest rates. The concessions are constrained by the interest rates offered by the BNDES. However, Brazil is currently experiencing an improvement in its regulatory framework and a reduction in its long-term interest rates, due to fiscal stabilisation but also to improvements within the regulatory framework. Some disagreement exists at the domestic level between various institutions, regarding the rate at which this is occurring. The TCU, which sees itself as protecting the national interest, is exerting pressure in order to reduce the implicit rents that will have to be given to the concessionaires. While this certainly will help the welfare of the consumers in the long run, it also has created some additional uncertainty and delays, which may result in an opportunity cost. In addition, it may also be equally important to reduce the scope for renegotiation *ex post*, as these may also have costly implications.

As a result, ANTT had to resend to TCU the revised rules of the concession contracts. In order to accelerate the bidding, it was decided that the new concession contracts would not again be subject to a public hearing.[36] The TCU approved the edict of the bidding for seven sections of federal roads in July 2007 – recommending, however, that the ROI should be reduced to 8.95% (instead of 18% as initially specified) in order to reduce the cost of the tolls, and to improve the political acceptance of such concessions.

Finally, the date for the auction was set to be in October 2007, after a period of 9 years of hesitation and various dealings between ANTT, the TCU and the Ministry. Private parties interested in the bidding process have to submit feasibility studies according to the terms of reference set by ANTT for the auction. As a result, private sector parties requested a delay in submitting a bid, due to the need for careful *ex ante* assessment; this was not accepted. However, such careful assessment reflects the importance of the corresponding investment, and may also translate into a smoother process in the long term.

Interstate and international passenger transport

The oversight of interstate and international passenger collective transport services was under DNER's responsibility until 1990, when Law 8 028 and Decree 99 244 transferred these tasks to the Infrastructure Ministry. In 1992, the Ministry of Transport and Communication was transformed into the Ministry of Transport, which was charged with the regulation of this sub-sector until 2001, when it was transferred to the newly established ANTT.

Regulation of the sub-sector began in the early 1970s, with Decree 6 8961/1971, which defined the services and rules for establishing new connections. These rules were modified in 1985 by Decrees 90 958 and 92 353/1986, Decree 952/1993 and 99 072/1998. This last decree is still part of the current regulatory framework, with Law 10 233/2001, Law 8 987/1995, Law 8 666/1993 and the agency-specific resolutions and decrees. A specific department of

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ANTT is in charge of regulating the supply of interstate and international passenger transport; its responsibilities also include application of penalties, proposal of new granting of licences, and analysis for tariff revisions.

The agency is responsible for supervising the interstate and international collective transport, and for avoiding non-authorised passenger transport. The right to operate a line is earned through a bidding process, managed by the agency. Economic *ex ante* assessment of the viability of the line may be performed by ANTT for approval, or the interested party may themselves have to present such a feasibility study.[37]

The terms of the bid include a minimum frequency, timing, tariffs and methodology for tariff revisions. Promotional differential tariffs can be set freely only since the 28 March 2007 (ANTT Resolution 1 928). ANTT can still veto the promotion if it finds evidence of predatory pricing, or any element reflecting an infringement of the economic order (involving consultation with the SDBC in the case of market concentration process). The current rules for requiring a reduction of the minimum frequency are established in Resolution 2275/2007. However, even if a reduction in frequency is accepted at one stage, this can be subsequently reversed.[38] ANTT also publishes an index of service regulation for each provider, an index of efficiency, and an index assessing the quality of service.

Overall, while freight transport is only lightly regulated in Brazil, passenger transport is more heavily regulated – even if the mode of competitive bids for tender mirrors the experience of some Nordic countries.

Notes

1. Da Mata *et al*. (2005).
2. OECD-ECMT (2007a), "Transport Infrastructure Investment and Productivity", Roundtable No. 132. See contribution by Pr. Hulten, Pr. Bennathan and Pr. Kopp.
3. World Bank Report No. 36 624, 2007.
4. World Bank Report No. 36 624-BR, 2007.
5. Canada Transportation Act Review Panel (2000).
6. The Future of Rail, White Paper HMSO (2004).
7. However, evidence of anti-competitive behaviour has not to date been found by the ANTT or the SDBC.
8. From the National Plan for Logistics and Transport (PNLT); *source:* the World Bank.
9. With this type of contract, the clients have to announce the quantity of cargo established in advance.
10. According to a report by Valor.
11. *Source:* ANTF, 2007.
12. Fleury, Valor.
13. Marcos Regulatórios no Brasil, 2005.
14. Global Trends to Railway Concessions Delivering Positive Results, 1997.
15. ANTT.
16. Ponti in ECMT (2006).
17. Senna and Michel, 2007, quoting Barat, (1978).
18. Economic Bulletin, CNT.
19. Data are from CEL/COPPEAD, from GEIPOT (2001) and the Bureau of Transportation Statistics, United States.

20. *Services Annual Survey*, 2004-2005, IBGE and CNT.
21. Infrastructure Notebook, BNDES, 2001.
22. Even if there is a project of a high-speed train between the major cities of Rio and São Paulo.
23. PNLT. See note below.
24. When the roads are in very bad condition, pedestrians can assault buses.
25. Itapemirim.
26. COPPEAD, 2002 and Fundação Instituto de Pesquisas Econômicas (FIPE).
27. ANTT Statistical Annual Book.
28. ANTT Statistical Annual Book.
29. "Valor on-line", 27/04/2001.
30. Article 25, Law 10 233.
31. World Bank, Report 36 624, 2007 and Guash, Laffont and Straub, WB, 2003.
32. Laws 8 666 and 8 883.
33. Santa Catarina and Paraná Passenger Transport Enterprises Union (FEPASC), 14/07/2005.
34. "Valor", 17/07/2007.
35. The PNLT was elaborated by the Ministry of Transport in co-operation with the Transport Engineering Expertise Centre (CENTRAM) from the Ministry of Defence. Its goal is to formalise analysis instruments for the planning of public and private intervention in the sector in the medium and long term, in accordance with the economic, social and environmental targets for the country. This is the first attempt to co-ordinate a technical plan for the development of the sector since 1985 (when GEIPOT launched the Development Programme for the Transport Sector – PRODEST).
36. "Valor", 21/06/2007.
37. Note 2894/2007 – GERPA/SUPAS/ANTT.
38. *E.g.* Resolution 2 126 of July 2007 accepted the request by Viação Itapemirim to reduce the minimum frequency in one itinerary, and the decision was repealed three months later by Resolution 2 266.

Bibliography

Andersen B. (1992), "Factors affecting European privatisation and deregulation policies in local public transport: The evidence from Scandinavia", *Transportation research,* Vol. 26, No. 2, March, pp. 179-191.

ANTF (Associação Nacional dos Transportadores Ferroviários) (2003), "Desafio do Comércio Exterior: A participação das Ferrovias na Logística de Exportação", Associação Nacional dos Transportadores Ferroviários by Julio Fontana, Chairman. *www.antf.org.br/cgi-bin/pagesvrexe.exe/Get?id_doc=285*.

ANTT (Agência Nacional de Transportes Terrestres) (2006), Management Report 2006, *www.antt.gov.br*.

ANTT (2007), "Evolução recente do transporte ferroviário", *www.antt.gov.br*.

ANTT and CNT (Confederação Nacional do Transporte) (2006), "Logística de transporte e o papel das ferrovias no Brasil", *www.cnt.org.br.*

Associação Brasileira de Concessionárias de Rodovias (2005), Annual report, *www.abcr.org.br*.

Associação Nacional dos Usuários do Transporte de Carga, "Solução para a competitividade logística", *www.anut.org.br*.

Banister D., Berechman J. (1992), "Competitive regimes within the European Bus Industry: Theory and Practice", *Transportation research*, Vol. 26, No. 2, March, pp. 167-178.

Barrett. S. (2000), *Bus Deregulation in Ireland, response to a New Institutional and Regulatory Framework for Public Transport*, Department of Public enterprise, August.

Beesley M.E. (1997), *Bus Deregulation in Privatisation, Regulation and Deregulation*, ed. Routledge.

Biggar D. (2002), "Competition Issues in Road Transport, background note", *OECD Journal of Competition Law and Policy*, Volume 4, Issue 4.

Boucher M. (1993), "L'industrie québécoise du transport par autocar: réglementation, pratiques et performance", *L'actualité économique, revue d'analyse économique*, Vol. 69, No. 4, décembre.

Bousquet, Franck and Fayard, Alain (2001), "Road infrastructure concession practice in Europe", *Policy Research Working Paper* 2 675, World Bank, Washington.

Braeutigam R. R., Noll R.G. (1984), "The Regulation of Surface Frieght Transportation: The Welfare Effects Revisited", *The Review of Economics and Statistics*, Vol. 66, No. 1, pp. 80-87.

Brown, Robert T. (1993), "The Political Framework of Regulatory Reform in Transport Enterprises: Bus and Truck Deregulation in Chile", in *Regulatory Reform in Transport: Some Recent Experiences*, edited by José Cabajo, World Bank, April.

Canada Transportation Act Review Panel (2000), "Competitive Rail Access", Interim Report, 29 December.

Castillo, Ricardo (2004), *Transporte e logística de granéis sólidos agrícolas: componentes estruturais do novo sistema de movimentos do território brasileiro, Investigaciones geográficas*, N. 055, Universidad Nacional Autónoma de México, México.

Castro, Newton de (2000), "Os desafios da regulação do setor de transporte no Brasil", *Revista de administração pública*, Vol. 34, Set./Out.

Cavalcanti, Bianor Scelza (2002), "Reformas políticas regulatórias na area de transportes", VII Congresso Internacional del CLAD sobre la Reforma del Estado y la Administración Pública, Lisboa, Portugal, 8-11 Oct.

CEL (Centro de Estudos em Logística)/COPPEAD, "Índices Logísticos", *www.centrodelogistica.com.br*.

CEL/COPPEAD, *Transporte de cargas no Brasil: ameaças e oportunidades para o desenvolvimento do país*.

Chambers E.J., Dunn M.J., Gillen D.W., Gordon Tyndall D. (1980), Bill C-20, "An Evaluation from the Perspective of Current Transportation Policy and Regulatory Performance", *Canadian Public Policy* Vol. 6, No. 1, winter, pp. 47-62.

Chang H.L., Yeh C.C. (2005), "Factors affecting the safety performance of bus companies, The experience of Taiwan bus deregulation", *Safety Science* 43, pp. 323-44.

Chujoh U. (1989), "Learning from Medium and Small-Sized Bus services in developing countries: is Regulation Necessary?", *Transportation Research,* Vol. 23A, No. 1, pp. 19-28.

CNT (Confederação Nacional do Transporte), Pesquisa Ferroviária (2006), "Relatório analítico", *www.cnt.com.br*.

CNT (2006), "Pesquisa Rodoviária", *www.cnt.com.br*.

COPPEAD (2002), "Transporte de Carga no Brasil, Ameaças e Oportunidades para o Desenvolvimento do Pais", Joint study with the Confederação Nacional de Transportes and the Centro de Estudos Em Logistica do Coppead, Universidade Federal do Rio de Janeiro, available at: *www.centrodelogistica.com.br/new/fs-pesquisa.htm*.

Da Mata, Deichmann U. Henderson J.V., Lall S.V., Wang H. (2005), "Determinants of City Growth in Brazil", *NBER Working Paper*, No. 11 585.

Darbera R. (2004), "L'expérience anglaise de deregulation des transports par autobus", *Les Cahiers scientifiques du transport*, No. 46, pp. 25-44.

De Borger B. (1984), "Cost and Productivity in Regional Bus Transportation: The Belgian Case", *The Journal of Industrial Economics*, Vol. 33, No. 1, pp. 37-54.

De Paula, Germano Mendes and de Avellar, Ana Paula Macedo (2007), "Reforms and infrastructure regulation in Brazil: The experience of ANTT and ANTAQ", *The Quarterly Review of Economics and Finance*, doi:10.1016/j.qref.2006.12.008.

ECMT (European Conference of Ministers of Transport) (2001), *Railway Reform: Regulation of Freight Transport Markets*, European Conference of Ministers of Transport, Paris.

ECMT (2002a), *Regulatory reform in Road Freight Transport*, Paris.

ECMT (2002b), "Tolls on interurban infrastructure, an economic evaluation", Roundtable No. 118.

ECMT (2004), "European Integration of Rail Freight Transport", Roundtable No. 125, Report of the 125th Roundtable on Transport Economics held in Paris on 28-29 November 2002, European Conference of Ministers of Transport, OECD, Paris.

ECMT (2005), "National systems of transport infrastructure planning", Roundtable 128, OECD, Paris.

ECMT (2006), *Transport services: The limits of (de)regulation*, OECD, Paris.

ECMT (2007a), "Transport Infrastructure Investment and Economic Productivity", Roundtable No. 132, European Conference of Ministers of Transport, OECD, Paris.

ECMT (2007b), "Transport infrastructure charges and capacity choice, self financing road maintenance and construction", Roundtable No. 135, OECD, Paris.

ECMT (2007c), "Market access, trade in transport services and trade facilitation", Roundtable 134, OECD, Paris.

ECMT (2007d), *Trends in the Transport Sector: 1970-2005*, OECD, Paris.

Estache, Antonio (1999), "Privatisation and regulation of transport infrastructure in 1990s", *Policy Research Working Paper 2 248*, World Bank, Washington.

Estache, Antonio *et al.* (2000), "The long and winding path to private financing and regulation of toll roads", *Policy Research Working Paper* 2 387, World Bank, Washington.

Estache, Antonio *et al.* (2001), "Privatisation and regulatory reform in Brazil: The case of freight railways", *IPEA Working Paper*, No. 9, Brazil.

European Union Road Federation, European Road Statistics (2006).

Filho, Bolívar Pêgo *et al.* (1999), "Investimento e financiamento da infra-estrutura no Brasil: 1990/2002", IPEA Discussion Paper No. 680, Brazil.

Friebel G., Ivaldi M., Vibes C. (2004), "Railway (De)Regulation, A European Efficiency Comparison", Center for Economic Policy Research, Discussion paper No. 4 319.

Garrido, Juan (2006), "Mais carga nos mesmos trilhos, Valor Setorial Ferrovias".

GEIPOT (2001), Ministério dos Transportes: Anuário Estatístico, *www.geipot.gov.br/anuario2001/index.html*.

Glaister S. Brown, Robert T., (1993), "Bus Deregulation in the United Kingdom", in *Regulatory Reform in Transport: Some Recent Experiences*, edited by José Cabajo, World Bank, April.

Gomez Lobo A. Hinojosa S. (2000), "Broad roads in a thin country", *Policy Research Working Paper No. 2 279*, World Bank.

Guash, Laffont and Straub (2003), "Renegotiation of concession contracts in Latin America", *Policy Research Working Paper 3 011*, the World Bank, Washington, DC.

Guimarães, Eduardo Augusto and Salgado, Lucia Helena (2003), "A regulação no transporte rodoviário brasileiro", Notas técnicas 4, IPEA, Brazil.

Heggie, Ian G. and Vickers, Pires (1998), "Comercial Management and financing of roads", *World Bank technical paper 409*, Washington, DC.

Hensher D.A., Wallis I.P. (2005), "Competitive Tendering as a Contracting Mechanism for Subsidising Transport, the Bus Experience", *Journal of Transport Economics and Policy*, Vol. 39, Part 3, pp. 295-321.

Hijjar, Maria Fernanda and Alexim, Flavia Menna Barreto (2006), *Avaliação do acesso aos terminais portuários e ferroviários de contêineres no Brasil*, Centro de Estudos em Logística/COPPEAD.

HMSO (2004), *The Future of Rail White Paper*, Report presented to Parliament by the Secretary of State for Transport, UK.

IBM (2004), "Summary of the Rail Liberalisation Index 2004", *Comparison of the Market Opening in the Rail Markets of the Member States of the European Union, Switzerland and Norway*, IBM Consulting Group, in conjunction with Pr. Christian Kirchner, Humboldt University, Berlin.

IDEI (2003a), "The Economics of Passenger Entry in the Passenger Rail Industry: a Theoretical Investigation", Institut d'Économie Industrielle, Toulouse, Report #2 on Passenger Rail Transport.

IDEI (2003b), "Entry in the Passenger Rail Industry: a Theoretical Investigation", Institut d'Économie Industrielle, Toulouse, Report #2 on Passenger Rail Transport.

IDEI (2003c), "Railway Regulation: A European Efficiency Comparison Report #3", in *Passenger Rail Transport*.

Ireland N.J. (1991), "A Product Differentiation model of bus deregulation", *Journal of Transport Economics and Policy*, pp. 153-162, May.

Ivaldi M., McCullough G.J. (2001), "Density and Integration Effects on Class I US Freight Railroads", *Journal of Regulatory Economics* 19:2, pp. 161-182.

Lacerda, Sander Magalhães (2002), "O transporte ferroviário de cargas", BNDES 50 Anos – *Histórias Setoriais: O Transporte Ferroviário de Cargas*, BNDES.

Lacerda, Sander Magalhães (2005), *O financiamento da infra-estrutura rodoviária através de contribuintes e usuários*, BNDES Setorial, Rio de Janeiro, No. 21, p. 141-159, March.

Lang, Aline Eloyse (2007), "As ferrovias no Brasil e a avaliação econômica de projetos: uma aplicação em projetos ferroviários", master dissertation, UNB, Brazil.

Langridge R., Sealey R. (2000), "Contestability in the UK Bus Industry? The National Bus Company and the 'Tilling Mark II' effect", *Transport Policy*, pp. 105-115.

Lawther W.C. (2000), *Privatizing Toll roads, a public private partnership*, Praeger, ed. Westport, Connecticut.

Leff N. (1982), *Underdevelopment and Development in Brazil*, ed. Unwin Hyman.

Lima, Rachel Fanti Coelho (2006), *Benchmarking de tarifas e práticas do transporte rodoviário*, Centro de Estudos em Logística/COPPEAD.

Mackie P., Preston J., Nash C. (1995), "Bus deregulation: Ten years on", *Transport Reviews*, Vol. 15, No. 3, pp. 229-251.

Marques, Sérgio de Azevedo (1996), "Privatização do sistema ferroviário brasileiro", texto para discussão 434, IPEA.

Meyer J., Gomez-Ibañez J. (1993), "Transit Bus Privatisation and Deregulation Around the World: Some Perspectives and Lessons" in *Regulatory Reform in Transport: Some Recent Experiences*, ed. José Cabajo, World Bank, April.

Ministério dos Transportes and Ministério da Defesa, "Plano Nacional de Logística and Transportes: relatório executivo", *www.centran.eb.br*.

Nasch C. (2004), "The EU Transport Policy White Paper: An Assessment of Progress", Institute for Transport Studies, Leeds University.

Nash C., Rivera-Trujillo C. (2004), "Rail Regulatory Reform in Europe", paper presented at the Stella Focus Group 5, p. 107.

Nash C.A. (1993), "British bus Deregulation", *The Economic Journal*, Vol. 103, No. 419, July, pp. 1 042-1 049.

Nelson J.D., Saleh W., Prileszky I. (1997), "Ownership and control in the bus industry, the case of Hungary", *Journal of Transport Geography*, Vol. 5, pp. 137-146.

OECD (2005), "Structural Reform in the Rail Industry: Should Train operations be separated from the Provision of the track infrastructure", OECD website on Competition Law and Policy, Best Practice Roundtables on Competition Policy, *www.oecd.org/competition*.

OECD (2006a), "Access to key transport facilities", Competition Committee, OECD, Paris.

OECD (2006d), *Infrastructure to 2030: Telecom, Land Transport, Water and Electricity*, OECD, Paris

OECD (2007a), *OECD Principles for Private Sector Participation in Infrastructure*, Paris.

OECD (2007b), "Mapping Policy for Electricity, Water and Transport", *Infrastructure to 2030*, Vol. 2.

Peci, Alketa (2002), "Modelos regulatórios na area de transportes: a experiência Americana", VII Congresso Internacional del CLAD sobre la Reforma del Estado y la Administración Pública, Lisboa, Portugal, 8-11 October.

Pires, José Claudio Linhares and Giambiagi, Fabio (2000), "Retorno dos novos investimentos privados em contextos da incerteza: uma proposta de mudança do mecanismo de concessão de rodovias no Brasil", Rio de Janeiro: BNDES, Texto para Discussão 81.

Productivity Commission Australia (1999), "Progress in Rail Reform", Report No. 6, August.

Reschenthaler G.B. (1982), "Public Policy and the Intercity Bus Industry in Canada", *Canadian Public Policy*, Vol. 8, No. 1, pp. 80-87.

Ribeiro, Maurício Portugal (2005), "Aspectos jurídicos e regulatórios do compartilhamento de infra-estrutura no setor ferroviário", *Revista eletrônica de direito administrative econômico*, No. 3, August/September/October, Bahia, Brazil.

Rodrigues, J.A.C. *et al.* (2004), "O crescimento do transporte ferroviário de carga no Brasil e seu reflexo na industria", XXXV Seminário de fusão, refino e solidificação dos metais e V seminário de fundição, Salvador, Bahia, 17-19 May.

Saintive, Marcelo Barbosa and Chacur, Regina Simões (2006), "A regulação tarifária e o comportamento dos preços administrados", *SEAE Working Document No. 33*, Brazil.

Senna, Luiz Afonso dos Santos and Michel, Fernando Dutra (2007), *Rodovias auto-sustentadas: o desafio do século XXI*, ed. CLA, Brazil.

Steer Davies Gleave (2003), "EU Passenger Rail Liberalisation", *Extended Impact Assessment*.

United Nations (2006), *Handbook of Transport Statistics in the UNECE region*.

Valor Econômico, "Governo define data para leilão de rodovias", 27/07/2007.

Valor Econômico, "Governo pode adiar em um mês leilão de rodovias", 17/07/2007.

Valor Econômico, "Questões ANTT divulga versão final de editais para leilão de rodovias federais", 17/07/2007.

Valor Econômico, "Questões técnicas determinaram recuo em PPPs de rodovias, dizem especialistas" 17/07/2007.

Valor Econômico, "TCU analisará regras do leilão de rodovias", 21/06/2007.

Valor Econômico, "TCU libera concessão de 7 trechos de rodovias", 26/07/2007.

Valor Econômico, "União desiste de usar PPP para duas rodovias", 18/07/2007.

Vencovsky, Vitor Pires (2006), "Sistema ferroviário e o uso do território brasileiro. Uma análise do movimento de produtos agrícolas", master dissertation, UNICAMP, Brazil.

White P. (1995), "Deregulation of local bus services in Great Britain: an introductory review", *Transport Reviews*, Vol. 15, No. 2, pp. 185-209.

White P., Farrington J. (1998), "Bus and coach deregulation and privatisation in Great Britain", with particular reference to Scotland, *Journal of Transport Geography*, Vol. 6, No. 2, pp. 135-141.

World Bank (1999), "Analysis of highway concessions in Europe", French Highway Directorate, Report for the Western European Road Directors, Washington DC.

Yordon W.Y. (1968), "Regulation of Intercity bus fares: The Problem of Cost Analysis", *Land Economics*, Vol. 44, No. 2, pp. 245-253.

ANNEX 5.A1

Regulatory Frameworks for Transport

Table 5.A1.1. **Regulatory framework for railway services and provisions for third party access in selected countries**

	Status of incumbent operator			Access		
	Company	Status of company	Dates for key recent reforms	Structural separation	Third party access	Freight
Australia	Most interstate rail networks have been privatised and/or separated.	Freight operators: seven: Corporatised/ privatised; vertically integrated/separated entities and responsible for different intra-interstate tracks.	1995. Application of general provisions of the National Competition Policy (NCP).	Yes. By 2002 only Queensland government has retained ownership of a corporative vertically integrated freight rail operation.	National Access Regime is set out in Part IIIA of the Trade Practices Act 1974 (Part IIIA topic link). (Amended in 1995), regulated by ACCC.	Yes. In 2002 the ARTC access regime for the interstate freight track was approved.
Brazil	The national company RFFSA was split and privatised in 1996 CVRD and FEPASA .	Mainly private. 28 225 km are private, 1 262 are public (mostly suburban lines).	Presidential Decree 1 832/1996 National privatisation plan for rail .	No. Local private monopolies.	Resolution 433/2004.	The users of the infrastructure can negotiate with the concessionaire. If they do not reach an agreement ANTT will arbitrate.
Canada	Canadian National and Canadian Pacific own almost 80% of the tracks.	Private	1996. Canada Transportation Act.	No	1987	Three competitive access provisions: inter-switching, running rights and competitive line rates (CLRs). Inter-switching and the power of regulators to impose running rights, dating back to the early 1900s. CLRs have existed only since 1987.
France	SNCF	EPICs (Public establishment with industrial and commercial purpose).	1997	Yes	1997	Partly. 2003: international freight 2007: Total freight
Germany	DB AG	State-owned private stock company.	1994: merging DB and DR. 1999: legal separation of the business units.		1994	Yes
Italy	Trenitalia	Part of Gruppo Ferrovie dello Stato SpA, a holding company 100% state-owned.	2000	Yes	1999	Mandated access within a (soft) vertical separation framework.

Table 5.A1.1. **Regulatory framework for railway services and provisions for third party access in selected countries** *(cont.)*

	Status of incumbent operator			Access		
	Company	Status of company	Dates for key recent reforms	Structural separation	Third party access	Freight
Mexico	1997 State company FNM was divested and most railways were privatised.	3 private regional companies and some short lines, mainly private.	1995, 1996: constitutional amendment and sectoral legislation.	No	Articles 35 and 36 of the RSL and concession titles.	Terminal and Interconnection services: mandatory trackage and haulage rights may be bilaterally negotiated between private operators, with SCT reserving the right to intervene if no agreement is reached within 90 days.
United Kingdom	Incumbent was split and does not exist anymore.	All railway operating companies are private.	1993 and 2000	Yes	1993	Yes
Spain	Renfe + ADIF	Public corporations under the direction of Ministry of Development (MdF).	2 004	Yes	Yes	Open to international freight for all routes
United States	Five of the 9 major carriers represent 94% of Class I freight railway revenue. Numerous smaller carriers (541 in 1997).	Class I railways are all privately owned. There are some short lines and one regional in public ownership.	1995. Surface Transportation Board (STB) replaced the Interstate Commerce Commission (ICC Termination Act).	No	No forced access	Three kinds of competitive access provisions: reciprocal switching, by which railways can be required to switch cars to nearby competing railways in terminal areas at a reasonable charge; alternative through routing, by which a railway can be required to interline traffic with another railway; terminal trackage rights, by which a railway must permit physical access over its lines to the trains and crews of a competing carrier for a fee.

Source: National Submissions to Rail Roundtable, OECD (2005). Steer Davies Gleave for the European Commission, NEA transport research and training for the European Commission adjusted by the OECD Secretariat. Australia: Productivity Commission Inquiry Report, 2006. United States: Railway Reform, ECMT, 2001. Class I railroad, as defined by the Association of American Railroads, has an operating revenue exceeding USD 319.3 million.

Table 5.A1.2. **Regulatory framework for road concessions across a sample of countries**

	Ministry	Concession law	Regulatory agency	Responsibility of regulatory agency	Related bodies for consultation and technical input for preparing strategic options
Argentina	Federal Planning Ministry (*Ministerio de Planificacion Federal*)	Law 17 520/67; 23 696/89; Decree 1 105/89.	OCCOVI – supervision of road concessions (*Organo de Control de Concesiones Viales*).	Control and supervision of contracts	
Australia	State and local governments, Federal Government	No Federal Concession Law.	Only at state and local level.	Not relevant.	Australian Transport Council (ATC) for advice on the co-ordination and integration of transport at national level. The Department of Transport and Regional Services (DOTARS) provides policy advice for the Transport and Regional Services portfolio. Technical body is the Bureau of Transport and Regional Economics (BTRE).
Brazil	Ministry of Transport	Law 8 987/95 and 9.074/95.	National agency for land transportation (*Agencia Nacional de Transportes Terrestre*) (ANTT).	To implement the policy formulated by the CONIT and the Ministry and regulate or supervise the services and use of the infrastructure of transports by third parties.	National Council for the Integration of Transport Policies – *Conselho Nacional de Integração de Políticas de Transporte* (CONIT) to define the national transport policy. No technical body at the moment. Until 2002, it was the GEIPOT (a planning agency for the Ministry of Transport).
Chile	MOP: Ministry of Public Works – *Ministerio de Obras Publicas* (specifically General Direction of Public Works – *Dirección General de Obras Públicas*)	Special Decree 164/1991. Law on Public Works Concessions (*ley de Concesiones de Obras Públicas*)/1996.	Direct supervision by the Ministry.	Not relevant.	Planning, projecting and constructing public infrastructure as well as their conservation and administration, fixing tariff intervals.
France[2]	Ministry of Ecology and Sustainable Development and Planning Unit for oversight of highway under concessions, special under-directorate for technical control.	General Law of 1955; Law 93-122; and corresponding orders in Council.[3] Law on Competition and Price Freedom, 1986.[4]	No agency.		National Transport Committee. National Committee on Transport accounts. Technical body inside Ministry of Ecology and Sustainable Development and Planning.
Italy	Ministry of Infrastructures Ministry of Transports	Law 1 137/29 "Disposizioni sulla Concessione di Opere Pubbliche" General Law for Public Works 19/1994 Presidential Decree 554/1999.	ANAS (Ministry of Transports) And CIPE (Interminiserial Committee for Economic Programmation).	CIPE granting authority responsible for state road, Surpervises maintenance and construction of infrastructures Tariff revisions. ANAS Tariff revisions set quality standards. Includes quality correction in price cap formula.	NARS, group of expert attached to Treasury providing technical support for tariff adjustment agreed between the licensee and the regulator.
Hungary	Ministry of Economy and Transport	Act XVI of 1991	Road administration	Road user charges	*Transport Infrastructure Development in Hungary*
Mexico	Secretariat for Communications and Transport (*Secretaria de Comunicaciones e transportes*)	Law on Roads, Bridges and Federal Trucking.	No, SCT directly.	Not relevant.	Administration of the planning for private tolled roads.

Table 5.A1.2. **Regulatory framework for road concessions across a sample of countries** *(cont.)*

	Ministry	Concession law	Regulatory agency	Responsibility of regulatory agency	Related bodies for consultation and technical input for preparing strategic options
Spain	State Secretariat for Infrastructure and Planning (*Secretaria de Estado de Infraestructuras y Planificacion*)	Tolled Motorway Act (1972) amended in 1996-1996. A royal decree is required to approve a concession; Law 13/1996.[3]	Some regions have autonomous or semi-autonomous toll road agencies.	Not relevant.	Policy for Infrastructure and Transport. The national plan is called the Strategy Plan for Infrastructure and Transport – *Plan Estratégico de Infraestructuras y Transporte* (PEIT).
United States[1]	USDOT	Intermodal Surface Efficiency Act, 1991.	No	Not relevant.	

1. *www.highways.gov.uk/aboutus/about.aspx*.
2. "Analysis of Highway Concessions in Europe", WB, 2004.
3. Data are from 1998.
4. "Rodovias Auto-Sustentadas", 2007, p. 303.

Table 5.A1.3. **Key aspects of road concessions across a sample of countries**

	Tolled roads (km)	Network size Motorway *kms*	Toll roads		Duration of concessions	Existence of shadow toll
			Public	Private		
Argentina	9 383 of the National Troncal Network)[3]	10 400 (expressway 1999)	0	9 383 km (of the National Troncal Network)[13]	First phase: 12 years, Second phase: 22 years[2]	No
Australia	168 none of them in the National Highways System[5]	18 700 km (National Highway System)[9]	0	168[5, 12]	18-48 years[5]	No
Brazil	1 492 federal 8 357 State and municipal (2005)	1 300 km	n.a.	1 493[8]	Three federal concessions of 25 years and two other of 20 years	No
Chile	79 604 total roads 2 300 tolled roads		0	2 289[1, 6]	20-30 years generally Maximum 50 years	No
France	7 840 (tolled highways 2004)	10 383[10]	6 940[2]	900[2]	30 years	As a possibility
Italy	About 6 000 km of motorway	6 840[10] total	1 202[2]	4 392[2] (After privatisation of Autostrade)	30 years	No
Mexico	6 000[7]	5 683 (1999)			n.a.	No (in bidding process 2006)
Spain	2 255 (1999); 2 900 (2004)	10 500[10] (25% tolled)		2 497.4[2]	Maximum 75 years (extended in 1997)	
United Kingdom	580	3 476[10]		580[2]	30 years	Yes
United States	8 439 (2007)	Total highways 91 287 (2003)[11]	8 101 (2007)	338 (2007)	20-99 years	No

1. "Rodovias Auto-Sustentadas", 2007, p. 303.
2. 1998. Policy Research Working Paper No. 2 249, WB, 1999.
3. Website Ministerio (17/07/2007)
4. BTRE Information Sheet 23, 2004.
5. "Australian Toll Road Sector – Stepping Up a Gear", Fitch Ratings, 2005.
6. Website Coordination de concessiones de MOP.
7. Data from 2004.
8. Questionaire answers ANTT. Relates to federal concessions. The total would be 9 296.
9. Year 2001-02. Data include expenditure on administration, regulation and subsidies. Source: BTRE Information Sheet, 2004.
10. Transport infrastructure investment, ECMT. Quoting data from Fayard (2006).
11. Handbook of Transport Statistics, UNECE.
12. "Australian Toll Road Sector – Stepping Up a Gear", Fitch Ratings (2005).
13. Resumen de concesiones viales otorgadas, CEPAL (2003).

Source: ECMT Report; Bousquet (1999).

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Table 5.A1.4. **Economic aspects of toll roads across a sample of countries**

	Road expenditure	Toll revenue Million USD PPP, 2005	Toll price
Argentina	USD 349 million public and USD 161 million private[8, 9, 14] 18% for maintenance.	300[2]	Phase 1: USD 0.015 per km Phase 2: Approximately USD 0.01 per km – USD 0.0156 per km car rates (road corridor); USD 0.035 per km car rates (urban access)[5]
Australia	Total: USD 8.779 billion (public: USD 8.252 billion (22% are commonwealth expenditure). Private: USD 527 million[10, 11]	USD 731 (2001-2002)[4, 6]	n.a.
Brazil	Private: USD 2 263 million[17]	1 977[17]	USD 0.04 per km (2007)
Chile	MOP: CLP 92 billion (43% main regional roads); total roads: 286 billion. Private: USD 43 million[12, 13, 14]	n.a.	First generation: USD 0.02-0.03 per km car rates (1999)[5]
France	EUR 2 700 million (2006)[15] Of which for maintenance: EUR 1 740 million (2006)[15]	6 778	0.062 EUR/km (1999)
Italy	EUR 12 900 million (1999)[15] maintenance 1 250 million EUR (1999)[15]	4 598[3, 15]	0.047 EUR/km (1999)
Spain	EUR 1 350 million (2005)[15] of whichEUR 634 million (2005)[15]	2 336[1]	0.086 EUR/km (1999)
United Kingdom	2 500 million EUR (2005)[2, 15] of which 2 147 for maintenance	n.a.	GBP 3 /car (2005, motorway)[7]
United States[1]	Public (2004): 136.4 billion[16]	Public: 8 544 (2004)[16]	Public: 0.15-0.2 per km per car (2000)

1. Million ECU. *Source:* "Analysis of Highway Concessions in Europe", WB (2004).
2. Only Motorway included. "Analysis of Highway Concession in Europe" quoting PIARC (2003) as a source.
3. "Analysis of Highway Concessions in Europe", WB (2004). Data are from 1998.
4. For category 1 vehicles, maximum toll established by contract. WB Study, Part III: Case Studies.
5. "The long and winding path to private financing and regulation of toll roads", WB (2000).
6. Bureau of Transportation and Regional Economics, *www.btre.gov.au/statistics/roadrail/mvtaxesandcharges.aspx*.
7. Toll for M6 (the only toll motorway). Roundtable 135, ECMT. Quoting *www.m6toll.co.uk, 2005*.
8. Transport infrastructure investment, ECMT. Quoting data from Fayard (2006).
9. Year 2001-02. Data include expenditure on administration, regulation and subsidies. BTRE Information Sheet, 2004.
10. Year 2003-04. BTRE Information Sheet, 2006.
11. "Australian Toll Road Sector – Stepping Up a Gear", Fitch Ratings (2005).
12. Cuenta de gestion MOPTT (2005).
13. Sistema de Concesiones en Chile 1990-2003, 2003.
14. Resumen de concesiones viales otorgadas, CEPAL (2003).
15. ERF. Most European countries distinguish "regular" and "non-regular" costs of maintenance, but the expenditures included in each category differ from one country to another. In the Netherlands, for instance, the terms fixed and variable maintenance are applied, while structural and operational maintenance are the definitions in Austria, routine and periodic maintenance are those in Sweden and routine and special maintenance are those in Spain. The European Commission proposes to apply the following distinction: "Regular" costs aim at maintaining the functionality of existing infrastructure within its original lifetime (local repairs, like fixing cracks or potholes, winter maintenance, cleaning rest areas, maintaining grass areas, etc.). "Non-regular" costs are renewal expenditures prolonging the lifetime of the infrastructure without adding new functionalities (renewal of roadways and structures of bridges and tunnels, maintenance of road equipment, etc.)
16. ECMT report. Questionaire answered by ANTT. Relates to federal concessions. The total would be 9 296.
17. Annual Report 2005, Relatório CNT, 2006.

Table 5.A1.5. **Road freight regulatory constraints, comparison between Brazil and a set of OECD countries in the late 1990S**

Regulatory Constraint		Number and identity of OECD countries concerned and Brazil
Rights of foreign firms constrained relative to domestic firms *Of which:*	16	United States, Germany, France, Italy, Canada, Mexico, Norway, Portugal, Sweden, Turkey, Hungary, Poland, Austria, Belgium, Greece, Switzerland, Brazil
• Complete prohibition of cabotage	6	France, Belgium, Mexico, Switzerland, Turkey, Hungary, Brazil
• Domestic carrier requirement for public traffic	5	Greece, Mexico, Norway, Hungary, Poland
• Restrictions on the possibilities for foreign firm pick-up	9	United States, France, Italy, Canada, Greece, Mexico, Norway, Sweden, Hungary
Criteria other than technical, financial and safety considered in granting a licence/permit/concession	12	Germany, France, Italy, Austria, Belgium, Mexico, Norway, Spain, Sweden, Czech Republic, Korea, Poland
Professional body enforces pricing or entry regulations or guidelines	10	Netherlands, Portugal, Spain, Switzerland, Czech Republic, Hungary, Poland, Italy, Austria, Greece
Regulator can limit capacity in some way	9	Germany, Italy, Belgium, Greece, Spain, Czech Republic, Hungary, Korea, Poland
Public ownership/control in road freight	9	Germany, Belgium, Denmark, Finland, France, Australia, Norway, Czech Republic, Poland
Regulation can restrict the number of competitors in some way	5	Italy, Norway, Turkey, Czech Republic, Poland
Regulations prevent or constrain backhauling	5	Finland, Greece, Netherlands, Norway, Hungary
Regulations prevent or constrain private carriage	5	Finland, Greece, Mexico, Netherlands, Switzerland
Regulations prevent or constrain contract carriage	3	Mexico, Switzerland, Hungary
Regulations prevent or constrain intermodal operation	3	Finland, Mexico, Hungary
Prices regulated in some way	3	Japan, Italy, Greece
Competition law exemption for road freight in some form	3 (+15)	United States, Japan, Turkey (and the European Community), Brazil
Competition agency not involved in enforcement	2	Switzerland, Greece, Brazil

Source: OECD International Regulation Data 1998.

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Table 5.A1.6. **Road passenger transport regulations, comparison between Brazil and a set of OECD countries in the late 1990s**

	Regulatory controls
Australia	Passenger services are regulated by State and territory government agencies. There are private bus services and government-owned services.
Brazil	A bidding process is required for the provision of regular service.
Belgium	Regular and specialised regular services are operated directly or contracted out to private operators by the railway company SNCV and by different local transport corporations. As well as satisfying quality controls, passenger carriers are subject to fare regulation by the relevant ministry in the case of domestic services and by agreement with other countries on international services.
Canada	Bus services are primarily regulated by the provinces. New entry is rare because of a strictly applied public convenience and necessity entry test (with the exception of Alberta). Provincial boards generally specify intra- and extra-provincial bus routes, capacity, service quality, safety standards and insurance requirements.
Denmark	The provision of bus services requires a licence from either the local authorities or from the Danish Passenger Transport Council. The prices of scheduled services are controlled by the transport authorities.
France	Urban and interurban bus and coach services, whether scheduled or non-scheduled, are organised solely by the public authorities. The 1982 Act on Inland Transport confers on the *départements* the main task of organising inter-city passenger services. The departmental authorities draw up and keep up-to-date the Departmental Plan which contains the routes and services that have been authorised. The actual operation of these services may be carried out by the department directly or by private firms contracted to do so. Fares must be approved by the organising authority. Urban transport is the responsibility of local authorities who may either operate the services directly or contract them out to a private firm. The local authorities also have the task of approving fares for scheduled local services.
Germany	An authorisation must be obtained for the paid or commercial carriage of passengers in motor vehicles, street cars and trolley buses. Before an authorisation is issued, the public interest in having such services established is considered. The authorisation is refused if *a)* the needs can be satisfactorily met by existing services; *b)* the services applied for would cover transport tasks already carried out by existing carriers or railroads without providing a significant improvement of transport conditions; *c)* existing carriers or railroads that provide such transport are willing to extend their own service. Rates are controlled.
Greece	Public passenger road transport is closely regulated as regards numbers of buses and fares. New buses are licensed for carriage if there is a need for further services. At present the number of buses is considered adequate for present demand.
Ireland	Private bus operators are required to hold licences for scheduled road passenger services. The key statutory requirement to be considered before granting a licence is to have regard to the passenger road services and other forms of passenger transport available to the public on, or in the neighbourhood of, the route of a proposed service. As a result of the restrictive nature of the legislation, relatively few licences have been issued to private bus operators.
Japan	A new road passenger licence is granted if *a*) the proposed service is in line with demand for transport services and *b*) the new service will not bring about an imbalance between capacity and demand. All passenger fares must be approved by the Minister of Transport, taking into account that the charges or fares would not cause undue competition with other carriers.
Switzerland	An applicant for a licence has to fulfil two conditions: *a*) they must prove that there is a need for the service they propose and *b*) the existing transport network must not be subject to significant competition from the new service. Public transport enterprises are free to set their own prices subject to the possibility of intervention by the confederation in the event of abusive fares.
European Union	Scheduled international services within the Europen Union still require a licence from member states which, until 31 December 1999, could block the opening of a new service if it threatened the viability of a rail service over the same route. Cabotage (carriage of passengers within another member state) is not permitted except for occasional services (where these are the extension of an international journey) and for special services (provided they do not go outside border areas).

Source: OECD (1990), Chapter 2; OECD, (2001).

PART III

Regulatory Governance in Selected Sectors

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Chapter 6

Independence and Accountability of Regulatory Authorities

The institutional autonomy of administrative bodies is a controversial and political issue in Brazil. It is difficult to build consensus around this issue across such a wide and highly diverse country. Setting up and operating independent sectoral regulators has involved significant challenges. Autonomy at technical level has, however, progressively strengthened with a more balanced equilibrium, facilitated by the general macroeconomic stabilisation experienced by the country in recent years, with sustained economic growth.

Institutional aspects

The main reasons to delegate regulatory (or quasi-regulatory) powers are to reduce the decision-making costs and to enhance the credibility of long-term policy commitments. Regulators need clear autonomy, both from political authorities and from regulated entities, especially in sectors where the state retains a large shareholding in energy businesses. Consistent and independent regulation will contribute to minimising regulatory uncertainty, and the associated regulatory risk premium. A clear and recognised authority in the broader institutional framework is essential for this purpose. Also, the regulator's mission must be clear and unambiguous, in respect of strategic objectives and allocation of responsibilities between the ministry and the regulator. However, the balancing of independence with accountability needs to be considered in its practical dimensions, given existing institutional and political practices.

Legal framework

In the Brazilian institutional system, regulatory agencies are considered as "special autarchies", or public agencies with financial and administrative autonomy, as stated in the laws that created them. In the Brazilian institutional order, the notion of "autarchy" is defined in a Law Decree 200/1967, which under the pre-1988 Constitutional order is in effect equivalent to an ordinary law, as the President had then the power to issue law decrees. This decree qualifies "autarchy" as "an autonomous service, created by law, as a legal entity, with its own patrimony and financial resources, to perform typical activities from the Public Administration, that required, for its better functioning, decentralised administrative and financial management". This status is close to the notion of a decentralised agency in many European countries. It offers the possibility of relatively autonomous management, but has not been designed to embody the characteristics of agencies entrusted with significant regulatory and enforcement powers.

The notion of "special autarchy", which corresponds to the Brazilian agencies, qualifies agencies for which the specific conditions of autonomy are differentiated and defined in specific laws. These can for example grant those agencies a higher level of autonomy, where it is impossible to dismiss directors freely. A special autarchy distinguishes itself from a normal autarchy, when its corresponding law grants special privileges or a specific level of autonomy.[1] This level of autonomy is entirely dependent on the law that sets it up.

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A difficult context

Autarchies and special autarchies are part of the indirect administration in Brazil. They exist not only at the Federal but also at the sub-federal level. They reflect the general trend of decentralised management in public administration observed in the late 1960s and early 1970s. This is in the context of the notion of relative autonomy with an uneven status, when the regulatory authorities were set up in the mid-1990s. The setting up of the new agencies was accompanied by significant tensions and has been subject to intense controversies. One of these issues is linked to the relations between the agencies and their related ministries, and the legal system for staff. The agencies were also created following an *ad hoc* approach, which did not reflect a co-ordinated movement of the administration towards a regulatory state (Gaetani, 2002). These agencies, created as part of the trend towards privatisation and liberalisation, received less political attention during the second term of President Fernando Henrique Cardoso (1999-2002) (Gaetani, 2003b). This resulted in fragile regulatory arrangements in the area of infrastructure precisely when these agencies were making their first steps and was also linked to a certain disregard, due to a lack of technical capacity and expertise from some infrastructure ministries. This is clearly illustrated by issues of resources and lack of strategic capacity experienced in the ministries of energy, transport and telecommunications just after the first wave of privatisation.

The situation was compounded by the lack of consensus about how the state apparatus should be organised. Many of the institutional mechanisms designed to protect the autonomy and independence of the agencies became subject to controversy, especially their operation, financing, and nominations to the board. Features that are supposed to balance independence to ensure accountability, in a procedural and non-political way, were not properly secured and understood: transparency, reporting of accounts, technical isolation, and rule stability. This was therefore an unfinished and very problematic part of the overall policy agenda.

In this context, the very notion of delegating significant powers was questioned from a political perspective, particularly in the context of the election of President Luis Inácio Lula of Silva. Upon taking office, the government was confronted with three alternatives concerning regulatory authorities:[2]

1. Reverting to the previous model.
2. Doing "business as usual".
3. Looking to improve existing regulatory arrangements.

The strengthening of policies towards quality regulation and the strengthening of the regulatory agencies was not part of the policy goals of the new coalition led by the Workers' Party (*Partido dos Trabalhadores*), as it would have been perceived as a validation of the privatisation processes. The full implications for long-term growth and in terms of financing major infrastructure were also not weighted properly at the start. Progressively however, a pragmatic approach emerged, with public authorities coming to terms with the fact that they had no choice but to ratify the existing institutional context. The decision was taken to keep the institutions in place under the leadership of the Civil House of the Presidency of the Republic.

The devolution of significant regulatory and enforcement powers to the regulatory agencies was still seen as problematic. The institutional arrangements that had been

adopted had some deficiencies (Binenbojm, 2006), reflecting a foreign institutional culture (Gomes, 2006; Calil, 2006). This reflected a lack of consensus on the philosophy of the regulatory framework. While the new government was embarking on a strategy of long-term thinking which would result in a new law proposal (see Box 6.2 on the New Law Bill), the agencies were subject to significant turmoil.

The contrast between formal institutional status and practical institutional operations will be analysed in more detail below for the agencies studied. It will also be placed in an international perspective, whenever possible, for each of the sectors of the study.

Agencies studied

The agencies studied here enjoy a significant level of autonomy from a legal perspective, which can be favourably compared to many other OECD countries. They are all created by laws and legally qualified as special autarchies (See Annex 6.A1, Table 6.A1.1). This, however, needs to be assessed against their day-to-day operations, which were significantly affected by the lack of an overall administrative culture for autonomous policy making.

The laws of the various regulatory agencies in Brazil instituted them as special autarchies with financial and administrative autonomy, where members of the governing body are appointed by the President and are confirmed by the Senate. These board members are nominated for four-year mandates for ANTT and ANEEL, which are here similar to the National Petroleum Agency, recently renamed National Agency for Petroleum, Natural Gas and Biofuels, (ANP), the national Water Agency (ANA) the National Waterway Transportation Agency (ANTAQ), and the national movie industry agency (ANCINE). However, directors at the National Health Surveillance Agency (ANVISA) as well as the ANS enjoy only three-year terms. These terms are renewable for ANEEL,[3] ANATEL, ANS and ANVISA, as well as only once for ANTT. The terms of the members of the board are usually staggered, to preserve the agencies' knowledge and coherence of decisions. The mandates are not necessarily linked to the Presidential mandate. In the case of ANATEL the terms are for five years (see Annex 6.A1, Table 6.A1.2).

These governing bodies cannot be dismissed *ad nutum* by the President (except in the case of ANVISA, ANS and ANA, when they can be dismissed for any reason in the four months from the beginning of the term; for ANEEL this possibility no longer exists and was cancelled by the Law 9 986/2000). In addition, for ANVISA and ANS, there is a theoretical possibility of dismissal in case of failure to comply with the "management contracts" (see discussion on accountability). Decisions of these agencies are taken in a collegiate way by the board, with a prevailing voice for the Director General in case of uncertainty. The other elements of cooling off period and compensation remuneration are also defined in the respective creation laws. Despite their technical independence, these agencies are linked to the respective sectoral ministries.

An international perspective

In the energy sector, the terms of regulatory authorities in selected OECD countries vary, from three years in the United Kingdom and New Zealand, to five-year terms in Argentina, the United States and Australia, six years in Norway or Chile and up to seven years in Canada (Annex 6.A1, Table 6.A1.3). These bodies are directed by a single Chair in Norway and the United Kingdom, and a board in all the other cases. Dismissal is highly restricted, and terms can be renewed in Argentina, Canada and Norway. By comparison,

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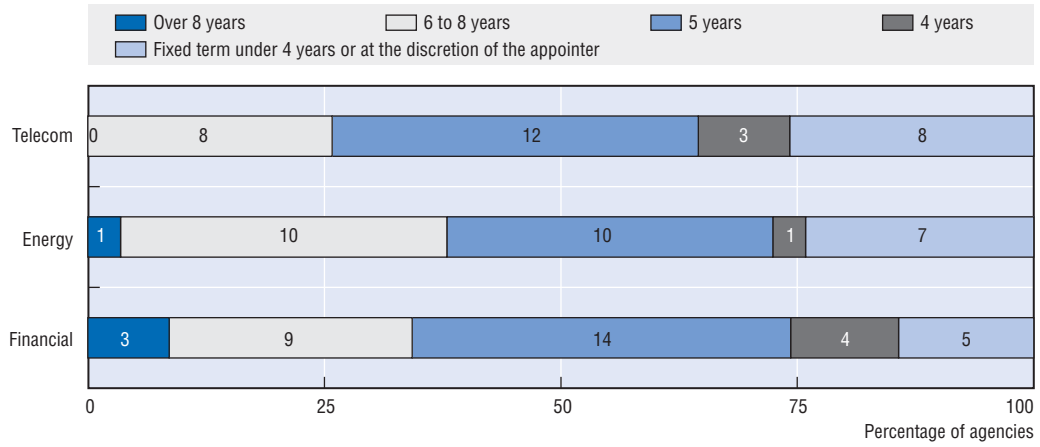
the four-year renewable term of ANEEL tends to lend a slightly more limited institutional independence, even if it can still be considered as autonomous. From a general perspective (Figure 6.1), the four-year term tends to fall in the lower bound, even if a large number of authorities did have such terms in the OECD 2003 survey.

In the private health insurance sector, the members of the regulatory bodies in Australia also have renewable terms. In France and Portugal, the terms extend to five years, and are only renewable once in France. In other countries, these bodies are fully subordinated to the related ministry, as is the case in Switzerland, Canada, Ireland or the Netherlands, where terms do not appear to be fixed, according to the available data. There tends to be a difference between those insurers specialised in health matters, generally linked to the Ministry of Health, and the other insurers in charge of wider insurance supervision, which are generally attached to the Ministry of Finance. From this perspective, provisions and terms set for the ANS, even if they do not confer significant legal autonomy, do not depart markedly from the majority of the countries for which information was available (Annex 6.A1, Table 6.A1.5).

In the telecommunications sector, the five-year terms for ANATEL are in line with the main practice; in 2003, up to 12 OECD countries had chosen such term duration (Figure 6.1). This is confirmed by Table 3.A1.2, where Australia, Austria, Canada, Germany, Greece, Hungary, Iceland, New Zealand, Poland, Turkey and the United States had five years. The only countries with a lower duration were the Netherlands (four years), Switzerland (four years), Japan, Luxembourg and Korea (three years). A number of countries had longer terms, such as France or Italy (six or seven years). However, these terms were not defined in the Nordic countries. The non-renewability of the terms prevalent in Brazil also existed in Australia, France, Italy and Portugal, while a large number of other countries tended to permit such renewability but to limit it to one period (Annex 6.A1, Table 6.A1.7).

In the transportation sector, few countries had set up a similar authority, and hence these detailed comparisons could not be performed, or would have been limited to Italy and Argentina.

Figure 6.1. **Terms of appointment**



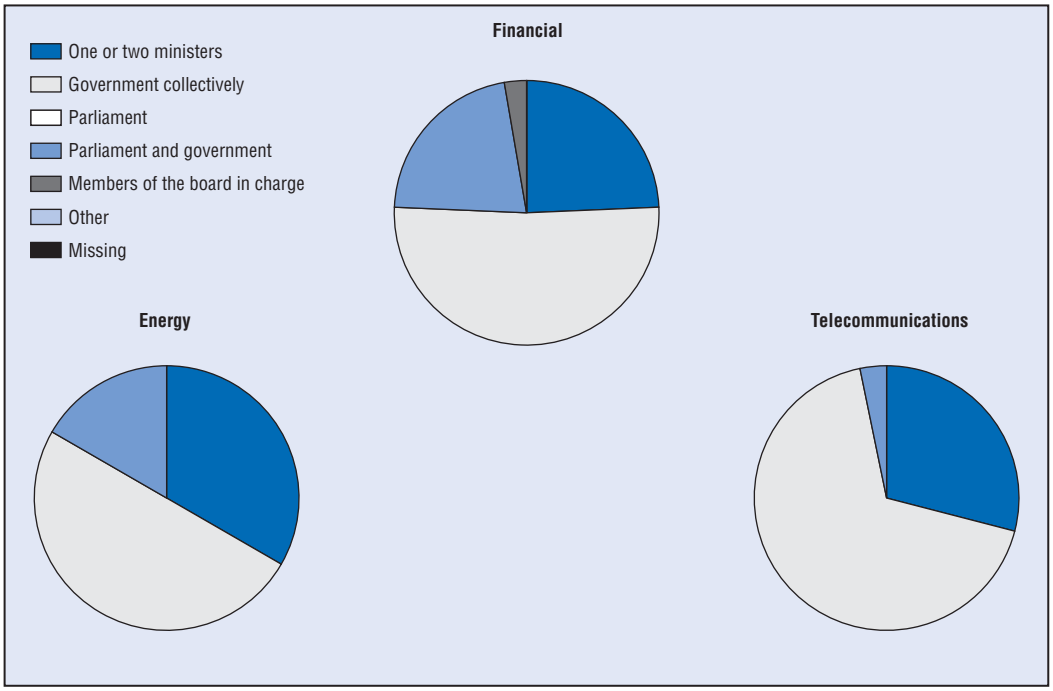
Note: Number of countries with such characteristics.

Source: OECD (2005), "Designing Independent and Accountable Regulatory Authorities for High Quality Regulation", Proceedings of an Expert Meeting in London, United Kingdom, 10-11 January.

The issue of appointments and dismissals

The political dimension of appointments is an unavoidable element in the management of regulatory authorities. This can be reduced by requirements for the heads of the agencies to be nominated by collective government decisions in parliamentary systems or by the President subject to approval by the legislative branch as in the case of Brazil. It can further be reduced with the need for parliamentary backing for the heads of the authorities. For example, the heads of the US independent regulatory commissions[4] call for bipartisan approval.[5] An international perspective shows that many countries had chosen some form of mechanism to ensure wide political support for the heads of their agencies, according to the OECD (2003) survey. This is confirmed in the case of telecommunications, energy and financial services by a collective government decision in over half of the countries surveyed, and by a joint decision in a significant number of cases in the energy and financial sectors.

Figure 6.2. **Appointment of regulatory heads**



Note: Number of countries with such characteristics.

Source: OECD (2005), "Designing Independent and Accountable Regulatory Authorities for High Quality Regulation", Proceedings of an Expert Meeting in London, United Kingdom, 10-11 January.

Such safeguards also exist in Brazil, with the need for Senate confirmation. However, the extent to which they have achieved their intended policy goals remains unclear.[6] Gesner and Fujiwara (2005) have performed a detailed analysis, based on a sample of regulators' CVs from ANATEL, ANEEL, ANP, ANA and ANTT. They distinguish "technical background" from "political background". If the regulator shows any technical or academic experience related to the specific sector, they consider the background to be technical. Based on this categorisation, they show that the level of politicisation increased between 2002 and 2005.

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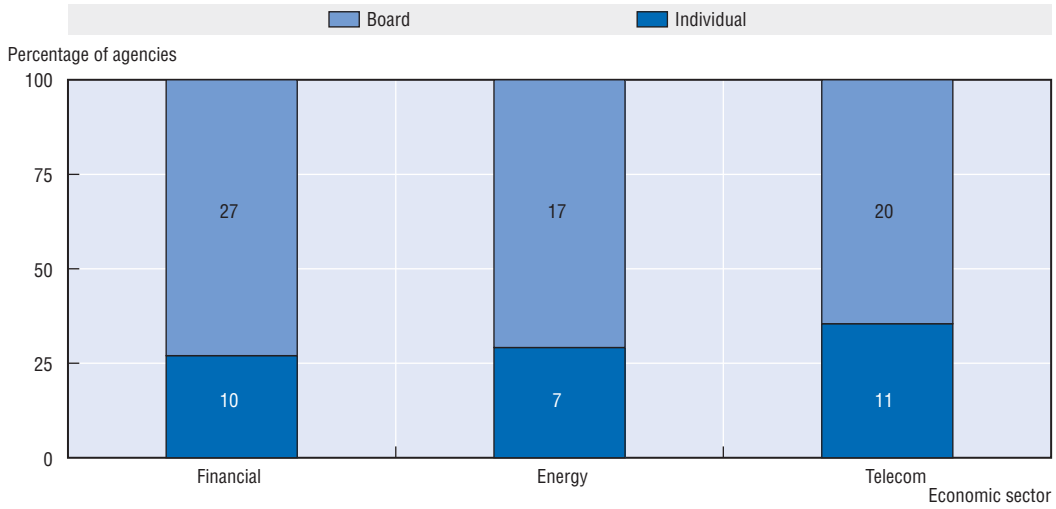
These results are complemented by a survey conducted by the World Bank covering state and federal level regulators and concerning dismissals.[7] The survey finds that in almost 35% of cases, directors can be dismissed for a non-legal and abstract reasons such as for "threatening the agency's integrity or autonomy". Ministries or state ministries had interfered (formally or informally) in agency policy-making decision processes, to even a greater extent at state level (World Bank, 2006). These were obtained by budget manipulations (57.1%), new nominations (57.1%) and substitutions of existing directors (28.6%). The issue of resources will be discussed further below. However, at federal level, the cases of dismissal have to follow pronounced judicial sanctions, or be related to inappropriate personal interest, as expressed in the Law 8 112/1990 concerning the status of the Civil Servant).

The issue of boards

The agencies in Brazil have collegiate boards, with a Director-General and supporting cabinet, and a number of Directors (for example five for ANEEL). The members of the board are nominated by the President, confirmed by the Senate, and nominated for staggered terms to assure continuity. All important regulatory decisions are submitted to the board. The collegial approach has proven its worth and been widely adopted across a range of other countries (Figure 6.3). Boards can help to resolve conflicts of interest in decision making, and may strengthen the regulator's legitimacy. It allows for the appointment of a diverse set of people. Overlapping terms of office support stability.

Figure 6.3. **Governance structure of regulators**



Note: Number of countries with such characteristics.

Source: OECD (2005), "Designing Independent and Accountable Regulatory Authorities for High Quality Regulation", Proceedings of an Expert Meeting in London, United Kingdom, 10-11 January.

However, there have been some difficulties in practice with Brazil's procedures. The process of appointing new directors can be very long. Approval by the Senate, which comprises a large number of parties, means that there is often political deadlock over nominees. Posts may not be filled for long periods, which compromises the decision-making process (the board needs a quorum to vote). A survey conducted by ABDIB[8] for the infrastructure agencies (ANEEL, ANATEL, ANTT, ANTAQ, ANA and ANP) shows that in 2006

each placement in the board was vacant for an average of 98 days (27.1% of the year). The numbers for 2003, 2004 and 2005 were, respectively, 29, 84 and 58. As matters stand, a departing director cannot prolong his/her mandate pending the appointment of a new director. For example, at the time of the study, the board for ANEEL was currently down to three directors. Salaries for directors are low by the standards of the sector, which adds to recruitment difficulties.

The way forward

While the current system provides for significant independence for agencies such as ANATEL or even ANEEL, it remains heterogeneous across sectors. The New Law Bill 3 337 intends to provide a systematic framework. This would involve a four-year mandate for all agencies, with a possibility of one reappointment, but this possibility seems to have been cancelled with the revision of the project. The cancellation of the possibility of reappointment would tend to reinforce the autonomy, limiting the risk of capture by reappointment. There is also a four-month quarantine period for all agencies following the Law 9 986/2000 (in spite of the fact that the initial Law for ANEEL 9 427/96 had established a 12-month period). It is proposed to extend this period to a year with Law Proposal 7 528/2006, which is pending Congress' approval and is intended to regulate conflicts of interest for those holding federal responsibilities, concerning employment opportunities for those leaving the civil service. If the current system of non-coincident mandates is kept, the new system would be progressively implemented as new members are being nominated. The directors can be dismissed only through resignation, or if found guilty by a judicial or administrative court (the latter through an administrative disciplinary process). This system would maintain more or less the existing system for ANEEL, while it would intrude on ANATEL's independence, and increase it for ANS. Particularly for ANS, the new project would suppress the possibility of dismissal of directors in case of non-compliance with the terms of the management contract.

The discussion as to whether all agencies need exactly similar terms could be debated further. While in the case of telecommunications or energy major incumbents are present, and there is a need to offer a stable framework for both foreign and domestic investors, the same necessity does not appear as crucially in the health sector. In many countries, private health insurance is considered as being part of the healthcare system, the responsibility for which falls on public authorities. In the case of transport also, the need to attract major infrastructure investment at favourable rates may require significant provisions for independence. In this context, it could be debated whether the current provisions of the new Bill 3 337 are really sufficient, in the complex institutional system of Brazil, to ensure sufficient protection for independence in some core infrastructure sectors, even if they increase independence for some agencies.

Another issue concerns the need for neutral and professional appointments. The current system has shown its limitations. The provisions of the new law Bill are not going much further. The potential need for stronger provisions, such as the need to publish on the agencies' website the professional background of all senior managers, together with their remuneration, or for a significant period of public comment before the nominations can be sent to Parliament, could be debated.

In this context, a significant constitutional amendment has also been debated, as proposed by Senator Jereissati in 2003 (PEC 81; see Box 6.1). This amendment would tend to constitutionalise the core features of the agencies, to stabilise their institutional

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framework. The goal seems to strengthen regulatory principles for the agencies, some of which relate to quality regulations (see powers for quality regulations). The goal is also to ensure further stability of resources. However, the proposed constitutional amendment does not discuss the issue of the transfer of the "conceding power" (*Poder de Outorga*), which is the main drawback of the existing system. In effect, the fact that any significant delegation of such power can be questioned under the existing Constitution represents a significant issue, which could affect the institutional setting of Brazilian regulatory authorities. Ensuring a clear delegation of power guaranteed by the Constitution could represent an equally worthy goal.

Box 6.1. **PEC 81 Proposal of Amendment to the Constitution**

Proposal of Amendment to the Constitution Number 81 from Senator Tasso Jereissati, from 2003, the first version of which had undergone some changes as part of the democratic process, is in study in the Federal Senate. The Amendment proposes entering the guiding principles of regulatory agency activity into the Constitution, as a way to inspire and guide the institutional treatment of the agencies and act as a cornerstone of the validity of the primary and secondary infraconstitutional legislation related to them. The regulatory stability that this set of principles provides meets the Brazilian needs to attract and keep productive capital in the country, and to promote the expansion of long-term investments in infrastructure and in essential public utilities, as well as income generation and employment. This proposal has been approved in a first vote on 7 March 2007, but two turns are required.

The project constitutes in the Amendment of Article 174 of the Federal Constitution, through the addition of Article 174-A that establishes that the regulatory activities will be under regulatory agencies' responsibility, constitutionalising the guiding principles of the agencies:

I) Protection of the public interests.

II) Consumer and concurrence defence.

III) Promotion of the free initiative.

IV) Accountability.

V) Universalisation, continuity and quality of services.

VI) Impartiality, transparency and publicity.

VII) Functional, decisive, administrative and financial autonomy.

VIII) Fixed mandates and employment security for the directors.

IX) Collegiate decisions in regulatory agencies.

X) Monocratic decision appealable to collegiate in executive agencies.

Balancing independence with accountability

The attempt to strike a proper balance between independence and accountability is aimed at promoting the transparency and accountability of the regulator by putting in place appropriate governance structures and an efficient appeals system, and by initiating a dialogue between regulators, Parliament and citizens to secure the credibility of regulators. All of this must take account of the administrative and institutional culture of different countries. Accountability may also be seen as a factor that promotes

independence. Public dialogue and communication with Parliament allows independent regulators to consolidate the credibility of their actions and anchor their institutional reach. Major decisions with regard to infrastructure call for an open approach based on dialogue that also, in some instances, requires a commitment by executive government bodies.

The counterpart of independence or autonomy is the need to be accountable for the powers that have been granted. Society and its government wish to ensure that regulation will be efficient, and that any risk of capture will be minimised. A regulator also needs safeguards to guide its action and limit the risk of corruption and inefficiency. The tools for ensuring accountability are twofold. Some are linked to core democratic and constitutional features, such as political dialogue with Parliament, civil society and the possibility for judicial appeals. Others are more procedural, and correspond to a high-quality regulation approach, with transparency, consultation and access to information. The first approach has tended at times to eclipse the second in Brazil, with significant implications for the actual independence of the agencies.

In a presidential regime such as in Brazil's, with an institutional division of powers, the design of control and accountability mechanisms need to consider the interaction of the three powers and civil society. It is well known that a democratic regime requires that any mechanism to be directly or indirectly guided by civil society. These elements will be discussed below with the policy dialogue with the Ministries, with the judiciary, with Parliament and with civil society at large.

Prado (2006) uses the theoretical structure of Accountability Mismatches to analyse the relationship between the regulatory agencies and the government during the beginning of the first Lula presidential term. It was widely felt that the lack of social control was the greatest source of concerns and difficulties that were promoting solutions through alteration in the legal framework of the regulatory agencies, as also revealed by the Statement of Justification 12/Civil House – PR, from 12 April 2004. Facilitating the social dialogue is a difficult task in a context where social participation is low, and where the majority of the public is not necessarily aware of the issues involved in regulation.

The policy dialogue with the ministries

A regulator, even independent, may not exert his function in a vacuum. Sectoral ministries are in charge of policy formulation. A healthy policy dialogue with line ministries may also be part of a fruitful approach towards accountability, as long as regulators are respected as full standing partners and not as subjected entities. However, this situation was compounded by the fact that, after the privatisation period, the ministries had lost critical mass and staffing, and were no longer in a position to provide expertise. In some cases they even had to rely on the expertise of the agencies for some policy making, with an unbalanced situation that was embarrassing and the cause of conflict. The danger was that, faced with such lack of capacity, ministries could be tempted to follow purely political arguments, and to exert wider political pressure, to try to recuperate some of the powers that had been lost.

Ministries also need to be in a position to provide strategic policy frameworks, particularly in sectors such as transport, energy and communications that require long-term investment in core infrastructures. National health policy is organised by the 1988 Constitution, which is heavily focused on the public Universal Health Care system (SUS). In

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this context, private healthcare is perceived as ensuring a complementary role, which becomes part of a universal approach when public health services are inexistent or insufficient. ANS is clearly perceived as a strategy to monitor the delivery of services in the private health insurance sector. The Ministry of Health's approach is that the public health system and private health insurance need to go hand in hand. The crucial issue of the interface between the public health system and the private plans, particularly when public care is delivered to privately insured patients and requires deepening the interrelationships between the public and private health components. The Ministry of Health's perception is that the approach of the regulator and that of the Ministry are closely integrated. The Ministry is promoting an overall approach for quality evaluation in healthcare (*Programa Nacional de Avaliação dos Serviços de Saùde* – PNASS), with the contractualisation of services, as well as the monitoring of a national registry of healthcare establishments (CNES).

In the field of telecommunications, the Ministry is in charge of a broader approach towards making access to services universal, with a view towards prioritising investment towards this goal. However, whether the Ministry should take direct action on the regulator for this purpose could be discussed. In many countries, Ministries are developing the framework for universal service, which then may have to be administered and enforced by the regulator. It appears that in Brazil conflicting approaches towards universal service have been developed on the side of the Ministry and of the regulator. The approach towards making services universal is also compounded by the fact that the current legal classification of services, between the public regime (fixed lines only) and the private regime, is based on historical considerations that may not correspond to the actual needs for universal access in a country such as Brazil today, where mobile services have allowed for leapfrogging and where access to broadband remains a priority policy issue for educational and information purposes.

The Ministry of Communications was also lacking substantive resources after 2002, with insufficient capacity for following up and developing appropriate policy responses. At the same time, the agency was coping with rapidly emerging market developments, which absorbed its strained resources. Yet, the Ministry still feels that two issues remain unresolved: the need for safety and quality of the overall infrastructure, with contingency plans, and the need to promote a national technology policy, with spectrum allocation, to foster technological development. Finally, the wider issue of convergence between communications and radiodiffusion services needs a co-ordinated policy framework, in Brazil as well as in other countries. However, there is currently no specific regulatory agency for broadcasting where services are still under direct ministerial responsibility.

In the transport sector, several entities are in theory charged with developing and implementing transport policy. These are the Ministry of Transport, the National Council for the Integration of Transport Policy (CONIT, which has not yet been effectively put in place), the Department of National Transport Infrastructure (DNIT), an Autarchy under the Ministry, the Ministry of Cities (for urban planning), ANTT, and the National Waterway Transportation Agency (ANTAQ). Such a fragmented approach, in a national federal state the size of a continent, with ministries and agencies often lacking crucial staffing resources, presents significant challenges for adequate policy formulation in this field. The public authorities, including the Ministry, as well as even the Civil House of the Presidency, are heavily involved in the debate, for example questioning the terms of the auctions for

the new highways – with some success however, since the new auctions seem to be realised under more favourable conditions for the public than the previous ones.

The energy sector is comparatively better endowed, with the National Council for Energy Policies (CNPE) and the Ministry of Mines and Energy (MME) relying on strategic 25-year planning. In energy, these strategic policy-making functions have been re-established with the EPE (Energy Research Enterprise) providing the planning (see energy sector discussion). However, the corresponding capacities are still lacking in the transport sector, where the ministry has to rely on analytical resources from the armed forces as well as academic units. As a result, a significant hiring of qualified technical staff has been decided in 2006-07 with over 600 management specialists to be hired by the infrastructure ministries. In addition, a new body of 300 professional engineers' careers was created by Law 11 539 of 8 November 2007 within the public service to ensure the availability of the necessary expertise.

The issue of management contracts

Management contracts are a specific Brazilian issue. The law creating some of the regulatory agencies had established management contracts between the Executive and the agency. These exist only for ANEEL, ANVISA, ANA and ANS among the agencies studied at the moment. The reports on these management contracts have to be included in the annual reports. In the case of ANS and ANVISA, the non-fulfilment of contractual obligations could result in the dismissal of the president of the agency. In the Brazilian debate, some parties argue that the management contract could act as a mechanism ensuring accountability and facilitating interaction between the regulator and the Executive, if properly designed. However, while such a mechanism is peculiar to Brazil, the potential for it to undermine the autonomy of the agency appears to be obvious, offering the possibility of political interference. The fact that such contracts exist in the health field is not by chance, and in a sense may even make sense given the policy setting in this sector. While ANS (and possibly ANVISA) are considered as part of an integrated health policy strategy, the argument for the independence of the regulator in that sector does not appear to be as strong as for other sectors.

In the case of the ANEEL, management contracts were formed for successive periods of four years, with yearly reports on achievements. For 2008, the management contracts result in a detailed set of 14 objectives to be accomplished, to address the seven key challenges. The extent to which each objective is reached is quantified and aggregated in a single indicator. A retrospective assessment of the achievements for 2006 showed a rate of achievement over 80%, reflecting general satisfaction. In spite of these satisfactory achievements, the agency has continued to be affected by financial resource restrictions that have affected the work of the agency. However, the period of 2006-07 shows signs of improvement, with further flexibility to recruit qualified staff to strengthen the agency. A previous report by the World Bank PPIAF on the energy sector (2002, 2004) has already recommended that the practice of having a performance contract should be discontinued.

Currently, it seems that even ministries in other sectors clearly have reservations regarding such contracts. The Ministry of Energy seems opposed to them, and the Ministry of Communications expressed its reservations pending clear effects from such contracts. The Ministry of Transport considers that it could be an interesting instrument, but one that may need to be checked in practice to see whether it could help to control the activities of ANTT and ANTAQ.

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Box 6.2. **The New law for regulatory agencies, Law Proposal 3 337**

The project of a new law for the regulatory agencies intends to harmonise the operation of these agencies across policy areas. General laws exist for the whole federal public administration of the direct and indirect administration, but they do not deal with the general matters of the regulatory agencies: Law 9 784, from 29 January 1999, limits itself to setting specific rules for the administrative process within the realm of the Federal Public Administration, and Law 9 986, from 18 July 2000, regulates only the management of Human Resources of the agencies.[1]

In March 2003 an Interministerial working group was established, by order of the President, to analyse, discuss the organisation of, and propose measures for the improvement of the institutional model of the agencies. This sent an important signal that the government intended to consolidate the institutional basis of the agencies and to strengthen their impartiality.[2] A clarification of the respective roles of agencies and ministries was deemed urgent given the policy debate. This resulted in a report on the "Analysis and Evaluation of the Role of the Regulatory Agencies in the Current Brazilian Institutional Arrangement" (*Análise e Avaliação do Papel das Agências Reguladoras no Atual Arranjo Institucional Brasileiro*), ratified by the Ministers of the Committee of Policies of Infrastructure and of the Committee of Economic Policy. This was intended to guide the action of the Federal Government in the regulatory area and to drive forward the improvement of the institutional model for economic regulation in Brazil.

In 2004, the Federal Government sent to the National Congress the aforementioned draft Bill of Law 3 337, which "Concerns the management, organisation, and social control of the Regulatory Agencies, adds and alters dispositions of previous laws[1] and makes other provisions". The main points of the Law Bill (first version) were:

- The restitution of the granting power (*Poder de Outorga*) from the agencies to the Ministries, since the formulation of public policies should be exercised by the direct administration.
- The harmonisation of the terms of the directors for four years with one possibility of reappointment.
- The increase of social control and transparency with the effective institution and implementation of the management contract and the obligation of public hearings, notice and comments procedures when new decisions are being issued.
- The creation of Ombudsmen Offices (*Ouvidorias*), separated from the directors' boards in all the Agencies.
- The interaction between the regulatory agencies and the Brazilian system for the defence of competition (SDBC).
- The interaction between the regulatory agencies and the state, Federal District, and municipal regulatory bodies and among themselves.

However, the management contracts generated much controversy, and a new modified proposal was issued as a result. The creation of the *Ouvidors* (Ombudsmen) as established in the PL is still raising concerns and debates. At the time of writing, the project was still being debated in Parliament.

1. Laws 9 472 from 16 July 1997, 9 478 from 6 August 1997, 9 782 from 26 January 1999, 9 961 from 28 January 2000, 9 984 from 17 July 17 2000, 9 986 from 18 July 2000, and 10 233 from 5 June 2001, of the Provisional Measure 2 228 1 from 6 September 2001.
2. See Dos Santos, 2004.

Therefore, the potential inclusion of such management contracts in the New Law Bill was highly controversial, and was analysed by many, including the OECD (2005), as an attempt to curb the independence of the newly established authorities. Many criticisms were issued following the first draft of the proposal for a general regulatory framework by the Interministerial Report preparing the New Law Bill. This first version stipulated that the Directory Board of the Regulatory Agencies should sign management contracts with the respective ministry in the terms of §8, Article 37 of the Constitution.[9] However, it is clear that the Constitution was not intended to design contracts as tools to reduce the autonomy of agencies, as part of this article says that the autonomy of entities of the public administration (regulatory agencies in this case) "may be amplified by means of contract". The first version of the Law Bill established that the agency would have to present bi-annually management and performance reports, and the duration of the contract would be one year. According to Aragão, "the management contract of the Law Bill draft violates the two characteristics imposed on contracts by the constitution: *a)* consensual/free negotiation, with the possible consequence of the non-conclusion in the case of unsuccessful negotiation, and *b)* the need for contracting entities to freely engage in the contract".

A new version of the Law Bill was being discussed in the Deputies' Chamber at the time of this writing. In this version, the management contracts would be withdrawn and be replaced by the Strategic Working, Management and Performance Plans. The *Strategic Working Plan* refers to long-term planning with a four-year duration and in accordance with the Pluri-annual Plan. The Management and Performance Plan is the annual step implementing the Strategic Working Plan, with short-term planning for the agency. Another important change is that while the Annual Report of activities must be forwarded to the Ministry, thematic commissions of the National Congress will be in charge of evaluating the accomplishment of the targets. While this new mechanism appears to offer less scope for undermining agency autonomy than the previous one, the need for direct four-year planning in a market economy may be questioned. Such planning mechanisms have been abandoned in many European countries. In some fields, such as transport and energy, there is a real need for even longer-term planning – up to ten or even 25 years – while in others, such as telecommunications, unpredictable market dynamics and rapid technological change may require short-term opportunistic responses. However, possibilities of annual revision exist with these proposed 4-year *Strategic Working Plans*.

The system for appeals and relationships with the judiciary

The existence of procedures to appeal against administrative decisions taken by regulators is a legal and democratic requirement that helps to ensure efficient regulation. Transparent appeals procedures prosecuted within reasonable time limits enhance the quality of regulation. In Brazil as in many OECD countries, the Constitution provides for access to appeals for any individual, following Clause XXXV in Article 5.[10] There is also only one single order of jurisdiction and no distinction between administrative and judicial courts. As a result, regulators are also to be held accountable to the judiciary. However, this requires effective arrangements for appealing the regulator's decision. The option to appeal to the judiciary is fraught with difficulties given the issues faced in the judiciary in Brazil, as in many other middle-income countries. One of the main concerns lies with the unpredictability and the slowness of the judiciary. The slowness of justice is at the centre of the debate about reform of the Brazilian judiciary branch. This slowness is perceptible in

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the high rates of congestion, which are responsible for the delays of the processes (ten to 20 months in the Lower Courts, 20 to 40 months in the Appeals Court, and 20 to 40 months in the Special Courts). The excess of litigations and the slowness of Justice have resulted in a costly judicial system. A study from the World Bank in 36 countries has shown that Brazil has the highest cost (3.66% of its budget) for the maintenance of the judicial system, whereas the average of all the countries is 0.97%. Some issues related to the judicial system have also been discussed as part of the chapter on quality regulation.

In Brazil, petitions for review of federal agencies' actions are heard by the federal courts of first instance. By law, challenges to actions of the regulatory agencies must be filed before the court, located in Brasilia. The first instance judge has authority to adjudicate most claims, including claims where a statute has been applied in an unconstitutional manner, but excluding claims where a statute is unconstitutional; they may also conduct preliminary proceedings to generate evidence and supplement the factual record. Appeals by the party or the agency from a decision by a first instance judge are logged to the Court of Appeals of the geographic region of the initial judicial decision. There are five regions in Brazil, each with a multi-member regional Court of Appeal. Appeals are heard first by a "panel" of the court and then may be appealed further to a "section" of the court. The number of judges in a panel or section is fixed by the internal rules of each regional court. Appeals from the regional Courts of Appeal are logged to the Superior Court of Justice (STJ). In this superior court, appeals are likewise heard first by a panel and then by a section.

Cases involving claims of unconstitutional statutory application may be appealed beyond the Superior Court of Justice to the Supreme Federal Court (STF). The STF is composed of 11 judges and addresses only constitutional issues. Specific parties, including Public Prosecutors, are authorised to raise specified constitutional claims, including claims that a statute is unconstitutional as written, directly to the STF without first proceeding through a first instance court. In the STF, cases on appeal from lower courts are heard first by a panel and then, if appealed further or certified by the assigned panel, are adjudicated by all 11 judges in plenary session. Cases filed directly in the STF are heard in the first instance by all 11 judges.

In Brazil, as in many other OECD and non-OECD countries, the general branch of the judiciary may be ill-equipped to deal with disputes concerning the regulation of infrastructure sectors. In recent years, the courts were invited, often by private parties or concession holders, to interfere in regulatory decisions in the telecom, transportation and electricity sectors. For example, ANTT has had to deal with approximately 2 000 judiciary processes since its creation in 2001, 60 to 70% of which are related to its supervisory activity. Another example is the adjustment of the fees of the fixed telephone services. The public civil action was filed in June 2003, the sentence was passed in July 2004, and only in October of that year did the final court revoke the decision, to which no other appeal is possible. As a result, a decentralised judicial system, combined with a real federal structure, has allowed opponents of the majority political coalition to commence actions in the judiciary branch to paralyse, at least temporarily, the implementation of high-impact national policies. The economic-administrative law appears to be relatively flexible, with relatively imprecise rules, which give enough room for manoeuvre to regulators for arbitration and for enforcement functions.[11] This flexibility is required in order to allow high-quality decisions that are technical and specialised in character.

The result in theory is that judicial decisions should not be based on the merits, but might focus on procedural and due process aspects. Empirical research into actual judicial decisions tends to show that it is not the case (Pinheiro, 2003). The results suggest that judges tend to consider non-economic matters when deciding about issues concerning the regulation of public utilities, and that their decisions investigate the merits of the decision. This tendency can be mitigated by an advocacy approach, as is currently done by the SEAE in the competition arena, in order to improve mutual understanding between the judiciary and the competition-regulation sphere.

There are several possibilities to reinforce the efficiency of the judiciary. At a general level, given the growing importance of the judiciary, the institutional changes that have been carried out aimed mainly at the mitigation of the procedural prerogatives of lower court judges, notably the limitation of the power to grant temporary injunctions and advance protections against the Government. This strategy involved implementing changes within the sphere of the rules concerning the decision-making process in the judicial system seeking to centralise that process. The objective of those tools is combined with the perception that the system of diffuse constitutionality control, through which any judge may interrupt governmental programmes due to supposed unconstitutionality, may need to be relaxed. Similar issues have been faced in Mexico with the Amparo system. Thus, in matters concerning reiterated decisions of the Federal Supreme Court related to the impact of the Federal Constitution, the Supreme Court may adopt binding decisions in relation to lower judges and courts and the whole public administration. The constitutionality incident is based on the presupposition that a constitutional matter should be removed from the inferior courts to be concentrated in the Federal Supreme Court.

Another important achievement was the suppression of preliminary injunctions against the Public Power centralising the definitive decision in the Federal Supreme Court or in the Supreme Court of Justice (STF and STJ, respectively).[12] This served to centralise resources for the judicial decisions about matters that directly interest the Public Power. It reduced the transactional costs of contract execution, and not only because it delegated to a single body – the Presidency of the STF or STJ – the power to suspend preliminary injunctions, even those that had been reinstated or upheld by the plenary bodies of lower courts. As such a verdict has a force of *res judicata*, its effects could be extended to other cases with the same object or cause of action.[13]

There are also several proposals to reform the judiciary branch in the National Congress. In December 2004 the "Pact for a Faster and more Republican Judiciary Branch" was signed, and 26 bills of laws were sent to the National Congress. The most important of the projects are those dealing with civil execution (Bills of Laws 052/04 and 4 497/04), repetitive subjects (Bill of Law 4 728/04), repetitive precedents of appeals (Project of Complementary Law 90/05) and the end of the suspensive effects of the appeal (Project of Complementary Law 136/04). Besides, Constitutional Amendment 45, with provisions about that matter, has been approved.

Concerning regulatory authorities, at least, all appeals from decisions by regulators and also CADE are treated in the same way by the judicial system. Concerning regulators, the proposed solution has been the one of creating Specialised Courts, emphasising the need of some type of co-ordination with the Federal Court, since the Constitution, in its Article 91, i, "d", gives the courts the possibility to propose Congress laws for the creation

of new jurisdictions, beyond those already foreseen in the Constitution. First instance courts can also be specialised but Regional Courts and Superior Courts, cannot be specialised in any case.

The system of Ouvidoria

Brazil also has a specific feature for holding regulatory authorities accountable to the public, and providing a speedier access in terms of appeal. This is in the form of an internal ombudsman to the agency, called the *Ouvidor*. The *Ouvidor* is intended to facilitate the relations between users of the public services and an administrative body. Their goal is to facilitate the resolution of conflicts on an independent basis (Pacheco, 2003).[14] In general, an ombudsman often functions as a "residual" jurisdiction when other forms of appeal are not available. It differs from other administrative appeals as it operates in a relatively informal way and with limited remediation powers.

In Brazil, the way in which the *Ouvidor* is appointed and is inserted in the governance framework of the agency is crucial to determining its role and impact in terms of accountability but also in terms of limiting the autonomy of a body. At the moment, the figures of the *Ouvidor* vary across the agencies. In ANATEL, the *Ouvidor* is appointed by the President of the Republic for a two-year term; in ANEEL the task is under one of the directors' responsibility. In ANS, the *Ouvidor* is also appointed by the President and is to produce reports according to Decrees. In the ANTT, the *Ouvidor* is nominated by the government for a three-year term. Pó and Abrucio (2006) point out that while in ANS, ANEEL and ANTT the *Ouvidor* is only supposed to attend to the needs of the public, in ANATEL they could participate in the board meetings and have access to documents, even if they cannot make them public. This obviously goes beyond the tasks that should normally be attributed to an ombudsman, and is reinforced by the fact that they are nominated by the President, which gives them conflicting legitimacy with the board of the agency.

The New Law Bill 3 337 will tend to generalise the figure of the *Ouvidor*, and will have it appointed by the President and confirmed by the Senate, without the possibility of reappointment. According to the proposal the ombudsman will act together with the board of the agency, with no hierarchical subordination. The *Ouvidor* will have responsibility over the services provided by the agency and will accompany the internal process to examine public complaints against it. The *Ouvidor's* reports will have to be forwarded to the agency's board, and thereafter to the Ministry of Finance, the Ministry of Planning Budget and Management, the Civil House, the National Congress and the Audition Court, and then be published on the Internet. One difference was that in the original project the *Ouvidor* could be dismissed by the President if the latter is authorised by the Senate. In a modified version of the New Law Bill, the *Ouvidors* have received the same guarantee of stability as the directors of the agencies.

This specific process for appointment and the institutionalisation of the *Ouvidor* are unheard of in other OECD countries. Fears have been expressed in Brazil that the *Ouvidor* could become a "watchdog" by the Executive, introducing *de facto* a double line of command in the agencies. The Brazilian association of regulatory agencies, ABAR,[15] expressed the view that the bill will create the possibility of permanent interference, instead of using it as a purely intermediary measure facilitating the relations between the users, the regulated firms and the public administration.

Relationships with the Legislative

In many OECD countries, regulatory authorities wish to maintain a healthy dialogue with Parliament as part of the democratic debate and also to signal their independence from ministries. In Brazil, the budgets of the agencies are approved by the National Congress, as part of the Annual Budget Law (*Lei Orçamentária Anual* – LOA). Under Article 49 of the Constitution, Congress has the competence to control the acts of the Executive Power, including of the indirect administration. According to the Constitution, the Legislative also has the competence to supervise the performance of the Regulatory agencies[16] and halt the agency's normative acts that may not be in accordance with the parameters and objectives established by law. In addition, the creation Law of the Agencies and the Law Bill 3 337 establishes that external control will be exercised through the National Congress assisted by the TCU. In the current version of the Law Bill, the formulation states however that the assessment by the TCU cannot interfere on the basis of merit of the decisions of the agencies.

In Brazil, the heads of the agencies do not testify in Congress. However, in the case of communications, they are frequently invited by Congress to explain specific matters or participate in public audiences. The Annual reports of the agencies are not subject to a public debate either. This may contribute to a lack of understanding on behalf of the Parliament of the technical matters of regulation in those sectors. In many other OECD countries, enhanced dialogue can help to explain the principles under which the agencies operate, and to foster transparency. This also helps to draw the attention of Parliament to regulatory quality matters. In some cases, sectoral laws offer specific provisions. For example, the telecommunications law establishes that ANATEL has to prepare an annual report to be sent to the Ministry of Communications, to the President and also to Congress.

Direct dialogue with citizens and the media

Brazil is already in a consolidation stage of democratic reforms brought about by the 1988 Constitution, with vibrant debates in Congress and also over the Internet and the medias. However, given the size of the country, and the lack of inclusion of some parts of civil society, ensuring a wider public debate and an effective communication strategy represents a significant challenge. A significant share of the population does not have access to the Internet and regulatory issues are new for many. Regulatory authorities must establish and maintain their reputation in this debate. Dialogue with citizens and the media is an important means of bolstering the legitimacy of agencies, particularly if their remit is to gain greater independence. For the moment this is partly done through the overall professional association of agencies, ABAR, which represents states and a few federal agencies, business and consumer associations. The precise impact of the communication of each of the agencies, considered individually, is hard to assess beyond specific professional circles.

All the regulators studied have Internet sites providing key information to citizens and firms. Reports are systematically published on these sites, which also provide press releases and conferences. The websites of the National Congress also have a lot of information. The debates on regulatory agencies are publicly available. However, the consumer voice needs also to be more firmly established, both to exert pressure on the agencies and to consolidate their action in relation to the regulated interests in the sectors. However, aspirations towards greater openness must aim to strike a balance between

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public consultations to enhance the legitimacy of regulators and the organisation of confidential meetings, particularly when major public or private interests are at stake.

At the national level, transparency and publicity over regulatory authorities represent an appropriate way to invite civil society into the debate. The launching of the Growth Acceleration Programme (PAC) and the recent auctions on roads also gave an opportunity to stimulate the debate on regulatory authorities. However, the crisis in civil aviation experienced in mid-2007, while it increased media coverage of the issue, also presented significant risks of setback, with a possible politicisation of the issues following discussions in Congress. This would require significant assessment, and insight into the follow-up to similar crises in other countries, as was the case in Switzerland. Instead of greater politicisation, a foreign agency in that country was commissioned to perform a thorough technical assessment, which resulted in greater technical autonomy accorded the management bodies. However, in Brazil, there is a need for the wider public to better understand the importance and role of the regulatory agencies.

Human and financial resources

Adequate human and financial resources are important factors to ensure the professionalisation and autonomy of regulators. One of the main factors in independence is the technical expertise of staff. Agencies need to be able to formulate independent opinions on issues without having to call upon external skills.

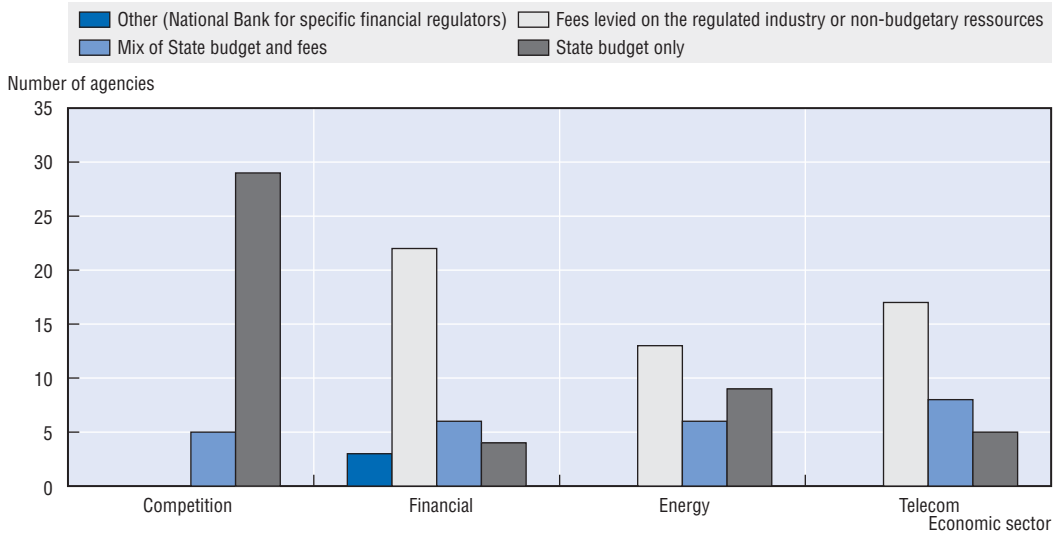
Financial resources

Regulators need a clearly defined budget of their own to support regulatory stability and autonomy, which is ideally ring-fenced from the rest of the government budget so that there is no ability or incentive for the government to use it for other purposes, or to withhold it.[17] In Brazil, as in other OECD countries, regulatory authorities are funded either out of the federal budget or by specific charges levied on the sector. The resources of regulatory authorities generally represent a modest budgetary expense from a macroeconomic perspective. The possibility of funding from non-budgetary sources tends to enhance authorities' independence from the political pressures, but it can increase their economic dependence on the sector.

Legally, Brazil's system follows this approach. The resources for the agencies are specified in each of the sectoral laws, which specify in theory a mix of budgetary resources and specific fees. The actual budget plans have to be approved in the Annual Budget Law (*Lei Orçamentária Anual* – LOA). In the early years of their implementation, the agencies tended to be better resourced than the ministries in technical staff, as they recuperated many of the staff previously involved in the public incumbents, for example *TELEBRÁS* staff transferred to ANATEL in the telecommunications sector. This raised some tensions.

However, recent practice is different. The Finance Ministry regularly holds back a significant part of the revenues: the actual resources to be allocated to the agencies were less than planned in recent years, due to mechanisms of "contingency", aimed at achieving fiscal balance (*superávit fiscal*). This has resulted in difficulties for the agencies to accomplish the objectives established according to the defined budget, although results vary from sector to sector. A study by ABDIB (2006) concluded that the contingency had been more stringent in recent years. This had been compounded by delays in receiving the

Figure 6.4. **Sources of funding for regulatory authorities in OECD member countries**



Note: Number of countries with such characteristics.

Source: OECD (2005), "Designing Independent and Accountable Regulatory Authorities for High Quality Regulation", Proceedings of an Expert Meeting in London, United Kingdom, 10-11 January.

actual resources, and had impacted on the agencies' technical capacity. It also had implications for the design of efficient technical bodies to train qualified staff.

In the electricity sector, ANEEL's main funding is from the Electric Energy Services Supervisory Tax (*Taxa de Fiscalização de Serviços de Energia Elétrica* – TFSEE), prescribed by law. The situation is similar to many other OECD countries (see Annex 6.A1, Tables 6.A1.4). The tax is equivalent to 5% of the value of the revenues achieved by licence holders, and is paid by consumers as part of their electricity bill. ANEEL sets the annual value of the TFSEE for each agent, based on relevant data and proportional to the scope of their concession. TFSEE receipts have increased significantly over time, and actual receipts have been significantly higher than estimates every year. In the case of ANEEL, it is estimated that the proportion held back has risen from 36% in 2002 to 62% in 2006.[18] This is at a time when ANEEL was behaving in a relatively independent way in the institutional landscape in Brazil. While it should be acknowledged that TFSEE receipts are more than ANEEL needs, the part withheld was much too high, damaging ANEEL's ability to carry out even its basic duties.

In the telecommunication sector, expenses of ANATEL are covered by FISTEL (*Fundo de Fiscalização das Telecomunicações*), composed of a federal budget appropriation (10% of ANATEL's total budget in 2006) and fees, mainly from licences, authorisations and fines. This budget was also subject to contingency measures. These appear to be even more stringent. Due to the rapid expansion of the telecommunications market, the share of the budget actually spent was strictly reduced in recent years, and only represented 10.1% of the theoretical budget in 2005.

In the transport sector, ANTT is financed by own resource – inspections and monitoring services, administrative services, fines – and by public funds as well as loans from the World Bank, linked to private sector involvement with major infrastructure. The contingency measures also affected ANTT but more at the beginning than in recent years.

Table 6.1. **Impact of the fiscal contingency on ANATEL**

	Share of the approved budget actually spent by ANATEL %
1998	40.2
1999	64.3
2000	41.1
2001	36.8
2002	31.1
2003	32.4
2004	25.4
2005	10.1

Source: ADBIB.

In the transport sector, there has been a significant increase in resources allowed to ANTT, which have more than doubled over four years due to the positive perception of ANTT's impact on the sector and the continued need for concessions for major infrastructures. Therefore, the contingency was more an issue of fine-tuning, progressively allowing the agency to properly develop.

Table 6.2. **ANTT approved and actual resources in recent years**

	Approved budget (BRL)	Accomplished budget (BRL)	Execution %
2002	112 528 878	45 987 662	40.9
2003	97 730 428	64 437 656	65.9
2004	110 704 604	85 153 073	76.9
2005	114 139 633	87 709 168	76.8
2006	137 412 980	104 412 766	76.0

Source: ADBIB.

In the case of private health insurance ANS financial resources come from insurer's fee – 35% – and from the National Treasure (government allocations). This situation is similar to that of OECD countries (See Annex 6.A1, Table 6.A1.6). Their collection comes from the Supplementary Health Tax and fines collection. In recent years, ANS has experienced a steep increase in its resources, as it is thought to be part of the Ministry of Health strategy for the sector, and the provisions ensuring the independence of ANS are relatively limited compared to other sectors.

Human resources

Regulatory authorities need to have a sufficient number of motivated and highly skilled staff to be able to carry out their duties as effectively as possible. Adequate human and financial resources are essential for securing a regulator's autonomy from ministries and regulated companies. This poses issues in Brazil where the professionalisation of part of the civil service was occurring over recent years and where a significant part of the administration suffers shortages of qualified technical staff. The technical expertise of regulatory staff is also key to ensuring that a view independent of the companies can be taken on issues and that there is no temptation for other institutions to second-guess the regulator's work. For example, this appears to have happened with the TCU comments on the methodology for distribution tariffs established by ANEEL, as reported by IDEC.

As well as specific competencies in economics, law, and accounting, staff should include industry and consumer experts. The staff is a mix of statutory personnel, selected by public competition, following the Law 8 112/90, and outsourced personnel who follow the general labour rules. Outsourced staff members are employed following rules for public procurement. Salaries are constrained by public sector rules, and the recruitment and retention of high-quality staff is therefore an issue because the regulator is competing in the same labour market as the regulated companies. This affects the quality and timeliness of regulators' decisions and involves Directors in technical issues that they should not have to address. Operational difficulties and some judicial orders have prevented the agency from building a strong basis of permanent staff, which leads to a high turnover of employees and in turn prevents the agency from institutional building. The premature loss of staff is a waste of training. These issues had already been identified by the World Bank in 2004.

Following this diagnosis, the discussions over the modernisation of the regulatory framework, undertaken as part of the Interministry group also indicated the need to strengthen the regulatory agencies and the sectoral ministries. Their first step was already taken in 2003, through the issuance of the Provisional Measure 155, from 23 December 2003, dealing with the creation of careers and the organisation of effective positions of the regulatory agencies, and positions in the ministries responsible for the supervision of those agencies. The measure was converted into Law 10 871, from 20 May 2004, by the National Congress.

At the moment ANEEL has a staff of 645 professionals, made up of regulatory specialists, including 43 economists and 33 lawyers, and supporting technical and administrative staff. There is a mix of regular public administration staff, staff on loan from other organisations (it has a staff-sharing agreement with EPE and CCCE), independent consultants, and others such as federal lawyers seconded for a period to ANEEL. There is no provision for ANEEL to recruit its own staff on different terms and conditions from those of the public administration.

ANATEL is the largest of the agencies studied, with 1 532 workers, including 74 professional economists, and 88 lawyers, engineers and supporting technical and administrative staff. About 66% of these employees have been hired through a public competitive examination. In the transport sector, the legislation implies the setting up of an effective team and the recruitment of specialised staff. According to the 2005 management report of ANTT, of 899 employees, only 490 were permanent employees hired through public examination. This had to do with the fact that after the analytical unit GEIPOT was closed and the Ministry of Transport lost the corresponding expertise, the agency had to compensate for part of these issues. ANS has approximately 732 staff, of which 363 are qualified civil servants, with 223 specialists in regulation a mix of economists, physicians, lawyers and administrative specialists.

Agencies are trying to strengthen their staffing base. For example, a permanent programme for capacity strengthening has been established by ANS (RA 11/2006), with internal and external courses of short and long duration. These activities are also oriented towards the wellbeing of staff, with techniques such as yoga and nutrition, which are part of a health-oriented approach. The development of staff has been given financial incentives by the Decree 5 827, 29 June 2006, which applies to all agencies, with a topping up of the basic salary, according to performance management and professional

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development. This offers an opportunity to acknowledge individual as well as collective professional achievements.

Rule of conflict of interest

The human resource management rules of regulators must make it feasible to achieve a certain degree of independence, not only with regard to ministries but also with regard to the private sector entities they regulate, by allowing them to settle conflicts of interest as satisfactorily as possible. Such issues are very important in OECD countries, but even more so in middle-income countries, where the risk of corruption and conflict of interest is higher given the increased gap between private market and public sector conditions.

These issues are only partly addressed in Brazil for the moment. There are strict conditions for being employed as a director or a commissioner. These duties as stipulated by the Article 117 of the Law 8 112/90, are not compatible with involvement in or management of private companies, civil companies, management boards, or units in which the state has a direct or indirect stake, and over which the regulator would have a responsibility. At these levels, no age limits apply.

While these represent strict rules on the integrity of the staff hired at the senior position in the agencies, the *cooling-off* period for Directors (prohibition on taking up employment in a related activity with companies) before they are allowed to take up a post with regulated companies after they leave was initially four months. During that time (short by international standards), they continue to be paid on equal terms. This is the main issue, as regulators can always be tempted to be influenced by specific sector interests when exerting their duties, in exchange for later compensation. Rules to this effect have been introduced in other countries; sometimes bans of up to five years are imposed to ensure that senior officials cannot be influenced in their regulatory decisions by concerns over their future professional career in the sector. This nonetheless requires matching adjustments to career paths within the public sphere. In Brazil, there is currently a Law Proposal 7 528/2006 intended to regulate the conflicts of interest concerning post-departure employment possibilities for those holding federal responsibilities. It would extend the cooling-off period to up to a year, except if explicitly organised by a public ethics committee or by the Comptroller General of the Union (CGU). However, this is only a proposal at present.

Policy implications

Consolidating the institutional foundations for regulatory authorities in Brazil is an essential task. Independence is normally seen as a means of meeting these long-term objectives; it creates an environment favourable to innovation and growth and by promoting confidence and transparency in consultation with the private sector. However, the notion of independence has found a difficult place in the policy debate.

The four agencies studied, which may reflect the institutional variety in Brazil at the moment, enjoy a certain degree of administrative autonomy – it is certainly greater for ANEEL and ANATEL than for ANTT ANS, being the least independent. For example, as a result, Salgado (2003) has classified ANEEL, ANTT and ANATEL as State Agencies, which regulate public services through the application of specific legislation, while ANS was classified as a governmental agency that follows governmental guidelines. However, these agencies are performing different missions in different sectors. While independence may

be crucial to attract long-term investment in core infrastructure sectors, it may be understood differently as autonomous decision making in healthcare, in the context of an integrated health policy. These agencies have various statutes, but these are not significantly different from some of the international aspects. However, in practice, the notion of independent decision making has been affected by several factors; some illustrate the challenges of public administrations in middle-income countries, and others are related to a lack of consensus on the exact role of authorities and on the merits of a privatised approach. In recent years, consensus seems to have been growing, in the midst of very active public debates. Agencies have also consolidated their positions, even if some of them had a rather rocky start. In spite of this, the agencies have often been in a position to progressively consolidate their authority in their respective sectors, in all four cases, building a reputation for integrity and correcting some of the market deficiencies, even if many challenges remain.

The debate on the New Law 3 337 illustrates the challenges of building consensus.[19] On some aspects, such as the management contracts, the law was rather controversial. Concerning other issues, the law provides a more rigorous and a more systematic framework, even if the provisions and the statutes cut the length of the terms for ANATEL, and also reduce somewhat the autonomy of ANEEL. The issue of the *Ouvidor,* and the exact role that it is supposed to play, remain an open issue. While it is certainly desirable to exert greater social control and so offer further opportunities to civil society to see its rights defended, the fact that this requires a double line of command, with presidential intervention as is currently envisaged in the New Law Bill 3337, may be debated. The Ouvidor is useful to make suggestions and defend consumers' interests, and their current prerogatives do not involve the institutional power to intervene in the agencies' decisions. It may also be possible to investigate the extent to which institutional processes may directly involve the consumers, the final clients and beneficiaries of these processes. Other issues may also require discussion, such as the responsibilities of regulators, their ability to inter-react with public opinion and parliamentary bodies, and efficient appeal procedures. Further professionalising staff and ensuring stable resources are also part of the unfinished policy agenda.

Notes

1. Meirelles quoted in Barroso, 2005.
2. According to the Brazilian answers to the questionnaire.
3. Although they were non renewable under the original law setting up ANEEL, subsequently modified.
4. An independent regulatory commission is an *independent regulatory agency* in the United States Government.
5. *E.g.* three commissioners from the President's party and two from the minority.
6. "*A politização das agências*" (Politization of the Regulatory Agencies), *Valor*, 15/08/2007, De Paula and Avellar (2007).
7. "Regulatory Governance in Infrastructure Industries Assessment and Measurement of Brazilian Regulators", 2006.
8. Available at *www.abdib.org.br/*.
9. "The managerial, budgetary and financial autonomy of the organs and entities of the public administration may be amplified by an interim contract, to be settled between its administrators and the public power, that has the goal of performance target settlement for the organ or entity,

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entitling to the law to arrange on: I – the duration of the contract; II – the controls and criteria of performance, rights, obligations and the heads' responsibilities evaluation; III – the remuneration of the staff."

10. The law cannot exclude from the judiciary the appreciation of offences or threats to someone's right.
11. *E.g.* Aragão, 2005.
12. The principle of the "double suspension" (Article 4, Paragraph 4, of Law 8 437/1992, with the phrasing given by the Provisional Measure 2 180-35/2001.
13. Article 4, Paragraph 8, of Law 8 437/1992, with the phrasing given by the Provisional Measure 2 180-35/2001).
14. "*A ouvidoria a serviço da sociedade*", M.V. Pacheco.
15. "*A Organização e o Controle Social das Agências Reguladoras*", ABAR, 2004.
16. Article 49, Federal Constitution.
17. The World Bank (2004) explains further that the financial impact of power sector regulation is greater than its budget, and that regulation should be seen as part of the overall operation of the sector rather than part of the cost of government. Diversion of funds for fiscal reasons amounts to using the revenues as tax revenues. Diversion of funds for political reasons compromises the agency's independence, as for example withholding funds to penalise the regulator for its decisions.
18. According to a 2006 University of São Paulo paper, "Challenges of the Regulatory Agencies", and based on ANEEL's own figures.
19. Confederação Nacional Da Indústria (2004).

Bibliography

ABDIB (2002), "Corte de verbas das agências reguladoras atingem bilhões de reais e prejudicam atividades de fiscalização e pesquisa", 3 July, available at *www.abdib.org.br*.

ABDIB (2007), "Agências reguladoras de infra-estrutura ficam cada vez mais tempo sem diretores", 15 February, available at *www.abdib.org.br*.

Aragão, Alexandre Santos (2004), "A legitimação democrática das agências reguladoras", *Revista de Direito Público de Economia*, Vol. 2(6), pp. 9-26, April/June.

Aragão, Alexandre Santos (2004), "O contrato de gestão e a ouvidoria no anteprojeto de lei sobre a gestão, a organização e o contrôle social das agências reguladoras", expert's opinion, Associação Brasileira de Agências de Regulação.

Aragão, A. S. (2005), "Agências Reguladoras e Governança no Brasil" in Salgado, L. H. E Motta, R. S. (ed.). *Marcos Regulatórios no Brasil: o que foi feito e o que falta faze,* Rio de Janeiro, IPEA.

Aragão, Alexandre Santos (2005), "Considerações sobre o contingenciamento das agências reguladoras", *Revista Regulação Brasil*, ABAR, No. 1.

Barroso, Luis Roberto (2005), "Constituição, ordem econômica e agências reguladoras", *Revista eletrônica de direito administrativo econômico*, No. 1, February/March/April, Bahia, Brazil.

Binenbojm, G. (2006), "Agências Reguladoras Independentes e Democracia no Brasil" in Binenbojm, G. (co-ord.), *Agências Reguladoras e Democracia*, ed. Lúmen Júris, Rio de Janeiro.

Calil, L. (2006), "O Poder Normativo das Agências Reguladoras em face dos Princípios da Legalidade e da Separação de Poderes" in Binenbojm, G. (co-ord.), *Agências Reguladoras e Democracia*, ed. Lúmen Júris, Rio de Janeiro.

Confederação Nacional Da Indústria (2004), *A experiência internacional das Agências Reguladoras e a avaliação da proposta de Lei geral brasileira*, CNI, Brasília.

Dos Santos, Luiz Alberto (2004), "Regulando a regulação: a nova legislação das agências reguladoras federais", IX Congresso Internacional del CLAD sobre la Reforma del Estado y la Administración Pública, Madrid, España, 2-5 November.

Gaetani, F. (2002), "Políticas de Gestão Pública para o Próximo Governo" in *Res Publica – Revista de Políticas Públicas e Gestão Governamental*, September, Ano I, No. 1.

Gaetani F. (2003a), "As Iniciativas de Políticas de Gestão Pública do Governo Lula", mimeo, S/d.

Gaetani, Francisco (2003b), "O governo Lula e os desafios da política regulatória no setor de infra-estrutura", VIII Congresso Internacional del CLAD sobre la Reforma del Estado y la Administración Pública, Panamá, 28-31 October.

Gomes, J. B. B. (2006), "Agências Reguladoras: A 'Metamorfose' do Estado e da Democracia (Uma Reflexão do Direito Constitucional e Comparado)" in Binenbojm, G. (co-ord.), *Agências Reguladoras e Democracia*, ed Lúmen Júris, Rio de Janeiro.

Marques, F. de A., "Regulação Setorial e Autoridade Antitruste: A Importância da Independência do Regulador", mimeo, S/d.

Meirelles, Fernanda and Oliva, Rafael (2006), "Delegação e contrôle político das agências reguladoras no Brasil, Revista de Administração Púbica", Vol. 40 (4), July/August, pp. 615-630.

Moreira Neto, D. de F. Direito Regulatório (2003), *A alternativa participativa e flexível para a administração pública de relações setoriais complexas no estado democrático*, Chapter IX, Rio de Janeiro: Renovar.

Neto, C. M. Da S. P. E Correa, P. (2006), "Delegação de Funções para Agências Reguladoras Independentes: Mudanças Propostas pelo Projeto de Lei 3 337/04" in: Binenbojm, G. (co-ord.), *Agências Reguladoras e Democracia*, ed. Lúmen Júris, Rio de Janeiro.

Oliveira, G.; Fujiwara, T.; Machado, E. L. (2005), "A Experiência Brasileira com Agências Reguladoras", in Salgado, L. H. E Motta, R. S. (ed.), *Marcos Regulatórios no Brasil: o que foi feito e o que falta fazer*, IPEA, Rio de Janeiro.

Peci, A., Scelza Cavalcanti B. (2002), "A outra face da regulação: O cidadão-usuário de serviços no novo modelo regulatório brasileiro", *Revista de Direito Publico da Economia RDPE*, July Sept. pp. 9-28.

Pinheiro, Armando (2003), "Judiciário, reforma e economia: a visão dos magistrados, texto para discussão 966", IPEA, available at *www.febraban.org.br/Arquivo/Destaques/Armando_Castelar_Pinheiro2.pdf*.

Pinheiro, Armando Castelar (2005), "Reforma regulatória na infra-estrutura brasileira: em que pé estamos?, in Marcos Regulatórios no Brasil: o que foi feito e o que falta fazer", organised by Lucia Helena Salgado and Ronaldo Seroa da Motta, IPEA.

Pó, Marcos Vinícius and Abrucio, Fernando Luiz (2006), "Desenho e funcionamento dos mecanismos de controle e accountability das agências reguladoras brasileiras: semelhanças e diferenças", *Revista de Administração Púbica*, Vol. 40 (4), July/August, pp. 679-698.

Prado, M. M. (2006), "Accountability Mismatch: As Agências Reguladoras Independentes e o Governo Lula" in Binenbojm, G. (co-ord.) *Agências Reguladoras e Democracia. Rio de Janeiro,* ed. Lúmen Júris.

Salgado, Lucia Helena (2003), "Agências regulatórias na experiência brasileira: um panorama do atual desenho institucional", IPEA, texto para discussão 941.

Saravia, Enrique (2004), "Controle da regulação: problemas e possíveis soluções", IX Congresso Internacional del CLAD sobre la Reforma del Estado y la Administración Pública, Madrid, España, 2-5 Nov.

ANNEX 6.A1

Institutional Aspects of Regulatory Authorities

Table 6.A1.1. **General description of selected regulatory authorities at federal level**

Authority/Sector	Dates	Laws	Regulated sectors	Institutional framework and status
Telecommunications National Telecommunications Agency (ANATEL)	1997	General Telecommunications Law (Law 9 742). Law 8 977 concerning cable TV. Law 9 998 instituting FUST. Law 5 070 created the Telecommunication Inspection Fund.	ANATEL is responsible for the regulation of telecommunications markets in general (excluding broadcasting services).	Member of the Indirect Federal Public Administration, connected to the Ministry of Communications. The Agency is legally qualified as a "special autarchy", characterised by administrative independence, absence of hierarchical subordination, financial autonomy and stability of the members of the Board of Directors, who are submitted to a fixed term of office.
Power Sector National Electricity Energy Agency (ANEEL)	1996	Law 9 427	Production, transmission, distribution and commercialisation of energy	Member of the Indirect Federal Public Administration, connected to the Ministry of Mines and Energy. The Agency is legally qualified as a "special autarchy", characterised by administrative independence, absence of hierarchical subordination, financial autonomy and stability of the members of the Board of Directors, who are submitted to a fixed term of office.
Land Transport National Land Transport Agency	2001	Law 10 233	Interstate and international road passenger transport. Passenger and freight railway transport. Road freight transport. Federal roads granted to the private sector. Multimodal transport.	Member of the Indirect Federal Public Administration, connected to the Ministry of Transport. The Agency is legally qualified as a "special autarchy", characterised by administrative independence, absence of hierarchical subordination, financial autonomy and stability of the members of the Board of Directors, who are submitted to a fixed term of office.
Supplementary Health National Supplementary Health Agency	2000	Law 9 961	Supplementary health market (the private health insurance operators).	Member of the Indirect Federal Public Administration, connected to the Ministry of Health. The Agency is legally qualified as a "special autarchy", characterised by administrative independence, absence of hierarchical subordination, financial autonomy and stability of the members of the Board of Directors, who are submitted to a fixed term of office.
Competition Policy Administrative Council of Economical Defence – CADE	1962, 1992	Law 4 137 Law 8 884	Defence of competition.	Independent governmental agency within the structure of the Ministry of Justice. Despite not being a regulatory agency, the councillors of the CADE are appointed for a two-year mandate (and there is the possibility of one extension, of an equal period) and, therefore, can only be removed under very special conditions.

Source: OECD Secretariat, based on a specific questionnaire for supervisory bodies.

Table 6.A1.2. **Independence and financing of regulatory authorities**

Authority	Top management	Nomination	Mandate	Instructions	Staff	Budget 2006	Financing	Accountability
ANATEL	President-Director	By the Federal Government requiring approval from Senate.	5 years renewable	Yes		BRL 248.7 million	ANATEL's expenses, according to article 50 of the General Telecommunications Law, are covered by the Telecommunications Inspection Fund – FISTEL.	The General Audit Office. The Tribunal de Contas da União. Ombudsman office. ANATEL also issues an annual report that includes an evaluation on telecommunication management vision in Brazil. This report is available on the agency's website for consultation by any interested parties.
ANEEL	President-Director	By the Federal Government requiring approval from Senate.	4 years non-renewable	Yes	About 645 people in total. 43 economists and 33 lawyers.	BRL 311 million	The main source is the *Taxa de Fiscalização de Serviços de Energia Elétrica.*	Management contracts. The General Audit Office. The Tribunal de Contas da União. Ouvidor office.
ANTT	President-Director	By the Federal Government requiring approval from Senate.	4 renewable	No	Total of 1 027. 62 economists and 74 lawyers.	BRL 137 million	Own resources. Freight and transport services grant fines. Public funds.	The General Audit Office. The Tribunal de Contas da União. Ombudsman office. ANTT also issues an annual report which includes an evaluation on transport management vision in Brazil. This report is available on the agency's website for consultation by any interested parties.
ANS	President-Director	By the Federal Government requiring approval from Senate.	3 renewable once	Yes	Total of 732. 21 economists, 70 lawyers.	BRL 153 million (2007)	*Taxa de Saúde Suplementar* – TSS, and fines and National Treasury.	Management contracts. The General Audit Office. The Tribunal de Contas da União. Ombudsman office.

Table 6.A1.3. **Structure and independence of regulatory authorities in the energy sector in selected countries**

Regulator	Top management	Nomination	Dismissal	Mandate	Accountability
Argentina, ENRE	5-member Directorate composed of a President, Vice president and three members.	Appointed by the Executive; 2 of them are recommended by the Federal Council for Electricity.	Yes, although decision must be explained to a Congress commission.	5 years, renewable.	Annual report to the Executive branch of Government and Congress.
Australia, AER	3-member Board (1 Commonwealth member and 2 State/Territory members).	The Chair is appointed by the Governor-General; one of the members is a Commissioner of the ACCC, (Competition Council) another is selected by the States and Territories.	Yes, on specific grounds.	Governor-General determines length of mandate which may not exceed 5 years.	Responsible to ACCC. Annual report to Ministerial Council on Energy for presentation to Parliament.
Brazil, ANEEL	5-member Directorate composed of a President and four members.	The Director-General and Directors are nominated by the President, and the nominations are submitted for approval by the Senate.	There are strict provisions governing dismissal.	4 years, renewable.	ANEEL presents annual accounts to the Federal Court of Accounts (*Tribunal de Contas da União* – TCU), as do all the institutions of the federal public administration. The Federal General Controller (*Controladoria Geral da Uniao- CGU*), an audit body linked to the Presidency, also carries out periodical audits of the accounts of the Executive Power (*Poder Executivo*), of which ANEEL is a part. ANEEL's accounts are also sent to the MME, Senate and chamber of deputies (though this is not a legal obligation) and are published on its website. ANEEL interacts with the Senate and chamber via public hearings and technical meetings, and they can seek clarifications from the President and audit bodies. ANEEL also has its own internal audit, which monitors activities.
Canada, NEB	Active Chairman, Vice Chairman and a Board composed of up to 9 members.	The Governor in Council designates the Chairman and Vice Chairman.	Not specified.	7-year term renewable until a member reaches age 70.	Accountable to Parliament through the Minister of Natural Resources.
Chile, CNE	Council Commission composed of several ministers and headed by the Minister, President of the National Energy.	Appointed by the President.	Yes (by dismissing the appropriate minister).	The same as the legislature, 6 years.	Accountable directly to the President.
New Zealand, EC	A board of 4 to 8 commissioners, headed by the Executive Chair.	Appointed by the Governor General on recommendation of the Minister of Energy.	At any time at the discretion of the Minister of Energy.	3-year term.	Minister of Energy.
Norway, NVE	Director General.	Proposed by the Minister of Petroleum and appointed by the Prime minister0	Not specified.	6-year term renewable once.	Minister of Petroleum.
Spain, CNE	Administration council composed of a President, Vice President and 7 counsellors.	Public competition.	No	Not specified.	Accountable to the Ministry of Industry, Tourism and Trade.
United Kingdom, GEMA and OFGEM	- GEMA: Council composed of a Chairman and 10 advisors. - Ofgem: Chairman.	Appointed by the Secretary of State for Trade and Industry.	Not specified.	3-year terms.	Accountable to the Department of Trade and Industry .
United States, FERC	Up to 5 commissioners headed by a Chairman.	Appointed by the President with advice and consent from the Senate.	Not specified.	5-year terms.	Not accountable to either the President or Congress in order to guarantee their independence.

Table 6.A1.4. **Resource aspects of regulatory authorities in the energy sector**[1]

Country/regulator	Current staff	Latest budget (million USD)	Financing source
Argentina, ENRE	57	7.2	Inspection and control tax (which all generators, transmission companies and distributors must pay annually) and fines
Brazil, ANEEL	About 645 people in total. 43 economists and 33 lawyers	BRL 311 million	The main source is the *Taxa de Fiscalização de Serviços de Energia Elétrica*
Canada, NEB	280	38.5	Government appropriation (which is then reimbursed through fees and monies collected from regulated companies)
Chile, CNE	55	5.6	Government appropriation, *i.e.* part of the government's budget
New Zealand, EC	40	39.4	Government appropriation (fully reimbursed through fees and levies from regulated firms)
Norway, NVE	443	83.2	Government appropriation
Spain, CNE	174	32.9	National Government budget
United Kingdom, GEMA and Ofgem	300	71.8	Annual fees from licensed companies
United States, FERC	1 300	227	Federal budget appropriation (fully refunded from fees and levies charged to regulated firms)

1. This does not include the resources for sub-federal or sub-central levels of regulation. Some regulators cover more than the electricity sector.

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Table 6.A1.5. **Structure and independence of regulatory authorities in the private health insurance sector in selected countries**

Regulator	Top management	Nomination	Mandate	Accountability	Staff	Financing source
Australia: PHIAC	Council: A Commissioner and 2 to 4 other members	Minister for Health and Ageing	3 years	Accountable to the Minister for Health and Ageing	24	Quarterly fees from insurers
Brazil: ANS	Steering committee: President and 4 other Directors, plus a General Auditor, an Attorney General, and an Ouvidor	President of the Republic	3 years renewable once for directors.	Accountable to the Minister of Health	732	Government allocations and insurer's fees
Canada: OSFI	Superintendent of financial institutions	Employees are appointed in accordance with the Public Service Employment Act	n.a.	Subordinated to the Minister of Finance	450	Insurer's fees and a small government allocation
France: ACAM	9-member college headed by a President	The President is appointed by the French President	5 years renewable once	Accountable to the Conseil d'État (Highest Administrative Court)	185	Insurer's fees
Ireland: HIA	4-member board headed by the Chairman	Minister for Health and Children	n.a.	Accountable to the Minister for Health and Children	9, plus consultants	Levies on health benefits
Mexico: CNSF	9-member governing board headed by a President, supported by two Vice-Presidents.	The President is appointed by the Ministry of Treasury and Finance	Not set	Subordinated to the Minister of Treasury and Finance	About 200 managers	Surveillance and inspection service fees
Portugal: ISP	Board composed of a President, a Vice-president and two adjuncts	Board members proposed by the Minister of Finance and appointed by the Minister's Council	5 years renewable	Accountable to the Minister of Finance	n.a.	Insurer's tax and fees from surveillance, inspection and investigation services
Netherlands: CVZ	3-member board	Board members appointed by the Minister of Health, Welfare and Sport	Not set	Accountable to the Minister of Health, Welfare and Sport	300	On budget of Ministry of Health
Switzerland: BPV	Director	Director appointed by the Federal Council	n.a.	Subordinated to the Federal Department of Finance	70	Insurer's fees and levies
United Kingdom: FSA	6-member governing board, headed by a Chairman and a CEO. A Practitioner and a Consumer's panel	Chairman is selected by the Practitioners panel. Treasury's approval is required for the appointment	n.a.	Accountable to the Treasury Ministers, and through them to Parliament	100, plus external consultants	Insurer's fees, consulting, training services and publication sales

Note: Data on staff are for most recent available year, 2005-06.

Table 6.A1.6. **Resources and financing of regulatory authorities for private health insurance in selected countries**

	Staff	Latest budget (million USD)	Financing source
Australia: PHIAC	24	4.2	Quarterly fees from insurers
Brazil: ANS	934	59.5	Government allocations and insurers' fees
Canada: OSFI	450	3.6	Insurers' fees and a small government allocation
France: ACAM	185	39.1	Insurers' fees
Ireland: HIA	9, plus consultants	2.2	Levies on health benefits
Mexico: CNSF	About 200 managers	18.3	Surveillance and inspection services fees
Portugal: ISP	N/A	185.5	Insurer's tax and fees from surveillance, inspection and investigation services
Netherlands: CVZ	300	n.a.	On budget of Ministry of Health
Switzerland: BPV	70	10.7	Insurer's fees and levies
United Kingdom: FSA	100, plus external consultants	560.6	Insurer's fees, consulting, training services and publication sales

Table 6.A1.7. **Appointment of the Head of the Telecommunication regulators across countries**

	Appointed by	Term of office	Renewable terms (Parenthesis means renewed only once)	Dismissal of the Head	Number of appointed members including the Head
Australia	The Governor-General	The period must not exceed 5 years.	No	Possible	3-5
Austria	The Minister and the Federal Chancellery	5 years	Yes (once)	Not possible	3 (There are another 3 substitute members in case of a member's death, retirement, etc.)
Belgium	The Minister	6 years	Yes	Possible	4
Canada	The Governor in Council	5 years	Yes	Possible	13 full-time including Head (maximum); 6 part-time (maximum)
Czech Republic	The Minister	4 years	Yes (once)	Possible	1
Denmark	The Minister	Indefinite	–	Possible	1
Finland	The President	Indefinite	–	Possible	1
France	The President (members of the executive board are appointed by the President, the President of the National Assembly and the President of the Senate)	6 years	No	Not possible	5
Germany	The President	5 years	Yes	No specific provisions [members of the Presidential Chamber (one of the Ruling Chambers which implements decision making) depend on political appointment and they have annullable public service contracts, whereas the members of the other ruling chambers are lifetime officials]	1
Greece	The Minister	5 years	Yes (once)	Possible	9
Hungary	The Prime minister	5 years	Yes	Possible	6
Iceland	The Minister	5 years	No specific provisions	No specific provisions	1
Ireland	The Minister	Indefinite	–	Possible	1-3
Italy	The President	7 years	No	No specific provisions	9
Japan	The Minister (in case of Telecommunications Business Dispute Settlement Commission)	3 years	Yes	Possible	5
Korea	The President (in case of KCC)	3 years	Yes	Possible	9 (maximum)
Luxembourg	Government as a whole	3 years	Yes	Possible	7
Mexico	The Minister	Indefinite	–	Possible	4
Netherlands	OPTA: The Crown Radio-communications Agency: The Minister	OPTA: 4 years Radio-communications Agency: Indefinite	OPTA: Yes Radio-communications Agency: No specific provisions	OPTA: Possible Radio-communications Agency: Possible	OPTA: 3 Radio-communications Agency: 4
New Zealand	The Governor-General	5 years	Yes	No specific provisions	4-6
Norway	King in Council	Indefinite	–	No specific provisions	1
Poland	The President of the Council Ministers	5 years	No specific provisions	Possible	1
Portugal	The Council of Ministers	5 years	No	Possible	3-5
Slovak Republic	The National Council	6 years	Yes (once)	Possible	1
Spain	CMT: The Government with approval from the Parliament State Radio-communications Agency: -	CMT: 6 years State Radio-communications Agency: -	CMT: Yes (once) State Radio-communications Agency: -	CMT: Possible State Radio-communications Agency: -	CMT: 9 State Radio-communications Agency: -

Table 6.A1.7. **Appointment of the Head of the Telecommunication regulators across countries** *(cont.)*

	Appointed by	Term of office	Renewable terms (Parenthesis means renewed only once)	Dismissal of the Head	Number of appointed members including the Head
Sweden	The Government	6 years	Yes	Possible	9
Switzerland	OFCOM: The Minister ComCom: The Federal Council	OFCOM: Indefinite ComCom: 4 years	OFCOM: - ComCom: Yes (twice)	OFCOM: Possible ComCom: No specific provisions	OFCOM: 1 ComCom: 5-7
Turkey	The Council of Ministers	5 years	Yes	Possible	5
United Kingdom	The Secretaries of State	Between 3 and 5 years	Yes	Possible	9
United States*	The President; needs to be confirmed by the Senate	5 years	Yes (once)	Possible	5
Brazil	The President; needs to be approved by the Federal Senate	5 years, members expire in consecutive years for each member	No	No specific provisions	5

* Entries for the United States only reflect telecommunications regulation at the federal level.

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Chapter 7

Horizontal Institutional Architecture

Regulatory authorities are part of an overall regulatory system that needs to be considered as a whole. This means that account must be taken of transversal institutional architectur, in terms of relations with other agencies and across levels of government, and the definition of the role of authorities and their relationship to the institutional environment. Included in that environment are the Brazilian competition authorities, consumer protection bodies and regulatory agencies at the state level.

Issues relating to transversal architecture by function or by sector

Horizontal specialisation can take a variety of forms within the regulatory system. Regulators may be entrusted with one or more sectors, and also with one or more functions within the sector(s) in question. It is uncommon for a regulatory authority to have merely one mission. A regulator in the transport sector, for example, may well supervise the auctions for highways, and also ensure safety rules and enforcement for transportation. The health insurance regulator ensures a role in terms of prudential financial oversight, but also in terms of ensuring the quality of care of the plans offered to the citizens. The agencies studied in this report have an economic function, but there is also a significant safety component to ANTT, and a general health promotion function for ANS.

Wide-ranging sectoral competence may allow greater distance between regulators and individual interests. However, regulators operating in a single sector may also have several functions and therefore several objectives, which could imply sensitive tradeoffs. The disadvantages of having several objectives and functions can theoretically be limited by establishing specialised regulators with a clearly defined function, one clearly aimed at market efficiency in some cases or safety in others. However, that may also not be desirable, given the need to concentrate the available expertise and to minimise co-ordination costs. Technological convergence and also other technical factors may result in the need for streamlining regulatory frameworks in some cases, such as for telecommunications or transport.

Institutional architecture by sector

In the case of telecommunications, the issue of convergence exists in Brazil as in many other OECD countries. OECD countries such as the United Kingdom have decided to merge their telecommunication and broadcasting regulators. However, in Brazil, broadcasting is still under the competence of the Ministry of Communications. Broadcasting also involves sensitive issues at the level of the States, as licences for communication may be awarded at the state level. Working groups on convergence have been established in Brazil. This occurs in the midst of significant political demand: according to a study by AMCHAM (2006), 75% of interviewees agree that a single entity should regulate broadcast and telecommunications.

ANTT has competence only over part of the transport sector, while ANTAQ *(Agencia Nacional de Transportes Aquaviarios)* has responsibility over the ports and ANAC over civil

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aviation. The fragmentation between ANTT and ANTAQ did not exist in the original projects that had been presented when ANTT was established. According to De Paula and de Avellar (2007), the fragmentation was due to a political demand, as it would benefit local interests in the State of Rio de Janeiro, particularly shipbuilding. The current setting resulted from a substitute to the original project, presented in Parliament. This fragmentation may not allow the regulatory authorities to deal properly with the issue of combined transportation between rail and road transport, or that of connecting to port terminals. The discrepancy in policy framework between ANTAQ and ANTT may not offer the most relevant policy response, given the need for a co-ordinated approach to transportation issues. This is also compounded by the fact that the transportation system currently lacks an overall planning unit that could design an overall framework. Another issue is the bus terminal in the case of passenger transport, which is under the responsibility of the municipal or state authorities. The National Plan for Logistics and Transport (PNLT, *Plano Nacional de Logística e Transportes*) may offer some opportunities to address these issues.

In the energy sector, there is a discernible trend across OECD countries, toward integrating gas and electricity regulation into a single regulator, and another towards centralisation of regulatory responsibilities where – the case in many federal countries for example – responsibilities are dispersed across central and local levels of government. Gas-electricity regulatory convergence is encouraged by regulatory synergies and market interdependence. Centralisation of responsibilities helps to address the issue of different regulatory regimes for markets that need or want to trade, and to encourage the development of integrated regional markets across unitary states (the EU) or within a federation (Australia) (see Annex 7.A1, Table 7.A1.2).

However, in Brazil, a complete merger may not be appropriate, at least at this stage; the interdependence of the two sectors will require appropriate co-ordination mechanisms, discussed below. The power sector's use of natural gas as a fuel can help to amortise upstream development and pipeline investments, which Brazil wants to encourage. The use of gas in the power mix supports the reliability of the Brazilian power system.

Functional architecture

A regulator's mission should also be clear and unambiguous, with clear strategic objectives and a transparent demarcation of responsibilities between the ministry and the regulator. This supports accountability, and the courts can decide more easily in case of challenge.

In Brazil, the situation of the authorities studied concerned varies. The objectives of the Brazilian regulators are often complex, reflecting a mix of economic, social and other supervisory issues (see Annex 7.A1, Table 7.A1.1). These may reflect the complicated process that led to establishing the regulatory authorities. For ANTT, they are relatively clearly defined. According to the law, the role is to implement national policies, control the provision of services, preserve the public interest, reconcile the interest of users, concessionaries, and delegated entities, and deal with issues affecting imperfect competition or infractions to the economic order. For ANS they are specified in general terms, so as to promote the public interest in terms of supplemental health insurance, and to contribute to the development of health actions. This perspective also shows that the actions of ANS are part of an integrated approach to health issues, which may also be

related to the relatively more restricted autonomy enjoyed by this agency (see Annex 7.A1, Table 7.A1.3).

ANEEL's mission and strategy are defined in the broader context of the government's Pluri-annual Governance Plan (*Plano Plurianual de Governo 2004-07* – PPA), which sets the direction for implementation of sectoral policies. Strategic objectives for the power sector are to:

- Secure the expansion of the national power system via a planning process co-ordinated by MME, adapted to the government's orientation and current realities, so as to guarantee Brazilian energy needs and expectations in the short, medium and long term, stimulating a diversification of the energy mix, the financial/economic balance, social justice and environmental sustainability.
- Guarantee a balance between supply and demand with the necessary quality, continuity and security of service across the whole Brazilian territory, with pricing that attracts and remunerates investment needed for expansion, under fair conditions.

ANEEL's particular mission within this context is to regulate and control the production, transmission, distribution and supply of power, in accordance with the government's political directives. Its role is to establish the conditions favourable for development of the power market, balancing the needs of the different agents and the benefits to society. ANEEL is responsible for carrying out the Programme for a Quality Electric Service (*Programa Qualidade do Serviço de Energia Elétrica*), the objective of which is to establish the conditions for a quality electric system, as defined by indicators of duration and interruption of service. Objectives for these indicators are set out in the PPA.

ANEEL also has a public service mission, consisting of:

- Ombudsman (*ouvidor*) – to handle, identify and find solutions to user issues.
- Mediator – to mediate solutions to conflicts between agents, and between agents and consumers.
- Public hearings – to organise public hearings whenever a decision process affects agents/consumers.
- Delegation of tasks to state regulatory agencies – these cover monitoring, regulation, mediation and ombudsman tasks aimed at securing an efficient service to consumers at ground level.

To give effect to the PPA, ANEEL has established a Strategic Challenges Agenda (*Agenda de Desafios Estratégicos*) for 2006-08. The centrepiece of the agenda is to stabilise the regulated market so as to secure a positive climate for investment and establish a coherent regulatory framework, with effective tarification, transparency, and dialogue with society. Eleven specific challenges are identified, including:

- Regulation – reduce power costs, review methodologies for tariff review, remove gaps in the regulatory framework (these include regulations regarding the trading of energy from renewable sources, and the management of concessions for the isolated parts of the grid with a view to integration with the main grid), guarantee the achievement of universal service objectives, stimulate R&D.
- Society – strengthen methods of dialogue with society, improve means of satisfying consumers.
- Institutional – strengthen autonomy and role of the regulator (this largely refers to the need to improve financial autonomy), structure and develop services.

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This represents a worthy effort by ANEEL to strengthen the expression of its objectives and transform them into action.

ANATEL is in charge of implementing the policies for telecommunications, to ensure the provision of access to telecommunication services at reasonable prices and tariffs to the entire population. The measures adopted foster competition and a diversity of services that increase supply and provide quality standards. The goal is to extend universal services at reasonable prices. ANATEL in addition has to apply sanctions, settle disputes among service providers, repress violations to users' rights, and control, prevent and repress violations against the economic order. This is the widest set of objectives and some may be contradictory. One key issue here is that the focus on access in the current definition of the public service, with switched fixed lines, is totally inadequate, given the current technological, human and economic circumstances of the country. The mobile phone is more diffused than the switched line, and any definition of universal access around fixed lines only will not in a foreseeable future provide every Brazilian citizen with the opportunity to connect to the telecommunications network.

As a result, while the institutional architecture is relatively clear, overall the functional aspects are more complex and fuzzy at times. However, some of the agencies have taken steps to facilitate a clear expression of their strategic goals. The long set of objectives, some of which may be partly unattainable, set for some of the agencies may not facilitate the economic assessment of their performance, as it might be difficult to select an appropriate standard.

Co-ordination with other agencies

Co-ordination of regulatory authorities can take one of three guises: application of a common doctrine for the implementation of regulations; co-ordination of decision-making timetables; and co-ordination of compliance schedules. Co-ordination makes it possible to minimise the burden imposed by the obligation on the parties concerned to apply regulations. Modern regulatory systems have a multiplicity of entities with related and sometimes overlapping responsibilities. This requires effective co-ordination as well as a policy and regulatory framework that allocates responsibilities clearly and transparently, and that provides effective mechanisms for dealing with cross-cutting issues. This is essential to minimise regulatory uncertainty (and burdens) and to boost investor confidence.

An analysis of the co-ordination mechanisms helps to understand the performance of the current system, with issues concerning the lightening of regulatory burdens and the improvement of efficiency for regulatory processes. In Brazil this involves the relations with the competition authorities, but also relations with important environmental and safety agencies, and consumer and business associations, as well as relations at the state level.

Relationship between competition authorities and regulators

When countries engage in regulatory reform in specific sectors,[1] which aim at narrowing the scope of regulation and ensuring that it better serves public interests, an adequate definition of the relationship between sectoral regulatory authorities and competition oversight bodies is a core concern. Some of the functions of the sectoral regulators may require co-ordination or generate overlaps in the assignment of their

respective responsibilities. This poses the question of relative responsibilities of the two types of authorities and the role of sectoral regulatory authorities in promoting competition in their respective sectors. A clear division of tasks and complementary approach between competition authorities and regulators, and harmonious co-operation are prerequisites for the regulatory system to function properly as a whole. However, differences in approach may arise, as sectoral regulators have to pay attention to issues that are not necessarily related to competition, such as safety, universal access and prudential issues.

Introducing competition in sectors previously dominated by state-owned or heavily regulated, vertically integrated firms and protecting consumers from supra-competitive pricing are difficult tasks. For the transition from government ownership or heavy regulation to a more liberalised market, authorities must deal with several issues: industry structure (*i.e.* the need to horizontally or vertically split dominant incumbent firms); issues involving stranded costs and the implementation of universal service obligations; competition protection – controlling anti-competitive conduct and mergers; access regulation – ensuring non-discriminatory access to necessary inputs, especially network infrastructures; economic regulation – adopting cost-based measures to control monopoly pricing; technical regulation – setting and monitoring standards so as to assure compatibility and address privacy, safety, and environmental protection concerns; periodically reassessing the scope and degree of remaining market power in markets where competition is being introduced, in order to recommend whether such power justifies continuation of any sector-specific competition law or regulations (other than technical regulation). The best allocation of these tasks will depend on a mix of comparative advantage and synergy issues, and will also be heavily influenced by a country's general legal framework and regulatory history. This varies from country to country and even across industries within the same country.

Competition authorities and regulators have generally different cultures. Sector-specific regulators often work to attenuate the effects of market power, monitor (and sometimes define) behavioural conditions, apply an *ex ante* prescriptive approach, and intervene more frequently. They require a continual flow of information from regulated entities. Competition authorities usually have a stronger focus on reducing market power and, except in merger review, apply *ex post* enforcement tools, including fines and orders to cease and desist in the future. Competition agencies have important expertise in identifying and helping to reduce excessive market power, protecting competition from anti-competitive behaviour and mergers. They can help to address issues related to incumbent firms, and to define methods for recovering stranded costs and to ensure that universal service conditions do not result in unnecessary competitive distortions. Technical regulation requires ongoing monitoring and application of sector-specific expertise that may have less direct relevance to competition questions, such as prudential oversight or safety. On other issues the division is less clear-cut, for example when access regulation is concerned, which is to promote and protect competition in certain situations where access to a portion of a vertically integrated incumbent firm's assets is vital to the development of competition. This can be the case with the rail, energy or telecommunication networks. Whatever the allocation of tasks, it is vital that the regulatory agencies and competition authorities have a good flow of information and expertise exchange, in addition to clearly divided tasks. Co-operation can benefit from an

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institutional framework, but it will also rely on a joint and shared effort and on a mutual understanding of the two types of institutions.

Brazilian competition law and enforcement

In Brazil, competition authorities are fragmented, and are part of the Brazilian Competition Policy System (BCPS; the Brazilian acronym is SBDC). This system consists of three bodies (see Box 7.1):

- CADE, the Administrative Council for Economic Defence, an autonomous autarchy that has adjudicative authority in BCPS cases.
- SDE, the Economic Law Office in the Ministry of Justice, which has the principal investigative role.
- SEAE, the Secretariat for Economic Monitoring in the Ministry of Finance, which also has investigative authority but is primarily responsible for providing economic analysis in BCPS proceedings.

Box 7.1. **The Brazilian Competition Policy System (SBDC)**

The approval of Competition Law 8 884 in 1994 defines Brazil's entry into the modern era of the competition enforcement. This Law reformulated the role of the Administrative Council for Economic Defence (CADE) linked to the Ministry of Justice, which became an administratively and financially autonomous body with authority of last instance. This means that CADE´s decisions can only be reviewed by the Courts in matters concerning defence of competition. Together with the Secretariat for Economic Monitoring (SEAE) of the Ministry of Finance and the Secretariat for Economic Law (SDE) of the Ministry of Justice, which have analytical and investigative functions, and the Administrative Council for Economic Defence, CADE constitutes the Brazilian Competition Policy System (or *Sistema Brasileiro de Defesa da Concorrência* – SBDC). There are no specific exemptions from the competition law for any of the regulated sectors. Law 8 884/94 on its face applies fully to them and also to privatisations, which are considered similar to mergers.

The main role of SBDC is to promote competition through a combination of correction, prevention and advocacy. Competition Law 8 884/94 forbids mergers and conduct that are anti-competitive (Articles 20, 21 and 54). Article 20 defines violations of the economic order in general, in terms of its undesirable effects such as limiting or injuring open competition or controlling markets. Article 21 lists some of the acts that would be illegal if they produced any of the effects described by Article 20. Approval for mergers and concentrations is required under Article 54. CADE, as the last administrative instance, makes the final decision of a case. SDE and SEAE have analytical and investigative functions. Most of the cases begin in SDE, which conducts a preliminary investigation in partnership with SEAE before submitting the case and their recommendation to CADE.

This system was analysed as part of an OECD Peer Review on Competition Law and Policy (2005), following on an earlier 2000 review. The 2000 review also recommended increased enforcement attention to newly privatised sectors, particularly telecommunications, energy and transportation. The 2005 review acknowledged progress made in Brazil in terms of implementing sound competition policy. Following this review, there has been a general agreement to implement statutory revisions that will remodel the institutional structure (see Box 7.2.).

Box 7.2. **Project on restructuring the competition authorities, Law Bill 5 877**

The Law Bill 5 877/2005 is following the legal process in the Deputy Chamber with some priority. This project restructures the SBDC and regulates the prevention and repression to infractions against the economic environment. Within the main changes are:

1. CADE would perform all of the roles of investigation, analysis and judgement of competition matters. SDE will cease to exist after its investigative functions are transferred to CADE, while the consumer function would be transferred to the Department for Consumer Protection and Defence (DPDC) within the structure of the Ministry of Justice. SEAE will remain active in competition advocacy.
2. CADE will no longer comprise the Council and the Procuratorship. Its new structure would comprise a General Superintendence, with a General Procuratorship, investigating suspect enterprises and instructing cases; a Department of Economic Studies; and an Administrative Court.
3. Analyses of concentrations will be performed before the consummation of the concentration.
4. Criteria for notifying concentrations would be based solely on revenue.
5. The procedure would be simplified for cases that do not represent a threat to competition, and require only the approval of the General Superintendence.
6. Concentration cases could be resolved without the systematic need of a court decision, and a process would be provided for consensual proposal to resolve complex cases where the approval of the Court is needed.
7. Prosecution of crimes against the economic order would be handled at the federal level, under the competence of the Federal Justice, instead of the common judicial procedures.

Relationships between regulators and competition authorities

There are several possible configurations for the relationship between regulators and competition authorities:[2]

- Combine technical and economic regulation in a sector-specific regulator and leave competition law enforcement entirely in the hands of the competition agency.
- Organise technical regulation as a stand-alone function and include economic regulation within the competition agency.
- Combine technical and economic regulation in a sector-specific regulator and give it all or some competition law enforcement functions.

At first, it is slightly difficult to classify Brazil according to these categories, as independent regulatory authorities are still at a relatively early stage of development. In addition, the regulatory and competition frameworks are about to change. Competition law applies across the board to all sectors. Sectoral regulators are not the main authority in charge of ensuring compliance with the competition law in their sector, as the final administrative decision lies with the Administrative Council for Economic Defence (CADE). However, regulators certainly play an important role in the enforcement of competition law, as they are constantly monitoring the sector and have the necessary expertise and information. As a result, there is a certain overlap of tasks: CADE can also be called to solve cases that are being investigated both by the sector-specific regulator and by a competition authority. Still, there tends to be a division of labour by type of mandate, while both types

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of authorities play an important role in enforcing competition law and economic regulation. They have generally collaborated well, even if more systematic agreements could be implemented.

In terms of the general relationship between the SDBC and the regulators, SEAE is mostly involved though its advocacy function, but it also has a role in contributing to tariff revisions. SEAE analyses regulatory rules in order to evaluate their impact in terms of competition, performing a sort of Competition Impact Assessment, even though a formal regulatory impact analysis system is not yet in place in Brazil (see Chapter 1). This anticipates in some sense the formal attribution concerning regulated industries given to SEAE by Law Bill 3 337 (see Box 6.2 on the Law Bill). It is also in accordance with Article 11 of Decree 6 193/07, which defines prices in general and public tariffs as a competence under the Ministry of Finance. Article 12 of this same Law stipulates that SEAE has responsibility for following the implementation of regulation and management models developed by the agencies, and for manifesting their opinion concerning readjustment of tariffs and prices of public service, on biddings, and on market evolution of industries that have been privatised. In addition, Article 70 of Law 9 069 states that readjustment and revision of public prices and tariffs of public services are set according to annual rules defined by the Ministry of Finance. A number of Decrees of the Ministry of Finance have authorised regulatory agencies to set prices, tariffs and readjustments. SEAE's latest contributions in 2006 include their opinions on ANEEL's methodology for tariffs revision in electricity distribution, on the X factor applied by ANATEL, and on the methodology of price readjustment of interstate and international passenger road transport.

Except in the case of telecommunications, where ANATEL has specific prerogatives, the Secretariats of the SDBC may request opinions of the regulators, both in conduct and mergers and as part of the analysis and investigation process. At the level of CADE, the agencies may be invited to submit an opinion on the remedies to be imposed on a merger or on behavioural obligations to be imposed on a case of conduct. In general, as there are no specific legal provisions, this relationship is at the discretion of the SDBC. But generally, CADE has had co-operative agreements with ANATEL, ANS and ANEEL. Lately, CADE has been promoting studies and debates on specific sectors and issues – for example on the health sector, where a number of cases have been detected, and on issues of technological convergence, with the participation of ANATEL staff.

Sectoral aspects

In terms of sectoral aspects:

- In the telecommunications sector, general competition rules are applicable as long as they do not conflict with the specific provisions of the General Telecommunication Law. GTL and the law that created ANATEL are more detailed in matters related to competition, as they were well specified. The authority is in charge of supervising, preventing and repressing actions against the economic order except for those belonging to CADE. The agency has specific rules related to competition aspects and observes the competition legislation (Law 8 884) when it does not conflict with the rules and principles established by the LGT. The agency also needs to consider competition principles when reaching decisions (Article 5 of the Telecommunications Law).
- This reflects the tendency among OECD countries to allow for joint responsibility in the telecommunications sector between competition authorities and the sector-specific

regulator. In certain cases formal mechanisms exist for co-operation, while they do not exist in other cases. In Brazil as in OECD countries, good co-operation between the two types of authorities is essential. At the moment, there is no formal co-operation agreement between CADE and ANATEL, but co-ordination seems to have operated well until now, based on informal procedures. In addition, ANATEL has taken several resolutions that regulate administrative procedures involving competition. Resolution 76/1998 approves Norm 4/98 and establishes that ANATEL examines merger documents first and CADE issues final approval.[3] ANATEL is the only agency with such authority to investigate merger cases, replacing SEAE and SDE in this case. SEAE and SDE only issue opinions if specifically requested by a commissioner from CADE. ANATEL has special units for general management of competition defence. Resolution 195/99 approves Norm 7/99 and establishes procedures for investigation of violations of competition rules. In the context of mergers, the responsibility would be with the competition authority. ANATEL has issued several decisions on these issues, such as the one that defines the concept of Significant Market Power.

- In the electricity sector, the law that establishes the new regime for that market requires ANEEL to facilitate competition in the industry whenever possible. There is competing authority with the SDE. However, ANEEL's Decree 2 338 is not very detailed or explicit in terms of competition-related matters. Still, ANEEL and the three agencies that constitute the SBDC already have formal co-operation agreements to share information and technical expertise. ANEEL committed itself to work with SDE in its conduct of investigations, and to provide technical opinions to SDE and CADE on mergers and privatisations in the industry, which are fully subject to the competition law.
- In the transport sector, the main Transport Law 10 233/2001 stipulates in its Article 31 that any infringement to the economic order that would come under the scrutiny of ANTT must be communicated to the antitrust authorities and the SDBC (CADE, SDE or SEAE). This results in a situation where the agency supervises and monitors the market falling under its authority on a daily basis, while the antitrust authority's intervention is called whenever anti-competitive conduct might be taking place. In the transport sector, there is a constant relationship between the ANTT and the antitrust authority, and a technical co-operative agreement with CADE. There was also an agreement in 2002 between SEAE and ANTT for the exchange of information, joint analysis of techniques for applying competition principles, and tariff regulation. A co-operative agreement is also currently negotiated with SDE.
- As a result, when some issue involves both the regulatory agency and the antitrust authority, cases of overlapping functions may occur and there is a need to co-operate. The analysis of a concentration act in a regulated sector is a classical example. In these cases, the remedies that are available to the antitrust authorities may not be sufficient to establish competition, leading to suggestions for improving regulations. Brazil offers such an example, with the recommendation that SEAE provided in 2008 concerning the concentration act involving two big companies providing interstate passenger transport, Gontijo and São Geraldo. The analysis concerned some lines where both companies were present and their economic relevance over each section within the line. It was difficult, though, to apply a remedy against the concern that the combined firm would be protected from new biddings and permissions. So, even though SEAE recommended approval of the merger, it suggested broadening the possibilities of biddings and permission in the lines. This example highlights the necessary complementary role of

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the regulatory agency and the antitrust authorities with the need for them to co-operate. Fortunately, the co-operation is assessed as going rather smoothly. In the transport sector, there has also been a finding of a bus company cartel by a CADE decision in 2005.

- ANTT regulates rail freight transportation tariffs through a system of price caps established by contracts. These caps are reviewed every year and adjusted for the general price index (IGP-DI, Resolution 1 212/ANTT). However, any tariff revisions must be previously communicated to SEAE. In addition, changes of tariffs for passenger transport within a term of less than a year must be approved by the Ministry of Finance.
- In the private health insurance sector, the Competition Law 8 884 is also applicable. ANS has no antitrust authority, which fully belongs to the SDBC. The authority, ANS, has to approve any operation involving a change in the control of an operator following rule RDC 83/2001. There has also been increasing concentration in the private health insurance market in recent years, as the result of a process of consolidation. Interventions of the antitrust authorities have also concerned more specific aspects of anti-competitive practices in that market. There have been cases where some health co-operatives had required exclusivity for the provision of services by the physicians, and this was attacked in CADE by the national association for group medicine and by the prosecutors of São Paulo and of the municipality of Bauru São Paulo, through SDE in 2002.[4] ANS also denounced such practices to CADE in 2004.[5] Another case concerned an abuse of dominant position by the medical co-operatives.[6] Yet another was a cartelised practice of price setting by medical associations through the setting of a Central Commission to fix tariffs in Rio Grande Do Norte; this was attacked by a national association of health plans. In another, older case, a state association for inpatient services in Parana was attacked by a national association of group medicine, for cartelised price fixing.[7]
- Finally concerning tariffs, ANS has responsibility for reviewing the prices of private plans after hearing the Ministry of Finance, according to MP 2177-44/2001 and Order 75/2003 of the Ministry of Finance. However, lack of co-operation between these entities is an issue of concern, and does not allow much scope for efficiency improvement in the healthcare sector through lower prices.

This section highlights the need for competition enforcement in those sectors, in a way that takes into account the economic realities of the sectors and the relative strengths of the agencies and the competition authority. Until now, relationships seem to have been relatively satisfactory in spite of the lack of systematic co-operation agreements, even if these exist in some cases. Still, the Joint Ministerial Group considered that there was scope for improving the setup of co-operation procedures between the regulators and the SDBC. As a result, the New Law Bill 3 337 will give more institutional basis for the co-ordination procedures and the exchange of information. They will ensure that SDBC agencies work in close co-operation with regulatory agencies, while making it clear that competition authorities are to enforce competition law regardless of the sector. A new feature of the bill would also require that all new rules and regulations be submitted to the SEAE for the review of competition aspects, as part of the normal public consultation phase, thus instituting a form of competition impact assessment, in line with practice to date. However, the New Bill makes no specific recommendations concerning SEAE's role for public tariffs.

Co-ordination between regulators and consumer protection bodies

The rights and duties of consumers of public utilities and services are defined by the Federal Constitution, the Concession Law, the laws creating the regulatory agencies and the Consumer Defence Code (CDC) (Law 8 078 adopted in 1990). There is at present a Law Bill 5 877/2005 in the Chamber of Deputies that proposes reform of the National Brazilian Consumer Defence System. At the moment, the National Consumer Defence System in Brazil as organised by the CDC includes:

- The Consumer Protection and Defence Department in SDE (which will stay in the Ministry of Justice when SDE is suppressed by the new law – for more detail, see OECD, 2005).
- The state and local protection agencies, called "PROCONS".
- The States and the Federal Prosecuting Counsels, located in 26 Brazilian States and 670 Municipalities also have an important role in consumer defence. The offices of the prosecutor are in charge of the defense of the collective interests of the consumers. As a result, they do not take action on individual issues but can engage in class action litigation. For individual matters, consumers can appeal to the Public Defender, the Special Civil Courts and the local PROCONs. The PROCONSs also have a general information system. The cases that are most likely to occur in the sectors of the study are those of supplemental health insurance (problems of access to treatment) and of telecommunication services (disputes related to mobile services and contracts).
- Non-governmental Consumer Organisations (NGCOs) – this group includes three national organisations and more than 40 state organisations.[8] Among them, the Brazilian Institute of Consumer Defence (*Instituto Brasileiro de Defesa do Consumidor* – IDEC) plays a leading role. IDEC is a non-profit, nonpartisan consumer association founded in 1987 to promote education, awareness and defence of consumer rights and to encourage ethics in consumer relations; it enjoys political and economic independence, and is funded by contributions from its members and international financial organisations. Discussions with consumers form part of the overall policy dialogue with the citizens.

Consumer defence in regulated sectors in Brazil is facing two challenges. The first is the fact that the CDC is, according to Consumer Defence Entities and the Public Prosecutors,[9] not always in accordance with sector-specific regulation. The second is the relative lack of full social engagement, in a country where society participation and consumer co-ordination and organisation are still relatively limited and with a short history.

In spite of their limited resources, non-governmental organisations play an important role advising, orienting and defending consumers' interests. The most widely published record of the relationship between regulators and consumer groups is the "evaluation of effectiveness" by the Brazilian Institute for Consumer Defence (IDEC) (*www.idec.org.br/arquivos/site_agencias.doc*). Since 2003 IDEC has been publishing a yearly analysis of seven regulatory authorities and their relationships to consumers. Thirty questions are distributed under five categories (existence of institutionalised channels and conditions for consumer participation; transparency; access to information; publicity; and effectiveness on behalf of the consumer).[10] The public bodies include: ANEEL, ANATEL, ANS, ANVISA (*Agência Nacional de Vigilância Sanitária)*, Inmetro (*Instituto Nacional de Metrologia, Normalização e Qualidade Industrial)*, the Central Bank, and the Agriculture Secretariat for Farming and Cattle Raising (*Secretaria de Defesa Agropecuária* SDA). In the

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overall rankings produced by IDEC for the years 2003, 2004 and 2005, ANS rated worst among the seven in terms of consumer friendliness.

In the private health insurance sector, a first issue was the abusive readjustment of prices, both for older contracts and for residuals. In terms of collective plans, IDEC finds that ANS chooses a restrictive interpretation of the law in terms of exerting regulatory powers, which results in losses for society at large. In addition, given the increasing role of these collective plans – representing over 72% of the market – the whole action of ANS could then lose ground in terms of its relevance. The positive elements rated by consumers were initiatives of quality assurance and qualification.

In the telecommunications sector, ANATEL holds public hearings where consumer groups may debate and present their views on subjects of general interest.[11] It also has a specific advisory unit that treats users' claims and also has an Ombudsman, which responds to calls from individual consumers. The reports of IDEC also illustrate deficiencies with ANATEL, even if there has been some progress. When asked whether the regulator protects consumers' interests efficiently, 34% of interviewees in 2006 responded that the agency never acts efficiently, vs. 5% in 2005. IDEC acknowledges the lack of resources of the agency and the implementation of a call centre, and of receiving complaints against fixed and mobile phone companies. For example, the process for involving consumers in the prorogation of the concession contracts for fixed telephone lines was rather superficial (IDEC, 2006).

In the energy sector, consumer advocacy acts as a counterweight to the companies, and gives the regulator a demand perspective in an otherwise supply-driven framework. The law provides for consumer consultative bodies (*conselhos de consumidores*), with a remit to consider supply, prices, and quality of service to end-users. ANEEL is required to promote these, and helped their establishment in 2000. They come to meetings and present relevant information for the better management of the power sector. The consumer organisation IDEC's latest overall assessment is that ANEEL is one of the most effective regulators from the consumer perspective. There is, however, room for improvement. ANEEL's responsibility for carrying out the Programme for a Quality Electric Service requires it to establish and monitor indicators of duration and interruption of service, as well as voltage stability. IDEC notes that in a resolution addressed to distribution companies in São Paulo, the regulator set lower voltage stability standards than in the original contracts, with low penalties for failure to meet targets. A second resolution aggravated the situation by lengthening the time available for restoring adequate voltage levels, and weakening penalties further. IDEC notes that relevant information is not available on the ANEEL website.

Low-income consumers are also an issue, particularly in the energy sector. ANEEL also audits the programme for subsidised electricity to these consumers. IDEC has criticised the programme, not for its objective but for its efficiency in serving the needs of the real poor. Restrictions for monophase lines and a qualifying requirement for consumers to be registered in federal government social programmes mean that the programme often fails to deliver to those who really need it. IDEC also notes a failure by ANEEL and the companies (Eletrobrás and related companies) to publicise the programme and explain the criteria.

From a general perspective, consumer groups have manifested their opposition to the decisions of the agencies several times, especially in the sector of telecommunications. The complexity of the regulatory process, characterised by new rules and actors, is a subject of

controversy and conflict. In addition, there is a collision between general consumer protection rules and sectoral rules for each sector (Sundfeld and Câmara, 2005). One of the most controversial issues of the post-privatisation period is related to the adjustments of the fees for public utilities, including for telecommunication services, and the validity of the charge of the so-called subscription fee by the concessionaire of the Fixed Commuted Telephone Services (STFC). The debate around this issue reveals a complex picture of the limits of the regulatory power of the agencies, mainly when sectoral rules and actions do not seem to be coherent with the Consumer Defence Code or other general norms.

A specific case was the controversy over the adjustment index of the fees of fixed telephone services in 2003. The Deputy Federal Judge of the 2nd Court of the Jurisdiction of the Federal District granted a preliminary injunction for public civil action initiated by the Federal Public Prosecutor's Office, ensuring the that a general price consumer index would be used (IPCA), instead of the IGP-DI, for readjusting the fees. The IGP-DI had been rising rapidly as a result of external macroeconomic shocks. However, the final judicial decision by the Supreme Court (STJ) guaranteed a return to the *status quo* of the policy for setting fees defined by the ANATEL.

Another case in which consumer groups had a decisive role was the review of ANATEL's regulation concerning the conversion of pulses into minutes for charging fees for commuted fixed telephone services. Due to the opposition of those associations, the ANATEL reviewed its methodology and started offering an Alternative Plan for Obligatory Offering Services (PASOO) to the Basic Plan. Initial work by ANATEL in that process for changing local charges from pulse to minutes had been an example of disrespect for consumers' interest, according to those associations. The methodology used to calculate the price of a minute in the basic plan was not clear and would have resulted in "absurd increases" in the prices of calls over three minutes. (For additional information, go to *www.idec.org.br/*.)

However, except for ANATEL – which legally establishes the obligation of examining suggestions/proposals presented at the public consultations – there are no administrative procedures that guarantee such feedback or a systematic procedure for inviting consumer groups to comment on regulation proposals in other agencies. Bill of Law 3 337 attempts to expand those mechanisms to all regulatory agencies.

These actions will be further strengthened by the fact that IDEC is developing a project in partnership with the Inter-American Development Bank Multilateral Investment Fund, aiming to improve co-ordination between consumer organisations and regulatory agencies, and to strengthen mechanisms for social participation in the regulatory processes of two agencies: the National Health Surveillance Agency (ANVISA) and the National Telecommunications Agency (ANATEL). This project, which involves a USD 1 million grant to IDEC matched by local funds, will improve the institutional capacity of consumer protection organisations to participate effectively in those agencies' public consultations and hearings.

Co-ordination in the energy sector

Three other regulators are relevant to the power sector:

- National Agency for Petroleum, Natural Gas and Biofuels (*Agência Nacional do Petróleo, Gas Natural e Biocombustiveis* – ANP). ANP regulates upstream gas issues; its jurisdiction stops at the city gate, where state regulators take over.

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- Federal Water Regulatory Agency (*Agência Nacional de Águas* – ANA). The 1997 National Water Resources Policy Law created a framework for integrated water resources management (covering multiwater usages and flood control as well as issues related to the use of water for hydro power) and a National Plan of Water Resources. ANA's duties under this framework include the maintenance of an inventory of hydrographic basins, and running fluviometre/rainmetre stations, which provide essential data for the management of hydro power plants.
- Brazilian Environmental Institute (*Instituto Brasileiro do Meio Ambiente* – IBAMA). IBAMA is responsible for overseeing a licensing regime (see Box 7.3) covering environmental issues alongside the economic licensing and concession regime. A new power facility generally requires a green light from IBAMA as well as the energy regulatory authorities.

Relations with ANP are very important in the gas market, while relations with IBAMA are very important concerning environmental licensing (Box 7.3). This framework raises issues of co-ordination and co-operation that are important for the healthy future development of Brazil's power sector, especially given that institutional weaknesses were one of the reasons why the pre-2004 reforms failed. There are two levels at which co-operation is needed. The first is in relation to policy decisions that affect more than one part of the government, and the CNPE was established for this. But there appear to be delays or difficulties in taking decisions and achieving consensus, for example in relation to the environment and reform of the downstream gas market.[12] This can leave ANEEL very exposed, tackling issues as best it can without a clear policy steer. The issue of the overlapping functions between ANEEL and ANP was also identified by Fujiwara, as ANEEL has jurisdiction over input for thermoelectricity but ANP is the natural gas regulator, and distribution is regulated at the sub-national level. The second level of co-operation is between agencies, and between ANEEL and the Ministry. *Ad hoc* working groups have been

Box 7.3. **Environmental licensing: The sequence of events**

The process for the environmental approval of a project broadly follows four stages (assuming that a licence is needed at federal level):*

- Feasibility study. IBAMA triggers a feasibility study of the environmental and social impacts (effects on fauna, flora, water, and not least, people) of the proposed project, which it must approve before the process can go to the next stage. This is usually done by external consultants. A public hearing is arranged, the proceedings are filmed and stored, and this can add new elements. A synthesis of the feasibility study, once it has been agreed, is prepared for the wider public.
- Provisional licence (Licença Prévia- LP), with conditions that are drawn out of the feasibility study. The law says that this should be issued within a year of the PBA, but in practice legal challenges generate delays. ANEEL's authorisation comes after the LP.
- Installation licence (Licença de Instalação- LI). Construction may begin at this stage. In principle there should be six months between the LP and the LI.
- Operational licence (Licença de Operação- LO). The reservoir can be filled (if it is a hydro-plant), and power production can start.

* There are three possible levels – federal, state and municipality – and the division of role is not always clearcut. The judiciary often becomes involved, and as they are not always very experienced they may come under pressure from NGOs opposed to the project.

set up between the regulator and the Ministry to discuss issues of common interest, but not all relevant issues are discussed in these forums, and sensitive issues are sometimes taken forward by the regulator without adequate consultation.

A lack of consultation/co-ordination is even more apparent between ANEEL and two of its most important interlocutors, IBAMA and ANP. A strong relationship with IBAMA is important because the environmental licensing regime is demanding, with three stages that must be successfully completed before a facility can become operational (a provisional licence, installation licence, and operation licence). Failure to meet the conditions set out in the environmental licences results in delays in obtaining the authorisation for a plant to start generating power. Working through the process of obtaining an environmental licence is likely to be hard going at the best of times. This may be due to the importance of NGOs and the local opposition to projects; IBAMA's resources; compensation; and /or multi-level issues, with Federal/state responsibilities. Personal liability may also be an issue. While this represents a widely supported provision against corruption, it may also discourage decision making when officials at an agency like IBAMA know they could be held personally responsible if it goes wrong. This may also be an issue why IBAMA's decisions were deemed to be relatively slow, raising some policy concerns. The situation is very complex. This was further impacted by the fact that national authorities decided to split IBAMA into two agencies in the Spring of 2007. The result of this institutional shift remains unclear at this stage.

In the case of ANP, as matters stand the relationship is very distant, and the regulatory framework does not encourage dialogue even on matters that are highly relevant for both regulators. For example, ANEEL has responsibility for ensuring that gas-fired thermal plant owners have the necessary supply contracts to run if required, which includes, not least, Petrobrás. A strong dialogue could help ensure that specific regulatory developments in each sector are mutually reinforcing and consistent, to spot broader issues in the evolution of the regulatory regime for each sector that may need to be drawn to the attention of the MME and CNPE, and to have a good understanding of each other's markets. This can be achieved without a merger, and there are some advantages in keeping two regulators at this stage, not least to provide two different sources of regulatory oversight for the main company Petrobrás.

Economies of professional competence can be shared, too. Consideration could be given to staff exchanges, for example. This can be very helpful for economic regulators working in sectors sharing important characteristics (for example, a dominant operator, the need to oversee competition and access to monopoly facilities), and also reduces isolation and the risk of regulatory capture (adopting the mindset of the regulated companies). The second level of co-operation is between agencies, and between ANEEL and the Ministry. *Ad hoc* working groups have been set up between the regulator and the Ministry to discuss issues of common interest, but not all relevant issues are discussed in these forums, and sensitive issues are sometimes taken forward by the regulator without adequate consultation.

Co-ordination with SUSEP in the health sector

There are comparatively fewer co-ordination issues in the field of private health insurance. Another general insurance supervisory body exists: SUSEP (*Superintendencia de Seguros Privados*). The insurers specialised in health are subject to ANS supervisions. However, at the start of ANS there was an injection of expertise from SUSEP, which had a

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longer history. In terms of economic and financial regulation, the accounting framework used for prudential supervision by ANS is derived from the one used by SUSEP. This is similarly the case for the norms for financial guarantees and the forms for periodic information. Even if the scope of their regulatory oversight does not overlap, there is no standing co-operation between ANS and SUSEP. It seems that, past this initial period, the exchange of information and methods has been reduced, while the ANS was increasingly focusing on specific health-related issues. This may not necessarily be the most appropriate way to develop consistent expertise and policy approaches across governmental agencies.

Co-ordination with the broadcasting authority in the telecommunications sector

In the telecommunication sector, the currently fragmented regulatory framework raises issues of co-ordination. ANATEL and the Ministry of Communications share responsibilities for the regulation of broadcasting activities. This is particularly important in light of recent convergence trends mentioned above. The issuance of grants for the exploitation of broadcasting services is under the responsibility of the Ministry and is ruled by Law 4 117/1962 of the Telecommunications Code (revoked in part by the Telecommunications Law) and by subordinate legislation. According to the GTL, ANATEL is in charge solely of the preparation and maintenance of the respective channel distribution plans and for the inspection, as to technical aspects, of the respective broadcast stations. In practice, dealing with cross-cutting issues has often resulted in confusion and decision delays for the operators involved.

While on paper the division of responsibilities seems more obvious, in practice there seems to be scope for confusion and procedural inefficiencies. This, coupled with the global trend towards consolidation of broadcasting and telecommunication, explains why a significant demand has emerged for consolidation of the activities of both regulators. This was not facilitated by the tense relation between the regulator and the Ministry on other issues, such as financing or price readjustments. Steps towards formal co-operation agreements in this field would help to improve the regulatory framework.

Co-ordination in the transport sector

Several authorities exist in the transport sector, which requires a co-ordinated approach. A group of interface operated in 2004-05 in the context of ANTT's strategic planning activities. The Ministry of Transport is developing the National Planning for Logistics (PNLT), and ANTT is conducting a study of transport on central Brazil. However, this included meetings with both academics from a number of universities and regulatory authorities at state level, as well as co-operation with the Department of the Federal Highway Policy for the Control of the Transport Operators, and with the National Securities Commission, Embratur, the DNIT, the Ministry of Transport and the Ministry of Defence and competition authorities. There are some contacts with IBAMA concerning the transport of dangerous products. Contacts with ANTAQ are made on an *ad hoc* basis. There are resolutions by the ANTT to oversee the difficulties of connection between land and maritime transport, including access to the ports of Santos and Itaqui for various railroad concessionaries. ANTAQ is also a much smaller agency. The efficiency of the Brasilian ports also depends on other bodies, such as those charged with sanitary vigilance, with setting up triage terminals for trucks, and with overseeing the transhipment of merchandise. In addition, a special Secretary for Ports has been set up recently to oversee the 40 public

federal ports; this Secretary is independent from the Ministry of Transports, and has to work in a co-ordinated manner with ANTAQ.

While this working group has certainly contributed to exchanges of information, it may not by itself be sufficient to address the need for co-ordination in the transport sector. There is at the moment no standing agreement of co-operation between the two agencies operating in the sector, ANTAQ and ANTT, even though these two agencies might have been part of a single body to address regulatory issues in the whole sector. Similarly, co-operation with IBAMA may be required in relation to wider environmental issues related to pollution standards, building permits for roads and other matters. As a result, while the co-ordination may be close to the Ministry or even to the competition authorities on relevant points, it may not be designed for long-standing schemes to resolve the sector's fragmented policy setting. The lack of co-ordination has been underlined by a number of analysts, including Carvalho (2005) and Mendes de Paula and Paula Macedo de Avellar (2007). The result is that it hampers loading and unloading at harbours, as ANTT and ANTAQ cannot reach an agreement on what can be done. The split was also criticised by the Confederação Nacional da Indústria and the Associação Brasileira da Infra-estrutura e Indústrias de Base (ABDIB).

Co-ordination across levels of government, state regulatory authorities

In Brazil, the Federal Constitution divides authority across levels of government. Three different types exist: competing, exclusive and complementing authorities. This is illustrated in two sectors of the study, where there is a compelling need for co-ordination: energy and transport.

In the energy sector, the states have virtually no regulatory powers of their own for electricity as such, as electric energy and the use of water for generating energy are clearly federal competencies, but the law provides for delegation of certain activities to state regulators and the Federal District, via agreements and contracts that are paid for out of the tax on companies that funds ANEEL. For the moment, agreements have been signed between ANEEL and 12 entities at state level. This concerns in particular the control of distribution companies, and adjusting supervision and mediation activities, audits, and the management of consumer complaints to local conditions. However, a co-ordinated approach of the energy sector – including gas, which is an important factor for electricity generation – faces the fact that the federal competence of ANP only concerns upstream gas issues and stops at the city gate, where state regulators take over. In this case, there are no co-operation agreements for monitoring activities, which is a problem since authority in the area of transported gas is divided between the federal level, for production and transport, and the state level, for commercialisation and distribution. This fragmentation across two agencies at the federal level and across levels of government does not facilitate co-ordinated handling of this crucial part of the electricity system.

Monitoring at state level faces the fundamental issue of the efficiency and probity of distribution companies, especially those that are still federally owned. Although performance is improving, distribution companies are still prone to losses, due to theft and fraud. Distribution company supervision is delegated to state-level entities. However, ANEEL considers that it does not have effective mechanisms to control the efficiency of their work. Control mechanisms are not part of the co-operation agreements that underpin the delegation, as these are voluntary agreements and focus on process rather than results: a Plan of Activities and Goals defines which activities are to be delegated (depending on the

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state regulator's capacities), and their cost. The state regulator executes the activities agreed in the Plan and reports back to ANEEL on the completion of the tasks as well as costs. Once this is approved by ANEEL, it pays the state regulator for its services.[13] ANEEL is seeking to address this by developing a different form of agreement more focused on results, including performance indicators. The aim is to sign a new form of contract with state agencies that defines time-limited goals as well as penalties. Reference costs will be used to assess results. ANEEL hopes that this will strengthen state regulators' autonomy as regards the means by which they carry out their tasks, at the same time as it provides for a more effective form of delegation.

In the field of transport, technical co-operation and co-operative agreements exist with the States and the Municipalities, even if effective monitoring of the licences granted may be better exercised at the local level.

Besides these issues of co-operation, the federal authorities in Brazil coexist with a wide network of "state regulatory authorities". Any measures or decisions concerning the federal authorities, such as the Bill of Law for Constitutional Amendment (PEC) 81 from 2003, would have immediate effects across all levels of the federation. Issues concerning the autonomy of regulatory authorities are also posed at the state level (Peci, Cavalcanti, 2000). There is hesitation at state level to guarantee the autonomy of regulatory bodies. Similarly, any challenges such as the need for resources, autonomy or institutional clarity that exist at the federal level are also faced, with even greater acuity, at the state level (Queiroz, 2001). However, an important consideration is that the state regulators are often pluri-sectoral – in the same way as the public utilities commissions in the United States – while the federal agencies are specialised by sectors.

Policy implications

A horizontal approach reveals broader issues concerning the Brazilian regulatory system, across sectors, policy objectives, and levels of government. The sectoral distribution is generally clear, even if it reveals a number of challenges. One challenge faced by Brazil, as it is by all OECD countries, concerns technical convergence in the field of telecommunications. Another challenge more specific to Brazil concerns the duality of regulatory authorities for the land transport sector, which is compounded by the lack of co-ordination between the two agencies. Other countries, such as Canada, have opted for an integrated approach. In terms of functional approach, the objectives set by Brazilian regulatory authorities are very complex, and in a sense, almost impossible to achieve simultaneously. This requires strategic vision by the regulators in order to fix a way forward to conduct their mission. ANEEL has adopted this strategy, with some success. The issue of telecommunications is more complicated, and the institutional nature of the notion of *public service* has not contributed to a clear and consensual understanding of the notion of "universal service" in the sector.

Relations with competition authorities vary from sector to sector, as the distribution of competences is relatively uneven between ANATEL at one extreme and ANS at the other. It seems that the working relationship has generally been satisfactory, even if formal co-ordination mechanisms were not made mandatory by the laws. The foreseen institutional strengthening offered by the New Bill of Law may offer an opportunity to systematise such relationships in the future.

The most challenging part concerns technical co-ordination within specific sectors among various agencies, with overlapping competences on the same sector. This concerns mainly the energy and transport sectors. In these sectors, the co-ordination mechanisms established both across levels of government and with agencies that may have related competences are partly inadequate. This challenge is beginning to be faced in agreements concluded across levels of government by ANEEL, but much remains to be done. Similarly, limited co-operation seems to occur across several agencies with a similar responsibility for prudential supervision of health and non-health insurance companies. Perhaps a certain notion of autonomy and independence has prevented some regulators from developing closer relations with other federal agencies, probably for fear of losing some operational autonomy. However, in the future, institutional consolidation of the regulators may offer a more fruitful environment, in which some of the gaps of the current system could be addressed more systematically.

Notes

1. Particularly concentrated in communications, electricity, natural gas, water/sewerage, transportation, financial services, professional services and agriculture.
2. For further details see the conclusions of the OECD Roundtable on the subject of the relationship between regulators and competition authorities (OECD, 1999).
3. For more detail, see OECD, 2005b for telecommunication merger cases.
4. Administrative Processes 08012002475/2002-83 8012.005459/2002-42, 8012.001410/02-11.
5. Administrative Process 08012.001892/2004-71.
6. Administrative Process 08012004156/2001-21.
7. Administrative Process 08000.002322/96-57.
8. Twenty-four relevant NGOs can be found at *www.mj.gov/br/controleprocon*.
9. IDEC and CREMESP, 2007 and *www.emdefesadoconsumidor.com.br/stj/2005/maio_2005_04.htm*.
10. *Avaliação de agências e órgãos reguladores* (Evaluation of regulatory agencies and bodies). Brazilian Institute for Consumer Defense, *www.idec.org.br*.
11. ANATEL Consultas publicas.
12. President Lula attended his first meeting of the CNPE only very recently (according to *The Economist*, 18 August 2007).
13. For a detailed study of the case of energy in São Paulo, see Queiroz, 2001.

Bibliography

Araujo Jr., José Tavares de (2005), "A regulação econômica nos setores de infra-estrutura no Brasil", in *Marcos Regulatórios no Brasil: o que foi feito e o que falta fazer*, organised by Lucia Helena Salgado and Ronaldo Seroa da Motta, IPEA.

De Paula, Germano Mendes and de Avellar, Ana Paula Macedo (2007), "Reforms and infrastructure regulation in Brazil: The experience of ANTT and ANTAQ", *The Quarterly Review of Economics and Finance*, doi:10.1016/j.qref.2006.12.008.

De Santana, José Ricardo, Machado, Eduardo Luiz, Oliveira, Gesner and Werneck, Bruno Dario (2004), "Regulatory design and competition policy implementation", United Nations Conference on trade and development, New York and Geneva.

IPEA (2007), *Regulação e Concorrencia No Brasil*, Ministerio de Planejamento, Orçamento e Gestão, Instituto de Pesquisa Econômica Applicada.

Neto, Floriano de Azevedo Marques (2005), "A articulação entre regulação setorial e regulação antitruste", *Revista Regulação Brasil*, ABAR, No. 1.

OECD (2000), "Competition Law and Policy Developments in Brazil", *OECD Journal of Competition Law and Policy,* October, Vol. 2, No. 3.

OECD (2000), "Relationships between regulators and competition authorities", Competition Policy Roundtables No. 22, OECD website on Competition Law and Policy, Best Practice Roundtables on Competition Policy, *www.oecd.org/competition*.

Oliveira, G. (2001), *Concorrência: panorama no Brasil e no mundo,* ed. Saravia, São Paulo.

Oliveira, G. e RODAS, J. G. (2004), "Defesa da Concorrência e Mercados Regulados", *In Direito e Economia da Concorrência*, ed. Renovar, São Paulo.

Possas, M.; Fagundes, J.; Pondé, J. L. (1997), "Defesa da Concorrência e Regulação de Setores de Infra-Estrutura em Transição", mimeo, S/d.

Queiroz R.B. (2001), "Regulação de serviços Públicos: Estudo de Caso de Agências reguladoras estaduais, Dissertação de Mestrado", Universidade Federal de Santa Catarina, Programa de Pós-graduação em Engenharia de Produção, Dissertação de Mestrado.

Rocha, B. M. E Oliveira, H. N. C. (2003), "Balanço da Articulação entre órgãos de defesa da concorrência e agências reguladoras de infra-estrutura" in ROCHA, B. M. (org.), *A Regulação da Infra-Estrutura no Brasil. Balanço e Propostas,* IOB-Thomson, São Paulo.

Valor Econômico (2007), *CADE já pode fechar acordo para encerrar investigação de cartel*, 6 June.

ANNEX 7.A1

Sectoral Responsibilities and Missions of Regulatory Authorities

Table 7.A1.1. **Selected regulatory authorities: assignment and tasks**

Authority	Missions, objectives	Tasks
ANATEL	The provision of access to telecommunication services, at reasonable tariffs and prices, and under adequate conditions to the entire population; and the adoption of measures that foster competition and diversity of services, that increase the supply and that provide standards of quality compatible with user requirements. ANATEL's mission is to extend universal service at reasonable prices, foster competition and increase service quality.	ANATEL is in charge of implementing the national telecommunications policies established by the Executive and the Legislative Branches, through the organisation of the exploitation of telecommunications services. ANATEL is responsible for granting concessions or, exceptionally, permissions for the rendering of services under the public regime, subject to universal service and continuity obligations. ANATEL is also responsible for granting licences (authorisations) for rendering services under the private regime.
ANEEL	Regulate and monitor the production, transmission, distribution and supply of power, and to establish conditions for power market development which balances the interests of market players (agents) for the broader benefit of society, and in accordance with the government's political directives.	Regulate and supervise the production, transmission, distribution and commercialisation of electricity energy according to the policies and directives established by the Federal Government.
ANTT	To preserve the national interests and promote the social and economic development. To assert the national unit and regional integration. To protect users.	Enforcement of the Conselho Nacional de Integração de Políticas de Transportes' politics and regulation and inspection of transports' services. To regulate, supervise, and monitor the activities of services provision and transport infrastructure exploitation by the private sector.
ANS	To promote the defence of the public interest in the supplementary assistance to health. To regulate the sectorial operators. To contribute to the development of health activities in the countries.	Regulation and inspection of the activities that guarantee health supplemental assistance.
CADE	Competition policy.	Guiding, monitoring, preventing, and investigating economic power abuses.

Source: OECD Secretariat, based on questionnaires related to supervisory authorities.

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Table 7.A1.2. **Mission and responsibilities of energy regulators in selected countries**

Regulator	Mission	Responsibilities
Argentina, ENRE	Ensure that activity in the electricity sector follows national policies related to supply, transport and distribution of electricity, always taking into consideration the protection of consumer interests.	Protect consumer rights. Promote market competition in electricity demand and production markets and foment private investments that ensure adequate supply in the long term. Promote the operation, trustworthiness, free access, non-discrimination, and generalised use of services of electricity installation, transmission and distribution. Regulate transmission and distribution of electricity, ensuring fair and reasonable tariffs. Encourage the supply, transmission, distribution and efficient use of electricity using adequate tariff methodologies.
Australia, AER	Govern and manage electricity resources efficiently.	Regulate the revenues of transmission network service providers by establishing revenue caps. Monitor compliance with the national electricity law, national electricity rules and national electricity regulations. Investigate breaches or possible breaches of provisions of the national electricity law, rules and regulations. Institute and conduct enforcement proceedings against relevant market participants. Establish ring-fencing guidelines for business operations with respect to regulated transmission services. Exempt network service providers from registration.
Brazil, ANEEL	Regulate and monitor the production, transmission, distribution and supply of power, and establish conditions for power market development which balances the interests of market players (agents) for the broader benefit of society, and in accordance with the government's political directives.	Regulate and supervise the production, transmission, distribution and commercialisation of electricity energy according to the policies established by the Federal Government. Secure the expansion of the national power system via a planning process co-ordinated by MME. Guarantee a balance between supply and demand with the necessary quality, continuity and security of service across the whole Brazilian territory, with tarification that attracts and remunerates investment needed for expansion, under fair conditions. Carry out the Programme for a Quality Electric Service (*Programa Qualidade do Serviço de Energia Elétrica*), the objective of which is to establish the conditions for a quality electric system, as defined by indicators of duration and interruption of service. Objectives for these indicators are set out in the PPA. Handle, identify and find solutions to user issues. Mediate solutions to conflicts between agents, and between agents and consumers. Organise public hearings whenever a decision process affects agents/consumers. Delegate tasks to state regulatory agencies. These tasks cover monitoring, regulation, mediation and ombudsman tasks, aimed at securing an efficient service to consumers at ground level. To give effect to the PPA, ANEEL has established a Strategic Challenges Agenda (*Agenda de Desafios Estratégicos*) for 2006-08. Reduce power costs, review methodologies for tariff readjustments, remove gaps in the regulatory framework (these include regulation regarding the trading of energy from renewable sources, and the management of concessions for the isolated parts of the grid with a view to integration with the main grid), guarantee the achievement of universal service objectives, stimulate R&D. Strengthen methods of dialogue with society, improve means of satisfying consumers. Strengthen the autonomy and role of the regulator (this largely refers to the need to improve financial autonomy, structure and develop services).

Table 7.A1.2. **Mission and responsibilities of energy regulators in selected countries** *(cont.)*

Regulator	Mission	Responsibilities
Canada, NEB	Promote safety, environmental protection and economic efficiency in the Canadian public interest within the mandate set by Parliament in the regulation of pipelines, energy development and trade.	Ensure regulated facilities and activities are safe and secure and are perceived to be so. Ensure regulated facilities are built and operated in a manner that protects the environment and respects the rights of those affected. Guarantee that Canadians benefit from efficient energy infrastructure and markets. Co-operate with other public bodies and deliver quality incomes through innovative leadership and effective support processes.
Chile, CNE	Elaborate and co-ordinate plans, policies and norms for the adequate functioning and development of the energy sector, ensure compliance with these and assist the government in all matters related to energy.	Draft and propose energy plans and policies. Enforce energy plans and policies. Monitor market evolution. Perform or request any necessary sector studies.
New Zealand, EC	Ensure electricity is produced and delivered to all consumers in an efficient, fair, reliable and environmentally sustainable manner. Promote and facilitate the efficient use of electricity.	Ensure that the government's objectives for the electricity sector are met. Current areas of priority are: security of supply and reserve generation, priority investment in the transmission grid and hedge market arrangements and demand-side participation. Develop the Electricity Regulations and Rules to ensure best conditions exist for workable and effective competition. Ensure that electricity is generated and distributed in a reliable way, that the market for buying and selling electricity is administered efficiently and that disputes that arise in the course of the operation of the system and the markets are managed effectively.
Norway, NVE	Ensure an integrated and environmentally sound management of the country's water resources, to promote efficient energy markets and cost-effective energy systems and to work to achieve a more efficient use of energy.	Control and regulate monopoly operation. Facilitate the electricity market and safeguard consumer interests. Regulate network access arrangements and set methodology for network tariffs. Co-ordinate administrative procedures for licensing the construction and operation of generation and network infrastructure.
Spain, CNE	Ensure that the energy market is competitive, objective and transparent, for the benefit of all market operators and consumers.	Ensure market competitiveness. Elaborate detailed market regulation (when entitled by sectoral laws). Elaborate market analyses and provide information to the autonomous regions. Ensure consumers have access to a continuous supply of adequate quality and that their rights are respected.
United Kingdom, GEMA and Ofgem	GEMA: Monitor activities of electricity companies and take enforcement action where necessary to ensure compliance with statutory and licence obligations. OFGEM: Protect consumer interests by promoting competition where appropriate.	GEMA: Promote efficiency and economy on the part of licence holders, protect the public from dangers arising from generation, transmission, distribution or supply of gas and electricity, contribute to the achievement of sustainable development, secure a diverse and viable long-term energy supply. Ofgem: Promote market competition, protect consumer interests, regulate the monopoly companies that run the gas and electricity networks, ensure uninterrupted energy supply, contribute to curb climate change and work towards sustainable development. *Note:* GEMA determines the strategy, considers major policy issues and oversees the electricity regime. Ofgem manages day-to-day issues under GEMA.
United States, FERC	Regulate and oversee energy industries in the economic, environmental, and safety interests of the American public.	Promote the development of a strong energy infrastructure. Support competitive markets. Prevent market manipulation. Regulate interstate transmission.

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Table 7.A1.3. **Missions and tasks of regulatory authorities in the private health insurance sector in selected countries**

Regulator	Missions, objectives	Tasks
Australia: PHIAC	Section 264-5 of the Act requires PHIAC to achieve a balance between three broad objectives: • Foster an efficient and competitive health insurance industry. • Protect consumers' interests. • Ensure the prudential safety of individual private health insurers.	• Administer the Private Health Risk Equalisation Trust Fund. • Administer the registration of private health insurers. • Provide information to the government and other stakeholders on private health insurance membership and utilisation, reinsurance benefits and gap cover. • Collect financial and statistical returns from each registered health benefits organisation quarterly and annually. • Co-operate with other regulatory agencies on matters affecting the private health industry.
Brazil: ANS	Promote the defense of public interests in the healthcare sector, regulate the health insurance sector, including the relationship with healthcare providers and consumers, and contribute to the development of the health system in Brazil.	• Issue licences to insurers operating in the market. • Ensure that all insurance institutions respect the regulations in force, including sanitary and epidemiology requirements. • Establish quality parameters, monitor price evolution and ensure compliance with insurance policy obligations. • Gather information from private healthcare providers and integrate it with the Public Health System databank.
Canada: OSFI	• Protect depositors, policyholders and pension plan members from undue loss. • Advance and administer a regulatory framework that contributes to public confidence in a competitive financial system.	• Supervise the financial conditions of insurers as well as compliance with their governing law. • Advise institutions in financial trouble and take or require necessary corrective measures. • Promote the adoption of policies and procedures designed to control and manage risk. • Monitor and evaluate system-wide or sectoral issues that may impact institutions negatively.
France: ACAM	Protect the interests of policy holders and beneficiaries of guarantees by controlling and monitoring all players of the French insurance market.	• Ensure that all insurance institutions respect the regulations in force. • Monitor the sound finances of insurance institutions to ensure they can keep their commitments to policy. holders and to Ensure that insurance institutions put in place adequate measures against money laundering. • Register associations that have subscribed to contracts of collective insurance and national pension schemes (Plans d'épargne retraite populaire). • Participate in the selection process of certain experts in the field of real estate and actuaries. • Participate in the development of new regulations at EU and international level.
Ireland: HIA	• Benefit the common good by facilitating a competitive health insurance market while preserving community rating, open enrolment and lifetime cover. • Safeguard the interests of current and future health insurance consumers.	• Register private health insurers. • Monitor the conduct of health insurance business and its developments. • Take or recommend disciplinary action when health insurers are found to have breached statutory rules. • Report to the Minister for Health and Children on risk equalisation, and make recommendations on health issues and to review consumer complaints and monitor advertising and promotional material produced by insurers and to investigate complaints in relation to health insurers.
Mexico: CNSF	• Ensure the smooth operation of the insurance and surety industries and guarantee the users' interests. • Promote sound development of the insurance and surety industries with the purpose of extending its services to the majority of population. • Provide stability to the insurance and surety sectors .	• Monitor solvency and financial stability of insurance and surety institutions. • Ensure that all insurance and surety institutions respect applicable regulations. • Promote a culture of insurance in Mexico and promote product innovation. • Authorise insurance and surety business operating in the Mexican market. • Generate provisions for the regulation of the insurance and surety markets.
Portugal: ISP	• Regulate and supervise insurance and re-insurance activities, pension funds and insurance mediation activities in Portugal.	• Regulate, control and supervise insurance activities as well as connected or complementary activities. • Assist the Minister of Finance in defining sector policies. • Execute and control the execution of insurance sector policies. • Co-operate with the equivalent authorities of other states, particularly other EU states and other national authorities.

Table 7.A1.3. **Missions and tasks of regulatory authorities in the private health insurance sector in selected countries** *(cont.)*

Regulator	Missions, objectives	Tasks
Netherlands: CVZ	• Guarantee and develop the public preconditions of the healthcare system.	• Administer the basket of insured healthcare interventions and manage healthcare funds. • Monitor risk-based budgeting for healthcare insurers. • Centralise healthcare administration procedures.
Switzerland: BPV	• Ensure that private insurance institutions offer necessary guarantees relating to solvency, organisation and management to policy holders. • Ensure that private insurance institutions comply with the law and do not commit abuse against the insured. • Promote a favourable development of private insurance organisations at national and international level.	• Monitor the entire business operations of private insurance companies subject to state supervision. • Licence business operations, approve insurance products, check annual reports, inspect companies and manage complaints. • Participate in the drafting of legislation and international agreements in the private insurance sector. • Promote self-regulation processes and transparency in the insurance industry. • Support the national and international development of supervision.
United Kingdom: FSA	• Maintain confidence in the financial system; promote public understanding of the financial system; protect consumer interests and reduce the scope for financial crime.	• Monitor rule implementation, control market abuse and provide consulting services for firms. • Influence legislation negotiation at early stages and co-operate with national and international regulators. • Provide financial guidance to consumers and improve the relevance of the product information consumers receive. • Develop risk-based regulation through firm-specific and thematic supervision and policy. Establish risk mitigation plans. • Tighten service standards and benchmark FSA performance against industry best practices.

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Chapter 8

Powers for High-quality Regulation

Regulatory authorities are distinct from other decentralised agencies, as they are granted specific powers, often through the law that establishes them. This allows authorities to issue opinions, set out rules, monitor and inspect, enforce regulations, grant licences and permits, set prices and settle disputes. The range of these powers may vary substantially among agencies in the same country, as it has to reflect the different realities of the different sectors. A one-size-fits-all approach may therefore not be adequate in that respect. Agencies can receive direct powers, but they also often have a significant advisory function, based on their expertise. These regulatory powers that are devolved to regulatory authorities need to be considered from a whole-of-government perspective, as they have to contribute to high-quality regulation. Therefore, a quality regulation perspective can serve as an analytical basis on which to assess the transparency and reliability of regulation made and enforced by the agencies.

Powers of the regulatory authorities concerned

The powers of the regulatory authorities reflect the progress made in liberalising or opening various sectors. These powers depend on the nature of the legal instruments conferred to them. They are necessarily wider when authorities are created by means of legislation, as is the case with the Brazilian regulatory agencies. However, a general issue in Brazil is that the power to grant core concessions for public services (*Poder concedente*) is seen as part of the Constitution as an exclusive prerogative of the Executive. This is one of the main reasons why a general Law Bill has been prepared and sent to Congress. Although this law may have obvious benefits, it may be necessary to pay attention to the circumstances of the various sectors, given technology trends, the need for long-term market and investor confidence and cumulative expertise.

The powers of the authorities in Brazil are defined clearly in the laws, but the organisation of the interface with the ministries leaves scope for improvement and may generate cases of overlaps – an important issue (see Annex 8.A1, Tables 8.A1.1).The current Law Bill 3 337 may have significant implications, which will be addressed at the end of this chapter. For example, ANEEL's main powers, set out in the law and secondary rules, are, *inter alia,* to: allocate the licences that underpin the concessions and authorisations flowing from the auction process; to set the conditions for grid access and use, including user charges and network revenues; and to set the pricing framework for end-users, as well as other supervisory tasks. It is clear that for some of the core aspects of major infrastructure, the indirect influence of the ministries can be significant, as these are major issues. Similarly, ANATEL has wide powers:[1] To issue licences; to enact rules on the use, establishment and control of maximum tariffs and prices for services rendered under the public regime; to regulate interconnection; to manage radiofrequency and spectrum; to apply sanctions; to settle disputes between service providers and between them and consumers; to impose sanctions; and to protect consumers' interests in the field of telecommunications. However, the exercise of some of these economic powers can be very sensitive, as was the case for the setting of the prices for fixed line services at the time of

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the macroeconomic crisis. Both regulators are predominantly exercising an economic regulatory function.

By contrast, the other two regulators also have significant prudential or safety regulatory powers in addition to economic regulatory powers. ANTT has responsibility for the transport of special and dangerous freight over federal roads. At the same time, it has the right to study and propose concessions for infrastructure and services for interstate and international transports, submitting the plans for concessions to the Ministry of Transport for approval. Once these plans are approved, the process for licensing and adjudication of the concessions is conducted by ANTT. ANS is in charge both of ensuring the prudential credibility of the health plans, and of co-ordinating quality related issues; it also addresses issues related to the pricing of some plans.

The power to grant licences from a safety standpoint

ANTT has the following powers in relation to safety:

- Minimum safety standards concerning highways are defined in contracts with the concessionaires by the ANTT. ANTT also supervises compliance with these contracts. The agency can moreover establish specific norms in relation to the provisions of the contracts, and in co-ordination with other bodies, such as the Traffic Departments at state level.
- Transport of dangerous goods (Decree 1 832, Decree 98 973 and Resolution 420). This task does not solely concern ANTT, as IBAMA also has responsibility for the supervision of the transport of dangerous products (Decree 78/91, which approves the structure of IBAMA following Law 7 735/89 setting up IBAMA).

Inspection, surveillance and sanctions in terms of safety

In the case of collective passenger transport, ANTT is responsible for supervising vehicles and terminals and checking compliance with safety standards. The ANTT annual report provides a brief overview of these activities. For road concessions the agency carries out annual inspections, which result in technical-operational reports. In some cases, an administrative process may follow, with the issuance of "terms of registration of occurrence".[2] ANTT works in partnership with the Federal Road Policy to supervise the vehicles transporting freight. The agency also performs technical supervision of railroads and trains. In all sectors, it can apply penalties, in case of non-compliance. Safety has recently been a priority for ANTT; it has been developing a regulation proposal stipulating that transport companies have designated responsible persons as part of their contract for services. Control over the transport of dangerous products has also been intensified.

However, these inspections and actions may still fall short of fully addressing the issue of safety on Brazilian roads, as the fatality record is significantly higher than in most other countries. General safety standards are lacking for quality minimums, vehicle renewal periods, and workers' qualification. Deficiencies concerning these aspects are more likely to be found with small operators, which represent 57% of the total fleet.[3]

Licensing power from an economic standpoint

Delegation of power to grant an independent regulator a licence to operate in a market is a crucial component of liberalisation. This aim of this process is to reassure operators and promote conditions for investment and growth. There is also a key issue to ensure free

entry and stimulate competition in some cases. The provisions currently applied in Brazil are presented below; the potential impact of the New Law Bill 3 337 on these issues will be discussed further below. All sectors included in this study are concerned:

- In the telecommunications field, several types of licences exist. ANATEL is responsible for issuing operator concessions under the "public regime" (fixed switched telephony). Competitors are selected through competitive bidding, without exclusivity. This is subject to universal service and continuity obligations. In accordance with the general plan for granting licences (Presidential Decree 2 534/1998), there are currently four main and two small concessionaires, for switched telephony.
- The regulator also issues authorisations under the "private regime". All services are authorised under public regime. The fixed switched telephony is authorised in both. ANATEL has a legal obligation to adopt measures to promote competition and diversity of services. According to Article 136 of the GTL there is no limit to the number of service authorisations, except for cases of technical impossibility. The price to be paid should reflect administrative costs incurred by ANATEL (maximum value BRL 9 000 – Resolution 386, November 2004). The only restriction is on the use of radio frequencies, given the availability of the spectrum. ANATEL also has the power to establish restrictions, limits and conditions for obtaining licences by firms and groups of firms, especially in the case of operators with Significant Market Power.
- ANATEL has also the responsibility for overseeing Cable TV services under the private regime, with granting procedures governed by Law 8 977, from January 1995.
- For railroad transport, ANTT grants concessions for freight transportation for 25 years and authorisation for touristic and commemorative passenger transportation. For road freight, domestic transport is subject solely to registration, while international transport requires a formal authorisation and there are restrictions on cabotage. For interstate buses, a specific authorisation is required for each charter travel, which is valid for two years. For regular services, ANTT has to grant a licence following a bid, and the licence is valid for 15 years. The service has to be delivered using conventional buses, even if superior category services can also be offered. Given the federal structure, intrastate transport is not within the remit of ANTT.
- For road concessions, a plan has to be submitted for approval to the Ministry of Transport. ANTT then proceeds with the bid and the contracting, and then oversees the delivery of services over the relevant segment of the federal roads. The duration of the concessions is typically 25 years.
- With regard to the power sector, a licence is needed by companies; this can take the form of a concession contract, a permission contract, or an act of authorisation for generation and supply of energy. This is an executive power held by Ministry of Mines and Energy as a result of the constitution (*Poder de Outorga*), formally delegated to ANEEL. The allocation of a licence is preceded by auctions, organised by ANEEL according to directives approved by the MME, and based on the forward planning for power demand and supply carried out by EPE; the latter agency is also responsible for the technical certification of plants that can be put forward for auction. This setting establishes a fragile balance between ANEEL and MME/EPE as regards responsibilities for licensing and the linked issue of auctions, which together underpin market entry for generators and distributors into the power system.[4] ANEEL's role in auctions is the largely practical one of auction design and applying the rules and procedures set by MME, with EPE responsible for

establishing the amount and type of power to be auctioned and certifying plants. This only gives partial powers to ANEEL; the agency may not be fully sufficient to act as an autonomous and impartial regulator, as this requires constant interaction with the Ministry. There is also some uncertainty over legal powers and the difference between what is prescribed in law as regards ANEEL's powers – what seeks to make the regulator responsible – and what happens in practice. This is also the fact that MME is the manager of state assets with Eletrobrás and associated companies, and is also the lead institution together with its associated entity EPE, which is fully funded by MME, in setting the framework for auctions. In this respect, transparency of processes is necessary for success.

- In the field of supplemental health insurance, ANS has issue authorisation based on compliance with the rules set for the operators on the market. Any operator that complies with these rules should be allowed to operate. Given the specificities of the market, it is also necessary to testify that there are no longer active beneficiaries or debts to providers of services. Companies have to be registered in Brazil to provide services.

Market supervision, inspection and sanctions for issues from an economic standpoint

In the telecommunications sector, in order to oversee the quality and performance requirements imposed on operators, the regulator establishes specific goals for service providers on fixed and mobile telephony and Pay Television. Additionally, the regulator is empowered to request any information it may deem necessary from the operators, who must periodically submit economic, financial and accounting information on their operations. Recent work by the OECD and the World Bank reveals that there was a qualitative jump in service quality immediately following liberalisation, exemplified by a 30% decrease in dropped calls. However, service quality still remains an important issue for consumers, particularly in mobile services. Limited information was available in relation to sanctions.

In the energy sector, ANEEL regulates the work of ONS and CCCE, which between them are responsible for the technical and practical aspects of power market management. ONS' systems and technical procedures are audited by ANEEL in terms of reliability, compliance with operative practice, quality of computer models, etc. ONS has to prepare, publish and dispatch performance standards for this purpose, including operational safety, losses, etc. Market rules are proposed by ONS, discussed with agents, and reported to ANEEL. The supervision of CCCE is important to ensure effective market management. Overall responsibility for market supervision, with specific responsibilities delegated to specialist entities, is with the regulator in most countries with competitive power markets. The situation in Brazil has improved since the 2004 crisis, the roots of which can partly be traced to institutional failings in this area, including a failure by the regulator to supervise the precursor to CCCE effectively. Supervision remains an especially important role for ANEEL in a complex market framework that covers both a regulated and a free market, and contracts for both old and new energy; a significant portion of customers can migrate between the two.[5]

A significant portion of supervision is also delegated to the state level by ANEEL. This was discussed above as part of the co-ordination across levels of government.

Considerable information on the power sector is collected by ANEEL and available on its website. EPE and ONS also provide data on their websites. This includes the online

generation database BIG, which provides information about operational plants and those under construction as well as their regulatory status, including environmental licence status and restrictions. Similar data are available for transmission capacity and expansions.

In terms of sanction, the law provides for ANEEL to apply administrative penalties to market players (including fines, a ban on participation in public auctions, and the withdrawal of a concession).[6] According to the information collected, the sanctions for not delivering the agreed quantity of electricity are fairly high, and provide strong deterrents for producers and distributors. Sanctions may be given in case of inadequate maintenance or procedures. They can also be applied if the energy sold is greater than the actual production, or if the energy sold has been bought from another producer (Resolutions 63/2004 and 254/2007). ANEEL can and does, for example, apply penalties if a line is taken out without permission (this can amount to 2% of a company's revenue). Sanctions have increased from four in 1998, corresponding to BRL 1 million, to 170, corresponding to BRL 45 million, in 2002 and 81, representing BRL 76 million, in 2003. Since then the annual number has stabilised at around 50-60 sanctions for an order of magnitude of BRL 40 million total. This may also imply that the system has been a deterrent and that companies have been able to modify their practices to reduce the risk of sanction.

In the transport sector, ANTT had established partnerships with a number of institutions to have them assist with supervision: The Federal Road Police (DPRF), the Regulatory agencies of Goiana (AGR), Mato Grosso (AGER/MT), Mato Grosso do Sul (AGEPAN), São Paulo (ARTESP), Santa Catarina (DETER/SC), Bahia (AGEBRA), the Secretary of Infrastructure of Piauí (SEINFRA/PI), Tocantins (SEINF-TO), and the Secretary of Transport of the Federal District (SETRAN/DF). Other partnerships with academic entities have also been established (see Chapter 7).

In terms of sanctions, ANTT Resolution 288/2003 regulates the penalties applicable to the railway concessionaires that do not comply with the targets set by the contracts for accidents, but limited information is available about the corresponding penalties. In 2006, a Conduct Adjustment Term (TAC) was signed between the agency and the concessionaires that had not reached their targets.

In the private health insurance sector, ANS has the power and obligation to supervise health plan operators and sanction them when needed, with fines of up to BRL 1 million and a possible suspension or cancellation of their licence. When an infraction is suspected, an administrative process is started and the final decision is in the hands of the Collegiate Board (NR 48, and NR 124). Direct supervision refers to the detection of denunciations made and through programmed diligences in the operators. Several numbers are available and web contacts for the public to report abuses. In addition, ANS has ten units to receive grievances and perform supervision in all regions of the country. Indirect supervision refers to the continuous monitoring and checking of periodic information provided by the operators.

Access to networks and infrastructure

The power to provide network access is one of the key functions of an independent regulator, who seeks to ensure that third parties can enjoy use of a key infrastructure (an essential facility). This concerns only the infrastructure sectors of this study:

- ANATEL must promote competition. Interconnection is very frequently at the core of competition bottlenecks as incumbents generally try to resist or overcharge interconnection with new entrants. Indeed this is a key area for ANATEL's intervention,

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since local incumbents have tried to obstruct market development. In 2002 incumbents held 99% of the local market vs. a mere 1% for new entrant companies.[7] In Brazil the GTL regulated interconnection in general terms as in most countries, leaving detailed provisions to the discretion of the regulatory agency. In 2004 ANATEL issued a decision obliging incumbent local operators to provide access to their unbundled local loop. ANATEL has a number of specific powers to force interconnection, as provided by Articles 146, 147 and 155 of the GTL, even if these are not necessarily fully comparable with those in other OECD countries (see Annex 8.A1, Table 8.A1.3).

- In the rail sector, clear rules defining third party access and mutual traffic are very important, especially in a regionally fragmented network (see Table 5.A1.1 in Annex 5.A1). ANTT has explicit responsibility to regulate and enforce them.[8] Resolution 433/2004 (amended by Resolution 895/2005) establishes procedures for mutual traffic and access. The concessionaires have to negotiate the terms of the contract, called the Specific Operational Contract, which must be sent to ANTT a maximum of 30 days after being concluded. This principle of free negotiation may not lead to the best outcome, as there are no parallel rails and usually the option for using another path is not available for the service provider. This may give undue bargain power to the owner of the track. According to Law 10 233, it is under ANTT responsibility to prevent and avoid the abuse of power, and to inform the antitrust authorities when some abuse is detected. If the parties cannot reach an agreement, ANTT has to solve the issue. However, the Law does not establish specific terms for the contracts, such as maximum tariffs and minimum level of service. According to a report by CNT (2003), the current rules for third party access and mutual traffic do not allow for a full and efficient use of the rail network. In 2006 ANTT had to intervene to fix the conditions and tariffs for the access of EFC, from CVRD.[9]
- In the electricity sector, ANEEL is directly responsible for regulating access to, and use of, the transmission and distribution grids. It applies a well functioning regulatory framework, started in 1999, for open access to transmission and distribution systems, including imports and exports, setting revenues and tariffs for grid access and use, and other conditions. It holds public hearings for grid procedures. ANEEL also has an important role in grid maintenance, applying performance standards as well as authorising grid reinforcement projects. Overall grid management is shared with EPE, which is responsible for investment planning for extensions to the grid via the auction process; this is along the lines of its role in generation expansion, assessing future demand and identifying projects. ONS is responsible for the technical aspects of open access grid management.

Price regulation

The power to regulate prices is essential for regulatory authorities, in the event the historical operator holds a monopoly or exercises significant market power, or benefits from asymmetries of information. In Brazil this is indeed done by regulatory authorities, in close collaboration and co-ordination with the Ministry of Finance and SEAE in some cases, even if sectoral ministries have also at times tried to intervene to force certain decisions.

- ANATEL is responsible for controlling, monitoring and revising tariffs for services rendered under the public regime, as well as for establishing tariffs and ratifying readjustments. Concessionaries are subject to price cap regulation for retail prices, subject to annual readjustment according to an index specifically associated with telecommunication services (*Índice de Serviços de Telecomunicações* – IST). However,

readjustment of tariffs in the public regime have led to some controversies in the past, particularly when the price basket chosen for the readjustment was increasing rapidly due to the devaluation of the currency. The new basket of reference that follows significant negotiations at a domestic level is intended to mitigate both domestic price trends and the impact of international currency factors (see Annex 8.A1, Table 8.A1.5).

- Under the private regime prices are set freely, subject to competition rules and non-discriminatory treatment obligations. However, the agency monitors personal mobile phone service prices.
- Interconnection charges should be based on costs. Unless the regulator mandates full unbundling and no discriminatory treatment, interconnection charges and price caps are not likely to be based on costs, leaving open the possibility of unfair price negotiation and technology discrimination. Brazilian authorities are working towards the implementation of a Long Run Incremental Cost (LRIC). Decree 4 733 of 2003 reforms previous legislation and establishes a new orientation where tariffs will be based on the operator's long-run incremental costs. This change is scheduled to be enacted in 2008; it follows a transitional phase spanning 2006 and 2007, during which time interconnection tariffs are proportional to retail prices. Until this is fully implemented, conditions for interconnection are negotiated among interested parties. ANATEL may only arbitrate in the case of lack of agreement. Charges for the provision of leased lines may also be freely negotiated, but ANATEL has defined reference values based on costs to be used in cases of disputes involving a group with significant market power.
- ANEEL establishes and enforces the methodology for distribution companies' tariffs to end-users, which is included in distributors' concession contracts and subject to annual adjustments. The methodology has improved considerably, and is a mix of cost controls and a price cap. It includes the use of a reference company to set efficient operating costs. However, all these costs are closely monitored by the Ministry. For example, the MME intervened with its own rules for the methodology for distribution tariffs in 2003/04.[10]
- In the private health insurance sector, ANS is responsible for reviewing the readjustment of prices of private plans, giving due consideration to the opinion delivered by the Ministry of Finance.[11] The plans have to submit a technical actuarial note as a prerequisite to be registered, for family, individual and collective plans. There is an exception for odontological plans and for collective plans that are in part or totally financed by firms. Plans cannot be commercialised with values below the average medical spending to which is added an actuarial margin of safety. There are also fixed limits to the variation of premiums.
- ANS also has powers to oversee the price increase of individual and family plans. For this purpose, it uses the same methodology since 2001, calculating the average of the readjustment index applied to collective plans. This, in the view of the regulator, should be enough to deal with the lack of bargaining power of consumers of individual and family plans, and could provide incentives towards efficiency. Collective plans that are not sponsored and contain less than 50 beneficiaries are not included in the calculus.
- ANTT regulates rail freight transportation tariffs through a system of price caps established by contracts. These caps are reviewed every year and corrected by the IGP-DI (Resolution 1 212/ANTT). Any tariff revision must be communicated to SEAE two weeks before becoming effective. Tariffs for accessory services are not regulated by the ANTT; for users that are highly dependent on rail transportation however, ANTT may arbitrate.

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In addition, changes of tariffs for passenger transport less than one year following the previous change must be approved by the Ministry of Finance. Changes for passenger transport follow various domestic or specific price indices, with an annual readjustment calculated by ANTT every year. The agency must supervise and monitor the market with daily supervision and the antitrust authority must intervene whenever anti-competitive conduct may be taking place. Road tolls are established by contract. Road freight is free.

Settlement of disputes

Regulators are often given the power to settle disputes, which represents a quasi-judicial power. In many cases the regulators – who have a real understanding of the sector – are best placed to come up with an agreement between the parties; they also have the capacity to act swiftly. The disputes may arise either between firms on the market, or between firms and customers.

- In the telecommunications sector, ANATEL is responsible for settling disputes between service providers and between them and consumers, in order to guarantee protection of consumer rights and interests. Disputes are also common with interconnection. ANATEL internal rules have established a mediation process, wherein one or both parties request the agency's intervention, as well as an arbitration process, if both parties commit to accepting ANATEL's binding decision. Any person whose rights are violated is entitled to bring the matters under ANATEL's jurisdiction.
- ANEEL seeks to resolve disputes between agents and between agents and consumers, via a Mediation Procedure (*Procedimento de Mediação*) that sets a framework and milestones for the process. According to an ANEEL 2006 Annual report, 83% of the conflicts were resolved through this procedure. For 97% of these conflicts there was a loss of object following the mediation. Many issues raised with ANEEL are, however, related to matters that are not regulated: gaps in the legislation, difficulties in interpretation of the law, or obtaining facts needed to resolve a case. Gaps in legislation are illustrated by the electricity sector. For example, regulations for consumers in the free market may require revision and improvements, and regulation for isolated systems is lacking in terms of production and commercialisation grants to integrate the national interconnected system. Alternative sources of energy are also lacking regulation.
- ANS does not interfere in disputes between operators and consumers. It considers itself part of the indirect administration, with no competence to resolve controversies between consumers and plans. However, there are mechanisms being developed by the agency to facilitate resolution of these conflicts. There is the possibility of voluntary reparation by an operator. ANS is also developing a system of consumer hotline before setting up administrative procedures, to facilitate the interaction between consumers and operators.
- ANTT has the power to settle disputes, with administrative decisions that do not prejudice any further litigation.

Oversight of universal service

Oversight of universal service is one of the major tasks of some regulators in OECD countries. All of them depend on the definition and extent of such service. In Brazil, this concerns mainly telecommunications and electricity – even if the two policy fields differ significantly.

In the energy sector, there is a programme for the universal access to electric energy and for efficient use of energy. These two programmes are managed by the Ministry of Mines and Energy. However, ANEEL is charged with monitoring universalisation of access by distribution companies. This is an explicit item in the management contract for ANEEL, with indicators for monitoring universalisation by 64 distribution companies. In fact, access to electricity, according to the available data, is nearly universal, with only 6% of the population lacking access. The programme Light for All is intended to fill the gaps.

In the telecommunications sector, the General Telecommunications Law defines universal service obligations as those that aim to enable and provide access by any person or public interest institution to telecommunication services, regardless of his/her/its location and social-economic status, as well as those designed to allow use of telecommunications in essential services of public interest. Universal service in Brazil comprises both individual and collective access points. The only service providers subject to universal service obligations are those that render services under the public regime. Currently, this is the case only of fixed switched telephone service providers operating under a concession contract.

In terms of access, 46.8% of households have access to fixed lines, and 27.7% have only mobile lines. Thus overall, 74.5% of households have access to at least one service of communications, fixed or mobile (IBGE-PNAD, 2006). Universal access is therefore far from complete compared either with electricity or with telecommunications in OECD countries. In theory, universal service obligations are established in specific plans proposed by ANATEL and submitted for approval by the President of the Republic through the Ministry of Communications. The implementation, accompanying and inspection of such plans are the responsibility of ANATEL. The agency also has the power to impose sanctions in case of non-compliance with universal service obligations. In practice, the funds set aside for universalisation over the years as part of the FUST, have not been spent, except for one project: a decree was issued in February 2007 to approve a plan to provide access to persons with hearing difficulties. Following this decree, ANATEL has signed terms of agreement with the switched fixed institutions in charge of supporting persons with cognitive deficiencies. This first use of FUST resources to date follows studies undertaken by the Ministry of Communications to develop a strategy for universalisation. However, there remains strong disagreement within Brazil as to which would be the adequate strategy for spending those funds and for pushing towards universalisation of access to telecommunications. This has even resulted in judicial conflicts concerning the use of the resources from the Universalisation Fund created by Law 9 998/2000.

Rule making

In OECD countries, ministries are responsible for core policy or strategic decisions, and they prepare general rules, such as laws or decrees, as they are entrusted with political responsibility. Independent regulators are normally charged with the function of enforcing the general regulations, which also involves individual regulatory decisions. As a result, it is not usually their role to draw up general rules that would leave them the responsibility of being judge and jury. However, individual decisions build up a regulatory framework and result in a form of jurisprudence. Regulators also have a high degree of technical expertise and can serve a useful advisory role. For pragmatic and practical reasons, independent regulatory authorities may find themselves in a position to publish technical or subordinate regulations.

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In Brazil the direct administration, with the Executive and the ministries, is entrusted with general regulatory powers. The exception is in the telecommunications sector, where the regulatory agency, ANATEL, is entrusted with regulatory powers. Still other regulators have some limited powers; ANTT, for example, establishes specific rules for the safety of transport. ANEEL also establishes a significant number of technical regulations. ANATEL approves technical rules, such as those for the portability of numbers for collective interest services. Generally, the regulators are entitled to adopt Resolutions that serve as effective technical rules for the sector.

The powers of Brazilian regulators from an overall perspective

Real understanding of the powers of the Brazilian regulators requires a detailed analysis of the powers of the authorities in the various sectors in comparison with powers enjoyed by their counterparts in other countries.

In the energy sector, ANEEL's powers in relation to pricing and overall market supervision, via its regulation of the system operator and market manager, and the management of grid access and use, put it among the stronger regulators in international comparison (Table 8.A1.2). ANEEL has powers to establish tariffs and methodologies that are often formally shared with the ministry in other countries; typically the regulator might make proposals for pricing, but it would be for the ministry to take the final decision. However, ANEEL also has more limited powers in other respects, for example to police anti-competitive behaviour such as cross-subsidisation by incumbents, as it cannot request full regulatory accounts. It also has a relatively very secondary role, compared with the EPE, in relation to the auction process for power projects. Moreover, the power of certification granted to EPE is normally a power that would be enjoyed by regulatory authorities in other countries. In Chile the functions of EPE are performed by the regulator, in terms of offer and demand projections. This should not obscure the fact that ANEEL is limited to electricity, while many other countries have facilitated an integrated approach for gas and electricity, including Australia, Mexico, the United States and the United Kingdom.

In railway services, again – compared with many European countries – the Brazilian regulator is relatively advanced in its powers to ensure third party access (Annex 8.A1, Table 8.A1.5). However, most operators in Europe are historical monopolistic public incumbents with operations mainly in passenger services, which is a market structure different from Brazil. Still, the framework to ensure third party access is also more developed than in Mexico, even if it remains less developed than in Canada or the United States (Annex 8.A1, Table 8.A1.5). The licensing structure in terms of safety is also relatively similar, even if some European countries still give this competence to the Ministry (see Annex 8.A1, Table 8.A1.7).

In terms of road concessions, the situation is relatively different (Annex 5.A1, Tables 5.A1.2 and 5.A1.3). Authorities at a national level exist mainly in Italy and Argentina. In Italy the granting of infrastructure, as well as the supervision of maintenance and construction, is the responsibility of an interministerial committee for economic programming, while the authority is more charged with tariff revisions and quality standards.

Concerning road transport itself, the situation is more mixed. The data available for OECD countries are dated. It seems that Brazil is in a medium position for the regulation of

passenger buses, with some market restrictions managed by ANTT. In terms of road freight however, ANTT tends to have relatively limited powers on what is mainly a free market.

In the telecommunications sector, the powers of ANATEL are relatively developed, but they mainly reflect the first wave of liberalisation that has occurred across countries in the mid-1990s (see Annex 8.A1, Tables 8.A1.4, 8.A1.5, 8.A1.6). It has additional powers granted to ensure interconnection, as well as the unbundling of the local loop, as provided by Articles 146, 147, 153 and 155 of the GTL. The situation is also different in relation to the fixed or switched lines, as these have been given in concessions to private companies in Brazil, whereas in many OECD European countries this is still the responsibility of the historical national incumbent. However, whether public or private, an incumbent has often exercised local monopolistic power on the infrastructure, which does therefore not prevent Brazil from drawing lessons from recent trends in these OECD countries. In terms of universal service, the issue is that the framework is not adequate given the social and economic conditions in Brazil. The funding mechanism, while it exists, has not been implemented, and there are still some differences in views concerning the implementation. Contrary to trends in many other countries, it is explicitly mentioned that in Brazil universal service is supported through cross-subsidisation mechanisms, for the part of the costs that cannot be covered by efficient delivery of services. By contrast, many other countries make an attempt to assess the cost of universal service and to ensure that it is efficiently covered (see Annex 8.A1, Table 8.A1.6).

In the private health insurance sector, the powers enjoyed by the Brazilian regulator are close to those exercised by authorities charged with similar responsibility in terms of health-specific insurance supervision (Table 8.A1.3). In the Netherlands however, the regulator can take a critical look at the basket of insured healthcare, and may bring gaps to the attention of the Ministry. In Australia, the regulator administers private health risk equalisation trust funds, and also has the explicit duty to co-operate with other regulatory agencies on matters affecting the private insurance industry. This risk equalisation perspective is for the moment fully absent from the Brazilian system, but it would require a more in-depth analysis of the health system.

Maximising the quality of regulatory power

Autonomous agencies with regulatory powers represent a core part of an overall regulatory management system. The devolution of powers must be accompanied by the regulatory quality requirements that would also be those requested from the general regulatory processes. These requirements are expressed in the 1995 *OECD recommendations* that have been incorporated into the *OECD Guiding Principles for Regulatory Quality and Performance in 2005*. In the case of autonomous regulators, whose purely prescriptive performance remains limited in volume terms, the following criteria taken from the 1995 *OECD reference checklist for regulatory decisions* may prove useful:

- Does regulation offer cost-effective benefits?
- Is the distribution of effects within society as a whole transparent?
- Is regulation clear, consistent, comprehensible and accessible?
- Do all the interested parties have an opportunity to make their views known?
- How is compliance with regulations enforced?

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The 2005 *Guiding Principles* explicitly stipulate the need to assess regulatory instruments and institutions on the basis of performance. This aspect will be analysed in the last part of this report. These principles are explicitly aimed at ensuring that regulatory institutions are transparent and non-discriminatory.

Brazil is specific in relation to those requirements. In effect, regulatory authorities represent a part of the regulatory management system that has received specific attention in terms of regulatory quality, at an earlier stage than the rest of the regulatory management system (see Chapter 1). Brazil, as part of the PRO-REG programme, is now about to adopt a government-wide strategy for regulatory improvement (Albuquerque, 2006).

Concerning regulatory authorities, the American Chamber of Commerce in Brazil (AMCHAM) has published research to assess the transparency and the "regulatory" performance of the regulators which, combined with the reports from IDEC on effectiveness, will be used in this section to discuss the effectiveness of Brazilian regulators in terms of ensuring regulatory quality.

Access to information

Access to information is a key component of the decision-making process, which assesses not just costs and benefits but also the distribution of effects. There are relatively extensive provisions, both in the Constitution and in related laws to ensure access to information for administrative processes.

The transparency rules and demands of the administrative process are those established by the law of each regulator. In addition, the Law of Administrative Process 9 784/1999 does apply. The Federal Public Prosecutor's Office may demand compliance with the legally established rules in the judiciary branch. The Federal Court of Accounts (TCU) may, in certain cases, determine compliance with some transparency and administrative process rules. No other body has the authority to demand compliance with those rules. However, there are no established administrative sanctions. In general, the Brazilian agencies have well-organised and well-furnished websites. Access to information is relatively transparent, and on a par with similar practices in a number of OECD countries.

Transparency

Transparency allows the parties concerned to understand decisions. It helps strengthen the independence of the regulator. A range of information technology innovations has been of substantial benefit in increasing the effective availability of opportunities for consultation. The provision of consultation-related material via the Internet has empowered less organised groups in particular, by giving them greater access to the information needed in order to be able to contribute effectively to a consultation process. In addition, the ability to submit comments electronically has reduced costs and delays and allowed community groups to operate more effectively in formulating their views and transmitting them to government. The regulatory agencies have been making widespread use of the Internet to make documents, processes and legislation publicly available.

Public hearings are an important tool to ensure comments from interested parties and groups. It is also important that the hearings are connected to other consultation processes – for example, notice-and-comment. They are in principle open to the general public, but effective access depends on how widely invitations are circulated, and the location and

timing of the hearing. In order to be an effective way of bringing all the actors to the debate, organisation of the hearings requires more co-ordination and planning to ensure sufficient access.

In Brazil, public hearings are not yet institutionalised in all agencies. Their use is codified in the rules of each agency. Notice-and-comment processes after public hearings are still very inconsistent. As of 2005, only three of the four agencies – ANATEL, ANEEL and ANTT – made public the documents sent for consultations and public audiences. ANTT and ANATEL have publicised the corresponding agency comment and response.[12]

According to the law, ANATEL should submit to the Executive Branch the drafts of decrees that are related to the delivery of services in the public regime, related to the universalisation of services.[13] The drafts of normative acts shall also be submitted to public consultation, formalised by publication in the State Official Gazette, and observations should be reviewed and remain at the disposition of the public in the Library.[14] ANATEL's Internal Regulation establishes that the public consultation aims at submitting a draft of normative rulings for comments and suggestions of the public. The public hearing should facilitate a verbal discussion of matters of general interest, and the agency may also adopt other means of participation of the interested parties, either directly or through legally recognised organisations and associations.[15] Mattos (2007), analysing 1 053 proposals for changes in regulations that were subject to consultation, finds that 45% of participation comes from businesses, 35% from citizens, and 6% from ONGs, with low participation by consumer defence groups. However, 66% of the proposals for changes in the norms represent telecommunication companies' interests. Fourteen per cent of the proposals for changes in favour of consumers come from the public sector (municipalities and state governments), while 7.7% comes from consumer associations. 24.5% of the proposals in the interests of telecommunication companies were incorporated, while 31.4% of those defending consumers or poor people were integrated.

The National Agency for Electric Energy, ANEEL, also holds public consultations as well as public hearings. The procedures for hearings and public consultations, as well as for the meetings of its board of directors, are available on the web, which is one of the most advanced cases across countries.[16] The ruling process affecting rights of the agents of the electric sector or those of the consumer should be preceded by a public hearing.[17] According to the agency, "the Public hearing is a supporting tool of the decision-making process of the National Agency for Electric Energy (ANEEL), of ample consultation to society, which precedes the issuance of administrative acts. Public Consultation is an administrative tool, delegated by the board of the agency to the superintendents of the ANEEL, to support the activities of the units in support of regulatory and oversight processes or in the implementation of their specific attributions. The main objective of the Hearings and Public Consultations is to obtain subsidies and information from society for matters under analysis, as well as offering the interested parties the opportunity of sending their pleas, opinions, and suggestions related to the subject at issue." The processes of hearings and public consultations may imply holding public sessions, with live manifestations, the so-called Live-Presential Sessions that are unique to the agency, or just being done through document exchange.[18]

As a result, AMCHAM formed a positive assessment concerning social participation in regulatory processes and the agency capacity. Similarly, ANEEL is the best-rated agency of the four studied, according to IDEC indicators. A summary of the results is also presented

in Pó and Abrucio (2006), and confirms that ANATEL and ANEEL are the best-rated agencies in terms of consultation, followed (at a distance) by ANTT, while ANS was the least transparent, with only 14% of regulations subject to consultation.

Concerning ANTT, the initiatives of bills of laws, alterations of administrative rulings, and decisions of the Board for the resolution of disputes that affect the rights of economic agents or those of users of transportation services shall be preceded by public hearings.[19] The ANTT regulated the process of hearings and public consultations.[20] Any interested party is entitled to submit petition or appeal against actions of the agency, within 30 days of these actions becoming official (Law 10 233).

These processes are least developed in the Agency for Supplemental Health Insurance. Public hearings are at the agency's discretion, as they are not institutionalised by law. These may also take place in the Supplementary Health Chamber.

However, more is required than just institutionalised public hearings to involve citizens, particularly as social participation is low. Civil society may be difficult to represent. Brazil still misses a culture of citizen participation (Peci and Cavalcanti, 2000). Therefore, transparency may require a broader communication strategy, with more information about the purposes of economic and social regulation and their consequences for society to be diffused more widely through the press.[21] The recent steps to consolidate IDEC will also certainly serve to reinforce social participation.

Clarity of decisions

The clarity of the decision-making process is a basic requirement in terms of the quality of regulations, particularly in the case of technical subjects. Transparency alone is not necessarily sufficient: decisions of the economic regulatory authority are not necessarily easy to understand in themselves. It is essential to explain decisions in order to secure public support for regulatory actions – which involves, for example, organising public hearings, disseminating reports and setting up properly designed websites. Compared with other OECD member countries, the situation in Brazil is on the whole satisfactory. Operators and consumers have testified that in several cases, the creation of agencies has served to clarify the situation of the sector. This is the case for transport since the establishment of ANTT. It is also the case for supplemental health since ANS has been established, with clearer rules for the sector.

Consistency, compliance with procedures and predictability of decisions

Consistency and predictability are another key component of the quality of regulations. The legal system plays a crucial role in this respect. In a legal system based on Roman-French law (as is the case in Brazil), the regulatory authorities must try to comply as far as possible with the general rules set out in the legislation and regulations. The predictability of decisions is another major factor in the quality of regulation, in the interest of those that are subject to it. Firms as consumers, as well as ministries, must be able to predict the options that a given agency will take. In systems based on civil law, regulators must comply as closely as possible with the general rules set out in the legislation and regulations. In that case, strict compliance with these general rules underpins the security, predictability and legitimacy of its authority. In jurisdictions based on *Common Law*, the approach is that of case law, that is to say based on decisions taken earlier. Explaining how decisions have been taken; quoting the legislation, regulations and specific legal criteria; referring to earlier decisions; and explaining the grounds on which new decisions are based improve

the predictability of decisions made by the regulator. Compliance with procedure and assurance that the parties involved will be consulted is essential to building confidence, particularly among new operators. Respect for the procedural rights of actors is also an essential part of the confidence-building process.

Brazil has, as already noted, a Roman law system, organised around a fairly detailed Constitution in which the laws precisely define the context in which decisions are taken. The issues have less to do with the legal architecture (which is fairly precise) than the risk of political interference. Research by AMCHAM has shown a risk of political interference in the actions of ANATEL and ANEEL. The risk was rated as medium to high and very high by all respondents in 2005 for ANEEL. For ANATEL, the surveys also highlight a risk of duplicity of functions between the agency and the Ministry. The predictability of the Brazilian regulatory system was analysed by Gesner and Fujiwara (2005). In the telecommunications sector, two of the previous communication ministers have publicly manifested their opposition to previously established contractual rules. According to Gesner and Fujiwara, "these actions represent breaches in the contracts between ANATEL and the regulated companies, and this instability contributes negatively to investment in the sector". Concerning natural gas, the current regulatory framework is not conducive to predictability of rules in this sector, compounded by the recent difficulties with Bolivian Gas (which are exogenous to the Brazilian regulatory system).

Implications for public action

Analysis of the powers of regulatory authorities studied reveals the partially incomplete nature of the liberalisation process in Brazil. While the process has been relatively advanced in energy, with relatively wide powers attributed to ANEEL and ANATEL, ANTT has fewer powers in some other respects, and may lack some powers in terms of ensuring safety. ANS has powers that would be comparable to those of other private health insurance regulators. Although powers for ANATEL are relatively developed, they have tended to fall behind those of some other countries, in terms of interconnection and unbundling of the local loop.

Compared with the rest of the regulatory system, instruments for social participation have been more widely – but unevenly – developed across the agencies. These are most developed at ANEEL and ANATEL – which are fairly transparent, generating satisfaction for both consumers and firms. ANATEL's legal requirements are maybe the strongest, while ANEEL's practice seems to be the most extensive. However, ANS tends to lag behind, given the absence of similar formal requirements. This is compounded by the wide social and public dissatisfaction with a number of practices of the private health insurers, as this sector scores very high in the complaints registered by the PROCONS. Complaints are also numerous for telecommunication services, but they concern smaller disputes and often involve a lack of understanding and clarity of the conditions of some of the contracts.

Law Bill 3 337 would certainly have positive effects in terms of social participation, harmonising consultation and transparency procedures – often to the best level. This would be particularly positive for the ANS. As part of the law bill, it would be mandatory for all regulatory agencies to organise a public hearing before a decision and also before proposals for legal norm alterations, normative acts and decisions, and for tariff revisions by the Collegiate Board. The Law Bill also proposes that associations more than three years old (in the terms of the civil law) designed for the consumer, the economic environment or

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protecting competition, would have the right to nominate three representatives to accompany the process and advise the entities; these representatives would be financed by the agency. The Law Bill also establishes mandatory publicity for notice and comment processes, which is certainly a step forward in improving the legitimacy of agencies' decisions.

The main point is how Brazil can maintain and consolidate the credibility of its regulatory system, if it is to draw durable benefits from the fall of its long-term interest rates and reassured investor confidence in the macroeconomic situation. In this context, the question arises concerning the main changes to be introduced by the New Law Bill 3 337. The New Law Bill introduced two fairly controversial features. One is the management contracts that were discussed as part of instruments of accountability, and that have been made more flexible and less harmful to agencies' independence. The second is the transfer of the "Granting power" (*Poder de Outorga*) back to the ministries, while delegating the power to define and implement public policy for the sector. The justification that is provided for returning the granting power from the agencies to the ministries is a political one: that the formulation of public policies should be exercised by the direct administration, assigning to ministries the authority of formulating sectoral policy and granting and awarding the exploitation of services of public utilities.

However, this involves significant implications. If the simple exercise of giving authorisations or permissions will not be affected, what will be affected is the "*Poder de Outorga*" concerning concessions, which involves the rail, road or energy concessions. Also involved is the telecommunications field – the service of collective interest of the private regime, including permits of exploration for mobile phone networks. The situation is mixed but may raise significant concerns. This is particularly true in the field of telecommunications, with rapid technological progress and innovation, where this move concerning mobile networks would set Brazil apart from other industrialised countries that have delegated enforcement, supervisory and licensing powers to regulatory authorities.

Concerning the core licensing powers for major infrastructure – including hydroelectric plants, highways, railway concessions and fixed telecommunication lines – Brazil has delegated (at least in part) the concessions of some of these major infrastructures to autonomous authorities. This was probably required by the specific institutional aspects of the country, and justified in terms of efficiency and impartiality of decisions. For highways however, many OECD countries do not have a regulator to handle concessions for major infrastructure, except one or two. Therefore, the situation is difficult to handle from a cross-country comparative perspective. In the case of telecommunications fixed switched lines, many OECD countries in Europe are still relying on a partly publicly-owned incumbent, but almost all do have an independent regulator. Such a move in the case of the telecommunications sector concerning fixed lines would also certainly not bring Brazil closer to the rest of industrialised countries. It may increase the difficulty of co-ordination with the Ministry. It will moreover not contribute to strengthening the powers of the agency in terms of interconnection, something that is necessary if Brazil wants to reduce the implicit rents held by the concessionaries to facilitate the diffusion of high-speed Internet and the multimodal aspects of the transmission of information. It would also be important to check that in each of the policy areas the ministries are really in agreement and willing to exert such powers.

Another important consideration more specific to Brazil is the credibility of the current regulatory framework. The need for credibility has been underlined by analysts (Mattos and Mueller, 2004; Mueller and Pereira, 2002) as one of the key factors for setting up regulatory agencies, with a strategy of making credible commitments. This is important as Brazil – according to the authors – has a "history of governmental opportunism, with interventions of prices, manipulation of economic variables, etc." While it is difficult to assess the risk premium charged by investors related to the regulatory environment, it is estimated that this generates an increase of 2-6% in the cost of capital for investment in infrastructure in Latin America. Such an increase would mean an extra cost to be transferred to consumers in terms of fees that would be 20% higher. This is also very important as the World Bank (2007) found that private investment in infrastructure in Brazil was only able to generate adequate returns in the long run, when the full concession period is taken into account.

A step altering the decision processes, for matters requiring up to 25 years of commitments as part of long-term concessions, could involve costly renegotiations, as well as an increase in the risk premium for future investments. In the energy sector the current institutional framework, although complex, has proved it can work, allowing a continuous expansion of capacity and the meeting of objectives, at least in the short term. Any major distraction could interrupt processes for new licensing, and may also result in negative appreciation by the market. This would have implications for the future cost and supply of energy in the country.

This crucial issue may thus require further clarification and assessment on behalf of Brazilian authorities. The question might even be asked whether there should be one unique framework for substantive matters concerning the agencies, in terms of defining the extent of their powers, or whether this would not be best left to each of the sectoral laws. Powers and sectors vary widely. While the Law Bill is particularly useful as it concerns democratic legitimacy, quality regulation, social participation, improving regulatory processes and harmonising provisions for independence, it may not result in the expected social and economic benefits if it significantly alters the fragile balance of power currently established in these fields.

Notes

1. GTL Article 19.
2. Termos de Registro de Ocorrência (TRO).
3. *Source:* Logistic indicators from COPPEAD/CEL.
4. Market entry is a responsibility shared between the regulator and the ministry in many countries.
5. The PPIAF project "Strengthening of the Institutional and Regulatory Structure of the Brazilian Power Sector", World Bank (2002, 2004). It notes that in many US states that have opened their retail markets to competition, customer migration back and forth between regulated and free markets has often evolved in ways that were not foreseen and for which rules are difficult to enact and enforce. Customers, especially large ones, will often simply seek out the lowest price and migrate to the market that provides it, bypassing the rules designed to avoid this. The Bank underlined the need for a strong entity with a mission to monitor the market, look for signs of trouble, and call them to attention – especially to ANEEL, which should be clearly responsible for doing something about it. It notes two other roles. The first is relieving transmission congestion. Pooling of contracts for all the distributors means that the impact of each contract on the grid is likely to vary from one location to another; a market monitor can help to sort this out. The second is demand-side response. Although short-term energy price signals are less important under the

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new model, demand response is important as a weapon against supply shortages, and market monitoring for price signals that might help its evolution helpful.

6. The details are set out in Resolution 63/2004, which also sets out the rules for calculating the size of fines.
7. ANATEL and INTELIG (2002).
8. Article 25, Law 10 233.
9. Resolution 1 733/2006, of 21/11.
10. University of São Paulo, "Challenges of the Regulatory Authorities", 2006.
11. MP 2177-44/2001 and Order 75/2003 of the Ministry of Finance.
12. Pó and Abrucio (2006).
13. Articles 18 and 19, Law 9 472, from 16 July 1997.
14. Article 42, of Law 9 472, from 16 July 1997.
15. Articles 42 through 45 of the Internal Regulation of the ANATEL – available at *www.anatel.gov.br.*
16. *www.aneel.gov.br/aplicacoes/consulta_publica/documentos.*
17. Item 3, Article 4, Law 9 427, from 1996.
18. *www.aneel.gov.br.*
19. See Article 68, Law 10 233, from 5 June 2001.
20. Resolution 151, from 16 January 2003, published in the *Official Gazette*, 23 January 2003.
21. Aragão, 2006; Moreira Neto, 2003.

Bibliography

Albuquerque, K. Fl., "A Retomada da Reforma/Melhora Regulatória no Brasil: Um Passo Fundamental para o Crescimento Econômico Sustentado", Ministério da Fazenda/Secretaria de Acompanhamento Econômico – SEAE, available at *www.seae.fazenda.gov.br/*.

Albuquerque, Kelvia and Considera, Correa (2001), "The relationship between competition policy and regulation in the Brazilian economy", *SEAE/MF Working Document 10*.

Fujiwara, Thomas and Oliveira, Gesner (2005), "Brazil's regulatory framework: predictability or uncertainty?", paper prepared for the international conference: "Brazil: a sustainable economic success?" promoted by the Mercosur Chair of Sciences Po, Paris, mimeo.

Gomes, Marcelo Barros (2003), "O controle externo das agências reguladoras no Brasil em perspective comparative: lições, eventos recentes e desafios futuros", VIII Congresso Internacional del CLAD sobre la Reforma del Estado y la Administración Pública, Panamá, 28-31 October.

Gomes, Marcelo Barros (2005), "A experiência recente e a agenda future do Tribunal de Contas da União na análise e avaliação do desempenho de entes reguladores no Brasil", X Congresso Internacional del CLAD sobre la Reforma del Estado y la Administración Pública, Santiago, Chile, 18-21 October.

Mattos, Paulo Todescan Lessa (2007), "The regulatory reform in Brazil: New regulatory decision-making and accountability mechanisms" in University of San Andres – New York University Law School – Global Administrative Law, GAL NYU Law School, Buenios Aires.

Mattos, C. Mueller B. (2004), "Regulando o Regulador: A Proposta do Governo e a ANATEL", mimeo, S/d. *www.anpec.org.br/encontro2004/artigos/A04A089.pdf*.

Mueller B. Pereira C. (2002), "Credibility and the design of Regulatory Agencies in Brazil", *Brazilian Journal of Political Economy*.

Peci, AK. Cavalcanti B.S. (2000), "Reflexões Sobre a Autonomia do Órgão Regulador: Análise das Agências Reguladoras Estaduais", *Revista de Administração Pública*, 34 (5).

ANNEX 8.A1

Powers of Regulatory Authorities

Table 8.A1.1. **Powers of selected regulatory authorities**

Authority	Accreditation	Pricing	Inspection	Sanction
ANATEL	To authorise the exploitation of telecommunications services; to enact rules on the use and rendering of telecommunications services; to control, monitor and revise tariffs for services rendered under the public regime; to manage the radio frequency spectrum and the use of orbits; to apply sanctions; to settle disputes between telecommunication service providers; to repress violations to user rights; and to control, prevent, and repress violations against the economic order, in regards to telecommunications.	ANATEL is responsible for controlling, monitoring and revising tariffs for services rendered under the public regime, as well as for establishing tariffs and ratifying readjustments. Concessionaires are subject to price cap regulation for retail prices, subject to annual readjustment according to an index specifically associated with telecommunications services (*Índice de Serviços de Telecomunicações* – IST). Under the private regime, prices for the public are freely set, subject to competition rules and non-discriminatory treatment obligations. However, personal mobile service prices are accompanied by the agency. Interconnection charges shall be based on costs. Until this is implemented, the conditions for the interconnection of networks are freely negotiated among the interested parties.	All service providers, including historical operators (concessionaires) must submit to ANATEL technical, operational, economic, financial and accounting information, as well as all data and elements concerning the service, in the manner and periodicity determined in the regulations. Specifically concerning concessionaires, the General Telecommunications Law determines, in Article 96, the obligation of providing technical, operational, economic-financial and accounting information, or other related information requested by the agency.	ANATEL is empowered to sanction firms for violations to the General Telecommunications Law or to subordinate regulations, as well as for non-compliance with the conditions and obligations established in the concession contracts and in the authorisations terms for the exploitation of telecommunications services or for the use of radio frequencies. Among the penalties that may be applied are admonitions, fines, temporary suspensions, forfeiture and declaration of unfitness.
ANEEL	Opening of the market to new participants; free and non-discriminatory access to the transmission and distribution system; celebration of long-term contracts between distribution companies and the winners (generation companies) of the auctions; reformulation of the country's environmental licensing system; implementation of social programmes; introduction of competition in generation.	The prices at the end-users supplied by the distribution companies are regulated by ANEEL and differ for every distribution company and class of consumer. This price is basically a function of taxes and fees of the sector, a function of the energy purchased by the companies, and adjusted by economics index. In the free market, the prices of bilateral contracts are freely negotiated and tend to vary according to perceptions of the market regarding the growth of demand, the possibility of shortages, the difficulty of expanding the system, the expectation of the spot price (strongly dependent on hydrology in the Brazilian system), and other factors that affect the market.	ANEEL monitors investment by distributors, and demands more if necessary. It delegates supervision of the distribution companies to the state level. ONS systems and technical procedures are audited by ANEEL to check for reliability, compliance with operative practice, the quality of computer models, etc. Regulatory accounts are demanded on a regular basis by ANEEL to ensure that cross-subsidisation does not happen.	The agency has legal competence in applying administrative penalties to the agents.

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Table 8.A1.1. **Powers of selected regulatory authorities** *(cont.)*

Authority	Accreditation	Pricing	Inspection	Sanction
ANTT	Oversees the exploitation of the railway infrastructure and the leasing of corresponding assets. The agency is also in charge of providing register and authorisation for enterprises providing charter services.	The various laws, specific decrees and resolutions, and contracts establish criteria for pricing and tariffs revision. In some cases, they can be influenced by the TCU, antitrust authorities or the Federal Government.	ANTT has to share oversight of the transport of dangerous products with the Environmental Protection Agency	Penalties can be applied by the ANTT to the concessionaires that do not comply with the production and accident targets specified in the contracts (Resolution 288/2003).
ANS	Establishes norms and regulation for the sector according to the main Law 9 656, for issuing licences to insurers operating in the market; for ensuring that all insurance institutions respect the regulations in force, including sanitary and epidemiology requirements and apply legal penalties in case of non-compliance; for establishing quality parameters; for monitoring price evolution; for ensuring compliance with insurance policy obligations; for gathering information from private healthcare providers and integrating it with the Public Health System databank; and for adopting the necessary measures to ensure competition in the private insurance market.	Regulation of tariff readjustments of new individual plans.	ANS is entrusted with the direct and indirect supervision over insurers according to Law 9 656, which includes representation of preventive and programmed inspections of the operators. The agency has also the power to demand a recovery plan from a given operator, to institute fiscal or technical direction if required, and to determine the alienation of consumers' plans and decide on the firm's liquidation in some cases. Exchange Information in Supplementary Health. Beneficiaries Information System. Product Information System.	ANS has broad power to apply penalties such as fines, and to cancel authorisation for an operator's functioning. The penalties to which operators are subject are settled in RN 124.
CADE	Has the final decision on matters related to competition, as stated in Law 8 884 (last administrative instance).	No power concerning prices. Intervention only if it finds that the price is violating economic order.	Yes	Yes

Source: OECD Secretariat, based on questionnaires related to supervisory authorities.

Table 8.A1.2. **Powers of regulatory authorities in the energy sector in selected countries**

Regulator	Regulatory powers	Enforcement powers	Surveillance and analysis
Argentina, ENRE	• Elaborate regulations in the areas of security, technical norms and procedures, consumption measurement and prices, control and usage, disconnection and reconnection of supply, access to third party premises and quality of services. • Determine the bases for tariff calculation for outsourcing contracts to distributors and the bases for the selection of electricity transmission and distribution companies. • Issue regulations for the application of sanctions.	• Ensure that the Electricity Act and dispositions flowing from it are respected and apply necessary sanctions in case of breach of law. • Resolve disputes between users and providers and between agents in the wholesale market. • Initiate civil or criminal actions.	• Access the installations of generators, distributors and users with prior notification to investigate any potential or real threat to public security. • Request information and documentation from distributors to verify compliance with the Electricity Act, derived legislation and applicable contracts. • Perform inspections with adequate respect for information confidentiality. • Respond to inquiries from producers, distributors and users. • Prevent anti-competitive, monopolistic, discriminatory actions in all market segments. • Ensure property protection, environmental protection and public safety in the construction and operation of systems of generation, transmission and distribution.
Australia, AER	• Make and amend electricity and gas access pricing and transmission revenue regulatory decisions (2008). • Make and amend guidelines for the ring-fencing of operations and information flows between activities, or within a business, of a regulated transmission entity (2008). • Develop and publish service standards to be applied to electricity transmission networks (2008). • Be responsible for gas regulation (except price regulation).	• Monitor compliance with sector, investigate breaches or possible breaches and enforce the law. • Issue infringement notices in relation to civil penalty provisions. Notices may be contested in court. • Enforce the Gas Pipelines Access law and the Gas Code. • Initiate judicial procedures in relation to an alleged breach of law (both civil and criminal procedures).	
Brazil, ANEEL	Executive power delegated by the Ministry to ANEEL to allocate licences. Auction design and application of the rules and procedures for auctions. Regulation of access to, and the use of, the transmission and distribution grids; establishment and enforcement of the methodology for distribution companies' tariffs to end-users. Regulation of ONS and CCCE, the entities responsible for the technical and practical aspects of power sector management. Overall responsibility for market supervision. Auditing of the programme for subsidised electricity for low-income consumers.	Application of administrative penalties to market players (including fines, a ban on public participation in public auctions, and the withdrawal of a concession).	ANEEL monitors investment by distributors, and demands more if necessary. It delegates supervision of the distribution companies to the state level. ONS systems and technical procedures are audited by ANEEL to check for reliability, compliance with operative practice, the quality of computer models, etc. Regulatory accounts are demanded on a regular basis by ANEEL to ensure that cross-subsidisation does not happen.
Canada, NEB	• Regulate the construction and operation of some interprovincial and all international pipelines, pipeline traffic, tolls and tariffs, construction and operation of international and designated interprovincial power lines, export and import of natural gas, export of oil and electricity and frontier oil and gas activities. • Provide energy advice to the Minister of Natural Resources in areas of the Board's expertise.		• Carry out specific studies and prepare reports when requested by the minister. • Hold public inquiries when appropriate. • Monitor Canada's current and future major energy commodities. • Co-operate with other agencies, Canadian and foreign, to reduce overlap and provide efficiencies.

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Table 8.A1.2. **Powers of regulatory authorities in the energy sector in selected countries** *(cont.)*

Regulator	Regulatory powers	Enforcement powers	Surveillance and analysis
Chile, CNE	• Prepare plans and policies for the energy sector and propose them to the President. • Elaborate, co-ordinate and propose technical norms necessary for compliance with applicable rules and for safety purposes. • Approve the annual action programme and the internal organisation of the Commission and adopt whatever agreements are necessary for the good functioning of the institution.	• Monitor adequate compliance with applicable laws and regulations. • Manage concession contracts and resolve disputes regarding licence rejections.	• Outsource the necessary sector studies. • Request from the Ministries and other public entities the information necessary to fulfil its functions. • Perform technical analyses of price and tariff structure and evolution. • Analyse and prepare national offer and demand projections to use for periodic updates of sector plans and policies.
New Zealand, EC	• – Suggest recommendations to the Minister of Energy who may accept or reject them, and enforce adopted recommendations. • Introduce new regulations whenever consultation with stakeholders reveals the need for such regulation. • Perform such other functions as are provided for under the Act.	• Take all necessary measures to ensure the safe supply and use of electricity. • Appoint the members of the Ruling Panel, which handle complaints of breaches of energy regulations and impose penalties.	• Inspect the whole or any part of any works, electrical installation, electrical appliance, or associated equipment and require any reasonable measures to render them safe. • Require any document, and examine, make copies or take abstracts from such documents. • Conduct inquiries on accidents and on cases of possible regulation breach. • Investigate sources of energy savings.
Norway, NVE	• Regulate those aspects of the power sector open to competition to ensure actors construct and operate grids efficiently. • Co-ordinate application procedures for the construction of new hydroelectric facilities and issue recommendations (pro or against the project).	• Impose fees in case of market regulation breach.	• Decide on the necessity of conducting environmental impact studies and determine the content of the study programmes. • Perform assessments of future energy needs. • Catalogue energy resources, carry out power supply system planning and technical and economic analyses. • Ensure hydro projects are consistent with the Master Plan for Water Resources.
Spain, CNE	• Elaborate, develop and execute "circulars" or documents based on Royal Decrees and Orders from the Ministry of Economy when specifically invited to do so. • Elaborate proposals and general norms related to the energy market and the normative development of the Hydrocarbons Law. • Elaborate projects on the determination of tariffs, levies and retributions.	• Establish blame for deficiencies and failures of consumer supply, and propose corrective measures. • Instruct sanctioning procedures on issues where the Central Government has the formal attribution. • Resolve disputes related to distribution and transport, arbitrate conflicts involving consumers and other actors and resolve issues related to economic and technical management of the system.	• Elaborate analyses and reports when requested by the Autonomous Regions. • Provide information on market concentration operations, takeovers, and buyouts when such operations must be subject to Central Government approval. • Inspect the need to separate activities whenever necessary to ensure respect for free competition. • Inspect the technical conditions of energy installations and ensure regulation compliance. • Monitor continuity of supply, quality of services and correct invoicing to consumers. • Monitor the economic conditions of energy actors when they affect tariffs.
United Kingdom, GEMA and Ofgem	• GEMA: Grant licences, set price controls and standards. • Ofgem: Advise the Office of Fair Trading (OFT) and the European Commission about mergers and acquisitions and consult interested parties and consumer groups and the industry on the impact of any merger on competition. • Special solvency regime for companies that hold electricity transmission or distribution licences, to ensure uninterrupted supply.	• GEMA: Take enforcement actions to ensure compliance with statutory and licence obligations. • Ofgem: Impose financial penalties to licence holders on breach of their obligations, upon GEMA decisions.	• GEMA: Initiate market studies or make market investigations where it appears that competition has been prevented, restricted or distorted. Monitor the licensing regime. • Ofgem: Perform investigations and elaborate the document that sets up the case against a company suspected of being in breach of law or licence agreements.

Table 8.A1.2. **Powers of regulatory authorities in the energy sector in selected countries** *(cont.)*

Regulator	Regulatory powers	Enforcement powers	Surveillance and analysis
United States, FERC	• Regulate the transmission and sale of natural gas for resale in interstate commerce, the transmission and wholesale prices of electricity in interstate commerce, the transmission of oil by pipeline in interstate commerce. • Licence private municipal and state hydroelectric projects. • Provide merger and acquisition reviews (except for the oil sector).	• Use civil penalties and other means against energy organisations and individuals who violate FERC rules. • Administer accounting and financial reporting regulations and conduct of regulated companies.	• Maintain an environmentally safe infrastructure. • Inspect private, municipal and state hydroelectric projects. • Ensure the reliability of high voltage interstate transmission systems. • Monitor and investigate energy markets. • Oversee environmental matters related to natural gas and hydroelectricity projects and major electricity policy initiatives.

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Table 8.A1.3. **Powers of the regulatory authorities in the private health insurance sector in selected countries**

Regulator	Surveillance	Regulation	Investigation/information
Australia: PHIAC	In accordance with Section 264-20 of the Act, "The Council has power to do all things necessary or convenient to be done for, or in connection with the performance of its functions".		The Council can appoint inspectors for the purpose of investigating the affairs of private health insurers, and it can appoint persons as external managers of health benefits funds.
Brazil: ANS	• Monitor that insurance institutions comply with legal obligations and apply legal penalties in case of non-compliance. • Require the necessary information from insurance institutions to exercise its functions. • Adopt the necessary measures to ensure competition in the private insurance market.	The ANS does not have regulatory powers *per se* Rather, the ANS executes government policies. However, the ANS may: • Establish principles of fiscal or technical management for health providers. • Define the powers of the technical director, fiscal director and the manager of a liquidation procedure. • Establish the norms for the constitution, organisation, management and control of insurers.	
Canada: OSFI	Asses risks in financial institutions and private pension plans and intervene accordingly in a timely manner if necessary.	• Contribute to rules promoting safety and soundness of institutions and plans or to rules providing sector guidance. Such rules may be issued by a domestic or an international authority. • Provide input into developing and interpreting legislation and regulations, issue guidelines and approve requests from federally regulated institutions.	
France: ACAM	• Examine the financial situation and the operational conditions of insurance institutions and request that insurance institutions take the necessary measures to improve their conditions if necessary. • Ensure that insurance institutions put the necessary measures in place to fight money laundering. • Inscribe associations subscribing to the Plan d'Épargne Retraite populaire (Retirement Savings Plan).	• Certificate of tables of mortality and diminished capacities utilised by insurers to elaborate their rate charts.	Investigate any operation carried out by an institution that is submitted to its surveillance. It can notably: ask the institutions for any information deemed useful; ask the institutions' auditors any information; recommend that the institutions take any appropriate measure to reinforce their financial situation or improve their management methods and extend the investigation of an institution to any related company.
Ireland: HIA	The authority shall exercise such powers as are necessary for the performance of its functions. The Minister for Health and Children may assign further responsibilities to the Authority as provided for in the Acts.		
Mexico: CNSF	Carry out inspection and surveillance tasks as required by law and to give administrative sanctions to the authors of infractions.	• Issue the necessary provisions for exercising the competences awarded to it by law. • Issue prudential rules to preserve the solvency, liquidity and financial stability of insurance institutions and participate in the elaboration of regulations and rules as provided by law.	• Act as a consultation body for the Ministry of Treasury and Finance with regard to insurance-related matters and to Assist the Ministry of Treasury and Finance in the development of appropriate policies regarding technical and financial risks of the insurance system.
Portugal: ISP	Monitor operators (insurance undertakings, brokers and pension fund managers) and control compliance with the rules and regulations that govern the sector.	• Produce technical rules and co-operate on the drafting of new *legislation* that governs the taking up and pursuit of the insurance and pension fund businesses. • Act as a consulting body for the development of main strategic lines of legislation related to the insurance and pension fund sectors.	Ensure collection and analysis of statistical data on the regulated sectors, publish an annual document on the situation of the insurance sector, promote the elaboration of technical studies and analysis studies at the petition of individuals or official bodies related to the functioning of insurers and pension funds.
Netherlands: CVZ	Supervise the implementation of regulations.	Take a critical look at the basket of insured healthcare intervention regulated by the Zvw and the AWBZ. Highlight new legislation needs and gaps and bring them to the Ministry's attention.	

Table 8.A1.3. **Powers of the regulatory authorities in the private health insurance sector in selected countries** *(cont.)*

Regulator	Surveillance	Regulation	Investigation/information
Switzerland: BPV	• Check the business principles of private insurance firms when handling the application for approval of business operations and grant approval. • BPV is legally bound to check insurance facilities at least once a year as to whether the allocated amounts correspond to the nominal amount, that they satisfy the investment specifications and that they exist. During these annual inspections, BPV may also check policies and claims dossiers.	• Assist the Federal Department of Finance in drafting legislation on the fields that fall under BPV supervision.	• Examine annual reports to be submitted by insurers. The reports must be prepared using official report forms and provide information about all parts of the business operation. • Examine elements of the business plan presented by insurance companies, in particular the basis for calculating the technical provisions and bonus systems, the policy conditions and the premium rates. These may only apply after approval through the supervisory body, which covers all risks in health insurance.
United Kingdom: FSA	Require the information necessary to establish whether a regulating provision or practice has a significantly adverse effect on competition.	• Make the necessary rules to protect the interests of consumers. • Contribute to rules and guidance that are issued either domestically or internationally. This includes rules regulating the insurance business, rules endorsing regulations of external bodies, rules determining the conditions of price establishing, regulations on communication of financial promotions, and rules preventing and detecting money laundering.	• Appoint one or more competent persons to investigate on its behalf the affairs of any authorised unit trust scheme, if it appears to the investigating authority that it is in the interests of the participants or potential participants to do so or that the matter is of public concern. • Request the information and documents reasonably required in connection with the exercise by the Authority of functions. This may be done at the requirement of a foreign regulator as well.

Table 8.A1.4. **Regulations of interconnection in the telecommunication sector across countries**

	Authorisation of interconnection charges of operators with "significant market power"	Regulating Local Loop Unbundling	Dispute resolution	Notes
Australia	C	C	C	
Austria	R	R	R	
Belgium	R	R	C	
Brazil	R	R	R	Incumbent local operators are obliged to provide access to their unbundled local loop, under the forms of line sharing and full unbundling. Interconnection charges are negotiated although ANATEL determines price caps.
Canada	R	R	R	
Czech Republic	R	R	R, C	
Denmark	R	R	R	
Finland	R	R	R	
France	R	R	R	
Germany	R	R	R	
Greece	R	R	R	
Hungary	R	R	R	
Iceland	R	R	R	
Ireland	R	R	R	
Italy	R	R	R	
Japan	M	M	R (Telecommunications Business Dispute Settlement Commission)	According to the revision of Telecommunications Business Law, which went into effect in April 2004, *ex ante* regulations with regard to interconnection such as prior notification of interconnection agreement for non-dominant carriers were abolished.
Korea	M, R (KCC)	M	R(KCC)	KCC has had the authority, since April 2004, to issue corrective orders for unfair practices and impose fines on a telecom operator for unfair practices.
Luxembourg	R	R	R	
Mexico	R	– (*)	R	
Netherlands	R	R	R	
New Zealand	R	– (*)	R	
Norway	No authorisation	M	R	
Poland	R	R	R	
Portugal	R	R	R	
Slovak Republic	R	R	R	
Spain	R	R	R	
Sweden	R	R	R	
Switzerland	No authorisation	– (*)	R (ComCom)	The parties to an interconnection agreement shall send OFCOM a copy of the contract when it has been concluded. In parallel with fixing conditions for interconnection by ComCom, OFCOM shall consult the Competition Commission to determine whether a provider has a dominant position, and the Competition Commission may publish its opinion.
Turkey	R	– (*)	R	
United Kingdom	R	R	R	
United States	R, State Public Utilities Commission	R	R, State Public Utilities Commission	Any interconnection agreement adopted by negotiation or arbitration shall be submitted for approval to the state commission. If a state commission fails to act to carry out its responsibility in the proceedings such as arbitration, then the Commission shall assume it.

* Mexico, New Zealand and Switzerland have not yet implemented unbundling.
M – Ministry, R – Regulator, C – Competition Authority.
Source: OECD, DSTI/ICCP/TISP(2005)6.

Table 8.A1.5. **Regulating pricing in the telecommunication sector across countries**

	Type of regulation	Coverage of regulation	Regulatory body	Notes
Australia	Price cap	Incumbent PTO only	C	Following advice from the DCITA, the minister has directed the ACCC to conduct a public inquiry into the nature of price control arrangements that should apply after the expiration on 30 June 2005 of the Telstra Carrier Charges. – Price control arrangements.
Austria	Tariff approval	Voice telephony services via a fixed network and leased lines which incumbent PTO supplies.	R	
Belgium	Price cap	Basic voice telephony services of incumbent PTO under the USO.	R	
Brazil	Price cap	*Public Regime* Retail prices for public services rendered by concessionaries. Price caps subject to annual readjustment according to an index specifically associated with telecom services (includes consideration of general inflation and productivity increases).	R	Fixed line service is considered a public service and is subject to price caps. There is a general cap, which comprises a weighted average of the connection and subscription charges in the categories "residential", "non residential" and "trunking". There is also a long-distance cap and an international long-distance one (applicable only when the services are exploited under public regime).
	Free prices	*Private Regime*		Services exploited under private regime, including fixed (when that is the case) and mobile services.
Canada	Price cap or prior approval	Incumbent PTOs only	R	
Czech Republic	Price cap	Rental charge, national calls (local and long distance), information and operator services, and public pay phones (Rental charge and national calls are only for incumbent PTOs).	R	
Denmark	Price cap	USO services by incumbent PTO.	R	
Finland	Freely set by operators	–	C	Retail prices are not regulated.
France	Price cap; tariff approval	Price cap: USO services; Tariff approval: other (monopolistic) services.	R	
Germany	Price cap; tariff approval	Baskets of combined services in a price cap include rates for access services (non incl. rates for end-user) .	R	
Greece	Tariff approval	Incumbent PTO's services.	R	
Hungary	Price cap	Retail PSTN services.	R	
Iceland	Price cap	USO services by an incumbent PTO.	R	
Ireland	Price cap	Baskets of combined services in a price cap include rates for PSTN and ISDN retail; local; national; fixed to mobile; operator assisted; and directory enquiry calls services.	R	
Italy	Price cap	Baskets of combined services in a price cap include rates for access services, telephony services and fixed to mobile calls.	R	
Japan	Notification; price cap	USO services, designated telecommunications services (services through essential facilities) and specified telecommunications services (designated telecommunications services having a significant influence on the user's benefit).	M	Notification is expected for universal telecommunications services and designated telecommunications services; and a price cap is imposed on specified telecommunications services.
Korea	Tariff approval	KT's fixed line service and SKT's mobile service.	M	
Luxembourg	Freely set by operators	–	R	Dominant operators have to demonstrate that prices are based on costs.
Mexico	Price cap; tariff approval	Price cap: Incumbent PTO's services; tariff approval: international long distance service.	Price cap: M; tariff approval: R	Basket for a price cap includes charges for installation, monthly rental, measured local service and long distance services.
Netherlands	Price squeeze; tariff approval	Incumbent PTO's services with significant market power regarding end-user tariffs for fixed telephony and for leased lines.	R	

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Table 8.A1.5. **Regulating pricing in the telecommunication sector across countries** *(cont.)*

	Type of regulation	Coverage of regulation	Regulatory body	Notes
New Zealand	Kiwi Share Obligations requirement	Telecom New Zealand local residential telephone services.	R	Kiwi Share Obligations requirement: The charge of local residential telephone service should be no more than the standard residential rental etc.
Norway	Tariff approval	Operators with significant market power in regard to offers of access to public telecommunications network, offers of public telephony services or transmission capacity.	R	Operators with significant market power have to demonstrate that prices are based on costs.
Poland	Tariff approval	USO and leased lines of operators with significant market power.	R	
Portugal	Tariff approval	–	R	Operators with significant market power have to demonstrate that prices are based on costs.
Slovak Republic	Price cap	Fix telephone public services of an incumbent PTO.	R	Notification is required for services that are not subject to price cap regulation.
Spain	Price cap	Fixed telephone service and leased lines of operators with significant market power.	R	The existing requirement for *ex ante* approval of specific retail tariffs was transformed into a requirement only to notify the regulator of tariffs.
Sweden	Tariff approval	Incumbent PTO: fixed telephony services, minimum set of leased lines, fixed subscriptions and interconnection (fixed and mobile); Other operators: fixed interconnection and mobile interconnection (market-based tariffs).	R	Operators have to demonstrate that prices are based on costs.
Switzerland	Price cap	USO services by incumbent PTO.	M (Fed. Council)	
Turkey	Tariff approval; price cap	Approval on the basis of cost orientation: national leased line services of incumbent PTO; price cap: other services of incumbent PTO .	R	
United Kingdom	Price cap	BT's residential services	R	Retail price control focuses on the expenditure patterns of residential customers other than the top 20% of spenders.
United States*	Price cap or rate of return regulation	Retail and wholesale interstate services provided by incumbent local exchange carriers; some limited categories of service such as Dial Around 1+ services provided by both domestic and international carriers.	R	Every common carrier was required to file all tariffs with the FCC, but in 2001-02 the FCC decided to forbear from the tariff requirements, which continue to apply to the category of carriers that are classified as dominant. But at this time, no carriers are considered dominant in the domestic market. In the international market, only Comsat World Systems is classified as dominant.

* Entries for the United States only reflect telecommunications regulation at the federal level.
M – Ministry, R – Regulator, C – Competition Authority.
Source: OECD.

Table 8.A1.6. **Telecommunication regulations regarding universal service across countries**

Country	Universal service framework	Existence of funding mechanism	Estimate cost of USO	Cost allocation	Notes
Australia	Yes	Yes	R (ACMA)	M	All telecommunications carriers contribute to the funding of the USO by way of the Universal Service Levy. Carriers contribute in proportion to their relative market share. The DCITA facilitates timely payment of levy amounts received from carriers to USO providers.
Belgium	Yes	Yes	R	R	The fund has not been activated yet.
Brazil	Yes	Yes	–	–	Every telecommunications carrier that provides fixed phone services under the public regime must contribute to achieving established goals for universal fixed phone service. Additional goals for universal service are financed through a 1% tax on the revenues of telecom companies (net operational revenue).
Denmark	Yes	Yes	R	R	If incumbent PTO provides documentation that proves that providing USO services involves a deficit on an overall basis, the funding mechanism will function. But the incumbent has not as yet had such a situation. It is designated as a USO provider until 2007.
France	Yes	Yes	R	R	
Germany	Yes	Yes	R	R	There is the legal universal service levy, *i.e.* where compensation is granted, each undertaking has to contribute to such compensation by means of a retroactive universal service levy (no *ex ante* financed universal service fund). The cost of universal service has not been calculated, since no universal service compensation has been granted.
Greece	Yes	No	–	–	
Ireland	Yes	No	–	–	
Italy	Yes	Yes	R	R	
Japan	Yes	Yes	M	M	The cost has not been calculated because at present there is no net cost of providing existing universal service.
Korea	Yes	Yes	M	M	
Mexico	Yes	Yes	?	?	The cost has not been calculated on a formal basis.
Netherlands	Yes	No	–	–	
New Zealand	Yes	Yes	R	R	USO (referred to as Telecommunications Service Obligations is for local residential telephone service and does not require universal service coverage (*i.e.* all geographic areas and all customer types).
Norway	Yes	No	–	–	
Poland	Yes	Yes	R	R	
Portugal	Yes	Yes	R	M, R	The incumbent is currently the universal service provider (concession until 2025). The cost of universal service has not been calculated.
Spain	Yes	Yes	R	R	The incumbent has been designated a universal service provider until 2005. Implementation of a fund is subject to the statement where the net cost of the universal service is stated to be an unjustified charge for the prevailing operator. However that statement has not been implemented so far.
Sweden	Yes	No	–	–	There is currently no designated universal service provider as a result of the expiry of the legal provisions that had designated the fixed incumbent.
Switzerland	Yes	Yes	?	R (OFCOM)	Universal service licence is granted on a periodic basis by tender. If it will be impossible for the investment required for the universal service in a given area to be written off within the usual period, the applicant who submits the best bid shall receive the contribution. They must present their budget and accounts to OFCOM each year. Currently incumbent concession USO to the end of 2007.
United Kingdom	Yes	No	R	–	The incumbent is the designated USO provider.
United States	Yes	Yes	R	R	Every telecommunications carrier that provides interstate telecommunications services must contribute, on an equitable and non-discriminatory basis, to universal service.

M – Ministry, R – Regulator.

Source: OECE 2005.

Table 8.A1.7. **Licensing and safety regulation for railway services across selected countries**

Country	Licensing authority	Criteria for licensing	Comments
Australia	Department of Transport in the States	Comply with the Rail Safety Accreditation requirements in each State in which they are operating. A Rail Safety Worker's accreditation shall cease to be recognised where the accreditation has been withdrawn or suspended in or by any rail jurisdiction.	The Operator receives accreditation from the Department of Transport in the States of intended operations. Operators may seek accreditation in other states of operation through the mutual recognition arrangements.
Austria	Ministry of Transport BMVIT[1]	Creditworthiness and competence (for national concessions), operator's eligibility and a safety certificate (for European concessions).	ÖBB. A safety certification is necessary for European concessions.
Brazil	ANTT	CONAMA (*Conselho Nacional do Meio Ambiente*) is responsible for environmental licensing and ANTT for operational licensing.	
Canada	Canadian Transportation Agency	Adequacy of insurance cover to ensure that the potential liabilities of railways to shippers and the public can be met.	CTA licence carriers that operate under federal jurisdiction.
France	Ministry of Transport	Criteria for attribution are: good repute, financial capacity, ability to cover legal liability, professional competence.	
Germany	EBA[2]	Licence is awarded on criteria of reliability, financial fitness, professional competence, insurance for liability.	
Italy	Ministry of Transport (MIT)	Solvability, professional competence, record of stability, proof of good maintenance of rolling stock.	Ministry of Transport sets standards for safety certificates, RFI[3] issues them.
Spain	Ministry of Development (MdF)	Railway undertaking must be registered in accordance with company legislation and Railway Sector Law, must demonstrate financial robustness: ability to cover financial needs for a 12-month period, assessment of annual accounts, equity and shareholders' guarantees, must demonstrate that it is up-to-date with its contributory and social security payments.	Certificate issued by Ministry of Infrastructure (MdF) by ADAF[4]
Switzerland	OFT	Guarantee the functioning and safety of the operations, rolling stock fulfils requirements, labour rights and conditions are respected, respect of safety measures.	The safety certificate is issued by the OFT
United Kingdom	Office for Rail Regulation (ORR)	5 different licence standards.	ORR issues, modifies and enforces licences. HSE[5] issues safety certificates to railway undertakings and infrastructure managers since 2005.
United States	Federal Railroad Administration and STB	STB has broad authority to address the adequacy of the service provided by a railroad (49 USC 10701-11123). FRA issue regulations to establish a programme for certifying or licensing locomotive operators.	FRA and STB are housed within the Department of Transportation.

1. BMVIT: Ministry of Transport, Innovation and Technology.
2. EBA: Eisenbahn-Bundesamt.
3. RFI: Rete Ferroviaria Italiana Spa (infrastructure manager).
4. ADAF: Asociación de Acción Ferroviaria (institute for interoperability).
5. HSE: Health and Safety Executive.

Source: National Submissions to Rail Roundtable, OECD, 2005. Steer Davies Gleave for the European Commission, NEA Transport Research and Training for the European Commission adjusted by the OECD Secretariat. Australia: Australian Rail Track Corporation Code of Practice for Operations and Safeworking, 2004.

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Chapter 9

Assessing the Performance of Regulatory Authorities

Assessing performance on the basis of achievements

The use of performance assessment is crucial in order to improve the quality of regulators' decisions and actions. This entails determining the impact of the regulators' acts. Performance assessment may be carried out *a priori* or *a posteriori*. *A priori* analysis consists in a Regulation Impact Analysis (RIA), as analysed in the chapter on capacity for quality regulation. *A posteriori* analysis includes the evaluation of the regulators' achievement of objectives through assessment of their economic and social impact with regard to the powers and resources assigned to them. This is essential for institutions financed by public funds that have the obligation to be accountable. The process calls for a need to find a balanced approach, as too rigorous an evaluation could be used to weaken the independence of regulators, thus undermining their action, and the lack of evaluation could raise doubts over their legitimacy and restrict their influence.

The various dimensions of evaluation

The scope of performance assessment can comprise:

- Pure auditing, with an evaluation of the use of public funds (in accordance with regulations).
- An analysis of the decision-making and institutional framework of the regulator from a legal viewpoint. This examination, carried out by the appeals bodies and as a last resort by the Federal Tribunal, also helps to ensure the accountability of regulators.
- A broader evaluation of performance in economic terms, which can include:
  - Self-assessment, carried out by the authority itself.
  - An evaluation by a public body, supervisory ministry or auditing office, which where appropriate will report in general terms to Parliament on the effectiveness of its policies.
  - An independent evaluation performed within an academic framework to provide input to public debate.
  - An assessment by an international organisation, such as the World Bank or the IADB for Brazilian regulators.

The pure auditing dimension is of limited relevance for regulatory authorities, since these agencies are usually relatively small in terms of budget. Therefore, the key dimension is the overall economic assessment – whether regulators contribute to overall economic efficiency. This economic assessment can be ensured through instituting mandatory release of performance assessment reports, to check whether regulators have fulfilled their objectives. These reports can be prepared by regulatory authorities themselves in their annual reports, or they can come from an external assessment. Their availability can be considered as an important element for transparency and efficiency in public decision making. An overview of recent OECD practices is offered in the figure below.

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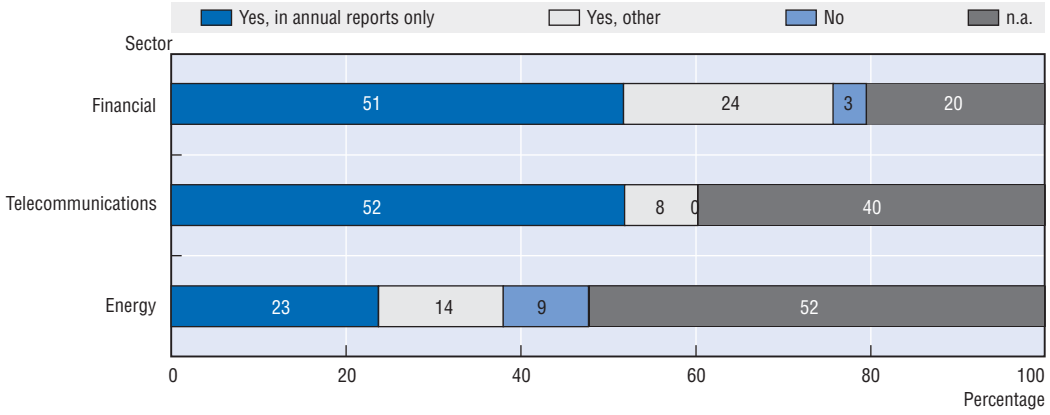
Figure 9.1. **Mandatory release of periodic performance assessment reports on achievement of objectives**



Note: Number of countries with such characteristics.

Source: OECD (2005), *Designing Independent and Accountable Regulatory Authorities for High Quality Regulation*, Proceedings of an Expert Meeting in London, United Kingdom, 10-11 January.

Unsurprisingly, these assessment reports are more frequently available and mandated in those sectors where the independence of the agencies is the greatest.

This current report focuses on the economic performance in a broad sense of regulatory authorities in Brazil. Performance assessment requires a clear definition of the objectives of regulators. However, as mentioned above, these are rather complex as mentioned above. This is also compounded by the fact that consensus is not fully achieved on what should constitute the agencies' responsibilities in Brazil – thus the debates leading to the formulation of New Law Bill 3 337. In practice, sectoral regulators often find themselves being assigned several other objectives, including those requiring technical expertise that may be lacking in the respective ministries – the case for energy, transport and telecommunications in Brazil.

Current auditing and assessment practices in Brazil

The intense debate around regulatory authorities in Brazil and the wide economic stakes have stimulated a number of evaluations. These include formal, constitutionalised evaluation as well as a range of other studies. Two bodies exert external control on the agencies: the General Audit Office in the Executive Branch (*Controladoria-Geral da União* or CGU) and the Federal Court of Accounts (*Tribunal de Contas da União*), assisting National Congress. The CGU is in charge of defending the public patrimony and increasing administrative transparency. The TCU is a National Audit Office that issues an annual report analysing accounting, budgetary, operational and patrimonial aspects of Federal Administrative organs, including the regulatory agencies. Since the 1988 Constitution, the TCU has been granted the constitutional power to carry out operational audits. External control by the TCU is key to contributing to efficiency and efficiency, and also ensuring accountability for regulatory bodies, including regulatory authorities (Vidigal, 2004).

The bodies of the Federal Executive Branch must give wide disclosure, also through electronic means of public access, to their reports, including their management reports, and the corresponding auditing certificates with opinion from the body of internal control, and the statement of the State Minister supervising their policy area, within a maximum

of thirty days after sending these to the TCU. As an example, the ANEEL and the ANTT publish their yearly Management Report, assessing the impacts of the regulation implemented by the agency during the year. The TCU performs periodic evaluations of the administration and results achieved by the regulatory agencies. However, the extent of interference by the TCU has been subject to discussion, as it has not only analysed decisions of the agencies *ex post*, as in all other countries, but also given advice *ex ante*. For example, the World Bank (2007) considered that, while surveillance is necessary to ensure appropriate checks and balances, some prudence is also recommended so that regulatory risk is kept under control, as TCU is extensively involved in reviewing concessions.

In Brazil, TCU has accompanied the entire privatisation process, issuing an opinion on privatisation and concessions of public services and supervising the states' regulations and grants. It has issued internal normative acts on the supervision of grants, licensing and authorisations (*e.g.* IN 27/1998, IN 43/2002, and IN 46/2004). Its advice has had an impact on the bidding process conducted by the agencies, as was illustrated through the recent bids conducted in 2007 for new highway concessions. Interventions by the TCU, questioning the internal rates of return implicitly chosen as a reference in order to protect the public interest, also had an impact in terms of delays in the auction process. There is a tradeoff between the long-term benefits of such action, which are clear and tangible, and its induced costs in terms of regulatory uncertainty. The extent to which national audit offices can also extend their role beyond mere control of public funds towards broader performance assessment is also subject to debate. This practice is more reflected in advanced countries such as Australia, Germany, Netherlands, Sweden, the United Kingdom and the United States, as shown in the INTOSAI working groups (Gomes, 2003).

The TCU has performed several audits of public policies and found that results had not been achieved. TCU has often performed a detailed assessment of pricing methodologies and conditions for concessions (Gomes, 2005). Two recent examples in the telecommunications sector are:

- An operational audit of difficulties related to the use of Funds for the Universalisation of Telecommunication Services (FUST).[1]
- An operational audit assessing how ANATEL was monitoring the quality of telephone service delivery.[2]

As a result of these audits, the TCU makes practical recommendations to the agencies. TCU has been considered to provide effective monitoring, particularly in light of the constant risk of capture by private interests in these sectors (Gomes, 2003, 2005).

The CGU operates as the central organ of the functions of internal control, correction, *ouvidor* and preventing and fighting corruption. In addition, it must help promote the transparency of public management. Its recent annual report mentions ANATEL and ANEEL but not ANS or ANTT. The audits of Regulatory Agencies performed in 2002 (ANATEL) is part of "Special Audits",[3] for management and supervision, and these audits are not available online on CGU's website. ANATEL's audit analysed the agency's management and conduct, including the quality of regulatory oversight, the penalties applied by ANATEL, the extent of compliance with former recommendations by either TCU or CGU, and operational and human resources management. It also considers the issue of compliance with universal service objectives, in terms of targets reached by concessionaries.

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Self-assessment by regulatory authorities

All the authorities studied in this report regularly publish annual reports, but most of these are restricted to accounting and a mere reporting of activities. ANEEL, ANATEL and ANTT publish an evaluation of the impact of regulation in their sector as part of their yearly Management Report. A key function that is necessary for evaluation is sometimes missing, for example production of comprehensive data allowing for an assessment of market trends. In the electricity sector, this is in a sense fulfilled by EPE. However, in the telecommunication sector, a comprehensive database allowing for the understanding of broader market trends was lacking in Brazil. Private marketed databases do not offer the same service. In the health insurance sector, ANS data production is significant, but limited to the oversight activities when it comes to private health plans. There is a lack of understanding of the social and health impacts of private health insurance, and of its contribution to overall health system performance.

Agencies also have Internet sites providing key facts. Their reports are systematically published on these sites as part of a communication strategy, with press releases and conferences. The websites of the National Congress also offer significant information, for example with the debates on agencies. While the agencies are making worthy transparency and communication efforts, there is a lack of transmission to the broader society and other channels may be required to disseminate a regulatory culture.

The agencies also have Internal Audits (*Auditoria Interna*), which report to the CGU, as part of the internal control mechanisms to ensure compliance with laws and regulations. They also have internal offices for monitoring the performance of their employees, assessing how they fulfil their duties, and performing disciplinary procedures when necessary.

Assessment by NGOs

The agencies are also subject to an independent assessment by NGOs, to an extent that is unusual among OECD countries. This reflects the intensity of the debate on agencies. Evaluations produced by IDEC and AMCHAM,[4] some of which were used in preparing this report, have proved to be very helpful even if they are restricted to the perspective of either consumers or regulated entities. They will be further developed by IDEC as part of a partnership with the IADB. They are based on perception surveys among broad samples of consumers or firms, and reflect an effective view of the agencies' achievement in terms of social participation, meeting consumers' needs, promoting transparency and facilitating access to information. While most of the assessments are positive concerning two of the agencies of this report, ANEEL and ANATEL, assessments performed for ANS by IDEC have revealed a certain degree of consumer frustration and dissatisfaction.

Assessment by international organisations

Extensive reports are also available from international organisations. For example, the World Bank and PPIAF published an assessment of trends in regulatory governance of infrastructure industries in Brazil in 2006 (Carrea, Pereira, Mueller and Melo, 2006, complemented by World Bank, 2007). The World Bank Report resulted in a detailed index analysis of regulatory governance for a large set of federal and state-level authorities, which includes variables related to autonomy, decision making, decision tools and

accountability. Among those studied, ANATEL and ANEEL were the best-rated agencies overall in Brazil, while ANTT was rated 7th. ANS was not included. The results of this study tend to show that several of the agencies analysed in the current OECD report tend to be the best within the Brazilian regulatory framework. In many respects, this OECD report has found these agencies to be comparable to those found in many OECD countries. The three agencies studied in the report were also the best-rated using a comparative methodology developed by the Asian Development Bank/NERA. However, a broader assessment of the Brazilian regulatory framework might need to consider the fact that other agencies, particularly at state level, still have to close significant gaps. In addition, the PRO-REG programme elaborated by the Civil House and the Ministry of Planning, Budget and Management has contributed to strengthening institutional capacity. Specific studies by the World Bank in the energy sector have also played a role in the past (World Bank, 2002, 2004).

Independent evaluation by academics

Evaluation by academics can also provide valuable input to the regulatory process, with a multidisciplinary perspective. Brazil benefits from a wide range of academic expertise, which is on a par with that observed in other large OECD countries. These academics are also closely linked to business associations, such as the Association of Brazilian Regulators (ABAR), the associations of users of transport, and others. In addition, major public research institutions such as IPEA and IBGE play a useful role, as well as private foundations such as the Getulio Vargas Foundation, with its *Nucleus* for studies on regulations and its Review of Public Administration,[5] which often focuses on regulatory issues. These promote debates and studies. ABAR often publishes articles and a magazine containing assessment by academics.[6]

The agencies also commission some academic work. For example, ANS has a network of collaborative centres and also contracts specific studies to the National Council of Technological and Scientific Development (CNPq). At least seven studies are currently being developed to focus on different aspects of competition and coverage in the private health insurance market as part of the CNPq. In 2003 ANATEL started a programme of academic partnership with University of Brasília (UnB) and the International Telecommunications Union in order to promote courses, researchers and seminars. ANTT and ANEEL have no formal agreement with academics. There are some specialised centres dedicated to transport research at UFRJ. In the energy sector, EPE plays a leading role in providing key strategic analysis.

Implications for public action

On the whole, there tends to be a wide range of evaluations in Brazil, with many independent intellectual entrepreneurs playing a role within an active academic community. Besides these independent assessments, Brazil has also developed an interesting culture of assessment by stakeholders of regulatory authorities, including consumers (IDEC) and foreign investors (AMCHAM), to an extent that is impressive and not matched in many OECD countries. However, the most effective and powerful assessment tends to be performed by the TCU, even if it also interferes in the daily work of the agencies, as it also involves an assessment of some decisions *ex ante*. The role of the TCU is also reaffirmed as part of the New Law Bill 3 337, which states that external control of the

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agencies will be exercised through the National Congress assisted by the TCU, but the New Law Bill may restrict the scope of the application of such external control.

Besides the reports by the World Bank and IADB have played a significant role in providing an assessment of regulatory trends in specific sectors such as energy. In addition, agencies tend to provide detailed reports on their actions, even if the development of appropriate statistical databases and quantified approaches tends to lag behind in some sectors. The fact that Brazil is currently not participating in the OECD work on telecommunications, or in the International Transport Forum (formely ECMT), is also a factor that tends to limit the assessment of domestic policies from a cross-national perspective.

Notes

1. Proceeding TC-010.889/2005-5 and Final Court Decision of the Plenary Session 2 148/2005.
2. Proceeding TC-019.009/2005-1 and Final Court Decision of the Plenary Session 2 109/2006.
3. The main elements subject to control are: evaluation of the execution of government programmes, special auditing, control of expenditures, annual auditing of accounting, auditing and supervision of projects for external financing and technical co-operation, and external demands.
4. Some of them used in this report.
5. *Revista de Administração Pública*.
6. Available at *www.abarg.org.br*.

Bibliography

Correa, Paulo, Pereira Carlos, Mueller B., Melo Marcus *et al.* (2006), *Regulatory Governance in Infrastructure Industries: assessment and measurement of Brazilian Regulators*, Trends and Policy Options No. 3, the World Bank PPIAF, Washington.

Frison Roche M., Laffont J.J. (2002), "Contrôle et évaluation des autorités de regulation", rapport d'expertise pour la Cour des Comptes, Paris.

OECD (2005), *Designing Independent and Accountable Regulatory Authorities for High Quality Regulation*, Proceedings of an Expert Meeting in London, United Kingdom, 10-11 January.

Vidigal, José Augusto Maciel (2004), "As agências reguladoras e seus poderes especiais no ambiente institucional contemporâneo brasileiro", TCU, Instituto Serzedello Corrêa, Vitória, ES.

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Conclusions and Recommendations

Brazil faces the challenge of establishing a regulatory framework that will facilitate and accelerate its long-term economic growth. The country has made progress towards addressing its broader economic and social imbalances. OECD work shows that there is a clear link between the long-term economic performance of a country, and the quality of its overall regulatory framework. In Brazil, much of the recent debate has focused on regulatory authorities, which have been analysed in this report. However, the economic and policy implications of the regulatory framework extend beyond these agencies. Improving the overall regulatory framework, paying attention to quality, impact assessment and simplification, will also contribute to long-term growth. Significant aspects of the regulatory framework were not addressed as part of the current report, at the state and municipal level. While improvements can be discussed at the federal level, they will need to be matched by similar attention at lower levels of government. The sectors analysed here show many positive signals and achievements, even if significant bottlenecks persist in some areas. A governance approach that takes into account the link between institutional structures and economic development can help achieve social and economic goals, while responding to policy priorities. Brazil is confronting the challenge of increasing social inclusion, and broader social participation may also help to address the challenges of reforming public services in such a large and diverse country.

Towards improved governance for growth

Brazil has consolidated its economic fundamentals, with a development model based on market reforms, outward orientation and sound fiscal policy. The country has managed to achieve macroeconomic stability, imposing a tight monetary policy and a relatively strict budgetary policy. It is also benefitting from improved terms of trade. This has created a better framework for investment in the economy in general, as well as for foreign investment. However, one of the main challenges of the Brazilian economy is to achieve sustained long-term economic growth in a way that would ensure increased living standards for its growing population. The government's Growth Acceleration Programme is intended to address this challenge.

The need for a diversified policy response

Improved regulatory frameworks for key infrastructure sectors are also essential to ensure long-term growth. This requires a diversified policy response. At the general level, consolidation of institutional capacities for regulatory reform is crucial if these objectives are to be reached. The country is facing a need for private investment in infrastructure sectors. Broader and better regulatory policies and implementation through an institutional framework supporting the regulatory process are key for the future. Despite some efforts at the federal level to develop a regulatory quality programme, the burden resulting from a large number of federal laws and regulations often represents a challenge for small and medium-sized enterprises. Regulatory policy can help meet these needs by

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easing regulatory burdens, simplifying economic regulations, reinforcing the rule of law and increasing certainty for private sector investment.

The general administrative and regulatory processes

The Brazilian administrative and legal settings have evolved rapidly over the past two decades, first following the democratic transition in the late 1980s and then during the economic liberalisation and privatisation programmes in the 1990s. The process of institutional and legal adjustment is still ongoing. Brazil has started its approach to regulatory management by concentrating on economic regulation. In the future, a systematic, comprehensive, continued and coherent approach could help to improve government capacities to make them more effective, more efficient, and less costly. The current trends in Brazil may also mirror the situation and efforts of many other OECD countries that have faced a process of political transition, or that are middle-income countries.

Given the specific circumstances of Brazilian institutional history, much of the debate has focused on the need to improve the institutional design of regulatory agencies, which is fundamental for the sound functioning of key economic sectors. However, other areas of regulatory management also require attention. Positive recent steps include the development of the Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG), which could positively influence policy developments if it is perceived as a way to promote broader regulatory policy, and not simply increase quality controls on the regulatory authorities, where much progress has already been made. One of the issues is the need to clarify the functions, role and regulatory implications of a whole range of institutions included in the "indirect administration", characterised by a large number of decentralised bodies in most parts of the Brazilian Federal Administration.

Brazil has the basic elements needed for a structured regulatory process. While a formal regulatory quality assurance programme does not exist, a formal process frames the preparation of new laws. Co-ordination and attention to regulatory quality aspects when regulations are prepared in the Executive branch, involving different institutions, may help to strengthen the overall regulatory framework. As part of the legislative process, the increasing role of Parliament in issuing or amending legislation has significant implications in terms of regulatory quality and for the co-ordination of regulatory policy.

Brazil has relatively developed, albeit not necessarily formal, consultation procedures, with a full access to the legal texts and with consolidation efforts in a number of policy areas. In spite of its complexity, the regulatory framework is accessible to citizens and businesses. But as a result of increased legal and regulatory activity, a large flow of regulations has been produced by federal but also sub-federal levels of administration, leaving scope for further improvement of the co-ordination mechanisms concerning regulatory matters. Brazil is making use of a number of alternatives to regulation, as well as self-regulation, either for standards, specific professions or through educational and training activities. Brazil has also devoted significant efforts towards a dynamic update of its growing stock of regulations. The consolidation efforts are impressive, but they do not necessarily entail as such the elements of a full-fledged administrative simplification policy.

Certain aspects of regulatory policy are still lagging behind current practice of OECD countries. Capacities for regulatory quality are fragmented and scattered across the administration; the co-ordination mechanisms sometimes in place leave scope for improvement. The country does not make systematic use of different regulatory quality tools. Regulatory Impact Assessment is one of them. It has received significant policy attention, but efforts towards a fuller regulatory impact assessment system may still take significant time in the coming years. Another issue may involve compliance, with a lack of certainty of some regulatory texts, calling for action by the judiciary. The functions of the judiciary, as is often the case in a large federal state and in a middle-income country, represent a significant challenge. A full discussion of their policy implications may go beyond the scope of the current report; still, a better understanding of the implications of the judicial system in terms of regulatory quality, as well as for the economy as a whole, could also serve as a long-term investment for capacity building in the country.

The issue of the agencies

Apart from the general issues, much of the debate and policy attention has focused on the agencies. The four agencies studied in the current report represent a sample of such agencies, in four different policy areas: health, transport, energy and communications. While they all represent various forms of delegation of authority, they are not necessarily equivalent. Some of them, including ANEEL, ANTT and ANATEL have been classified according to Salgado (2003) as "state agencies" which regulate public services through the application of specific legislation, while ANS was classified as a "governmental agency", which follows governmental guidelines. While this classification is not recognised by the Brazilian authorities, and does not involve that any agency would have "governmental" power, it echoes some of the distinctions found in Europe between agencies – for example, those charged with health or sanitary safety on the one hand, and full independent regulatory authorities on the other hand, operating in the financial, energy or telecommunication sectors. In the United States as well, the level of autonomy of the FDA, with a single commissioner, is not similar to the level of autonomy of FERC or FCC. However, in Brazil, all agencies are technically considered as "Special Autarchies".

The first political challenge for these agencies has been to operate as autonomous bodies within the policy environment in order to promote confidence and transparency for the private sector and civil society. Establishing independence in the broader policy debate has been fraught with many discussions and contradictions. Some of them were linked with the issue of separating broader policy design and planning, which should remain a ministerial remit, from enforcement and execution, which are tasks delegated to the agencies. On the whole, agencies have been operating at arms' length from government and have been fulfilling their mission since they were created. They have a different status and some of them leave less room for autonomy than others. However, in OECD countries as well, agencies operating in some policy areas do not necessarily have the same level of statutory independence as those in others where it is more pronounced, such as telecommunications or financial services.

The challenge for a middle-income country such as Brazil is to build and consolidate public service institutions while facing resource constraints in terms of staffing. These have at times affected the ministries and also the agencies. In general, agencies have built a reputation for integrity and have generally contributed to significant improvements in the regulatory framework in their sectors. The private health insurance sector has been

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policed and regulated, offering improved conditions for consumers, compared with the previous situation of lack of regulation. Similarly, conditions for railroad transport or bus transport have been facilitated by an improved environment. In the energy sector, corrections made to the regulatory framework and effective management of the new framework have helped to address the 2001 crisis. In terms of telecommunications, Brazil's achievements are largely in line with its relative development, and it can boast significant penetration of mobile services.

However, the challenges of raising the investment rate remain. In the energy sector, stronger economic growth may imply further pressures in terms of energy supply in the future, while overall investment rates remain at about 1% of GDP. According to the International Energy Agency, three conditions are required to secure a policy and regulatory environment conducive to investment in power generation: a clear and stable policy framework, an effective licensing process, and competition that includes cost-reflective prices to drive a positive investment climate. In this context, clear and stable priorities for diversifying power technologies will serve to offer a predictable signal for investors, particularly in relation to natural gas. An increased contribution of natural gas to energy supply depends on major further efforts to improve the security and diversity of gas supply, but also to ensure that corresponding efforts are made to the regulatory framework, including the downstream gas market. Another issue which has emerged as part of this report, even if it extends beyond the report's scope, is environmental licensing, as it can delay, sometimes for many years, an authorisation for a new power facility.

ANEEL and ANATEL are well regarded domestically, including by potential foreign investors and consumers. They are also considered to be among the best economic regulators in Brazil, in World Bank assessments. In many ways, their processes, consultation and capacity for assessment are largely meeting international best practice standards. ANTT faces a more difficult challenge in terms of co-ordination, as it is a more recent agency. Until recently, its resources were not up to its broad regulatory responsibilities.

Two key roles for the economic regulator in the Brazilian context are to minimise regulatory uncertainty, which can reduce investor confidence, and to stand out as an impartial and autonomous manager of the market players. Providing true universal service is also a challenge in some policy areas, such as telecommunications where a more practical notion of universal service may serve to lift conditions of access for the wide majority of the population that lack any type of connection or Internet access.

This report has identified a number of issues that deserve attention. Securing autonomy may be an issue in terms of resources and governance, to ensure that the Brazilian regulators have the capacity and technical competence to carry out their functions without being challenged. A core issue for all agencies might be to guarantee resources and to clarify the implications of the New Law Bill 3 337. Recently, significant resource increases have been observed for some agencies such as ANTT or ANS. A proposed constitutional amendment, PEC 81, may help to further consolidate the position of the agencies in the future.

Similarly, regulators need to operate in an institutional environment where ministries can play their role. In this regard, the recent strengthening of the capacity of Brazilian ministries through an increase in the administrative and engineering staff is welcome. It will help set the debate at a technical level, and reduce the scope for ideological disputes.

Ensuring accountability is crucial if regulators are to perform their mission and enjoy some independence in their relations with their parent ministry. The initial version of the management contracts was a reflection of such a tendency in the New Law Bill 3 337. Clear gaps exist in the current framework, in terms of ensuring broader accountability in the social sense, and reassuring citizens that regulators will defend the public interest, consumers' needs and the individual citizen perspective. In such a large country, where social access to essential goods remains somewhat diffuse and uneven, the perception has been formed that some regulators have not paid sufficient attention to the needs of individuals, such as individually insured patients for healthcare, or those unable to understand the clauses of their mobile phone contracts. While the other regulators have less to do with the public directly, ANS and ANATEL are facing a challenge in terms of consolidating their legitimacy, and balancing their approach between individual consumers and providers of services. It has been demonstrated that consultation did allow ANATEL to integrate the consumer perspective, but processes for ANS are lagging behind. While the agency's work does benefit consumers, the perception that the relationship between the health insurers and the privately insured is often so imbalanced may have generated the impression that more could be done. This is compounded by the fact that the main policy focus for the ministry is the public universal health service, which is vital for the poor.

Finally, some important bottlenecks in terms of future economic growth are found in the transport and energy sectors. In the energy sector, rationing of natural gas for some users has appeared again in the South East of Brazil, due to the sustained growth experienced in recent years. This illustrates the challenges of building infrastructure for diversified power supply. In terms of transport, Brazil's economy makes it one of the world's top exporters of a number of agricultural and primary products, but its domestic transport infrastructure is currently overloaded and unbalanced, which increases the costs of logistics. Many of these issues go beyond the pure mandate of the agency, or its regulatory framework. A broader perspective is required, integrating the whole transport sector. Much of the hesitation around the new highway concessions reflected how difficult progress has been in this field, with the agency facing the difficult task of resolving conflicting interests. The fact that these have been resolved and that, apparently, recent changes may benefit Brazilian consumers through reduced tariffs, is a welcome move. It is important that the result should not be undermined by further renegotiations as the concessions go along. A stronger agency might well be in a better position to ensure that the delivery of the service is closest to contractual conditions, with close monitoring. The broader recommendations set out in the remainder of this chapter offer some suggestions.

The way forward

At present, Brazil seems well positioned to address these challenges. There is broad consensus among political actors, the different parts of government, businesses and academia, that the country requires changes to improve its capacities for regulatory quality. There is a growing understanding of the need to increase transparency and accountability in the system, to introduce new tools for regulatory performance and to make necessary adjustments to the judiciary. There is also, in spite of all the recent political debate, a growing domestic consensus, as well as understanding of main trends across OECD countries, of the functions and roles of regulation.

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Concerning the agencies, the New Law Bill 3 337 has stimulated policy debate in the last three years. While this new bill helps to address a number of challenges in terms of closing the social gap and improving conditions for consumers, some aspects have also been a matter of concern. The debates over the past year have already led to some changes, with significant modifications to the management contracts that had been proposed initially. Over the years, the policy perspective has also been modified. The current environment has been one of reduced regulatory risk, as illustrated by the recent auctions for highways in October 2007. Other issues remain: clarifying the economic and social consequences of the transfer of the concessionary power to the respective ministries. This may have different implications for the different sectors, depending on how it is envisaged and taken forward. The diversity of experiences offered by OECD countries also provides a wide range of possible solutions that could be adapted to the Brazilian context. They offer broad general directions in terms of setting up a framework and balancing independence with accountability, but also illustrate cross-country variations in terms of the powers delegated to the agencies and the range of options for universal service.

Policy options for consideration

The following policy options are based on international consensus on good regulatory policies and on concrete experience in OECD countries that could help the Brazilian authorities in their efforts to improve regulation. Drawing on the OECD 2005 *Guiding Principles for Regulatory Quality and Performance,* they follow the analytical lines of the report, even if there might be more specific implications by sector. Their implementation may require reappraisal of national institutional practices. Some changes proposed may take time. The goal is that these changes accompany and fortify the growth in expertise and the consolidation of a regulatory culture in the country that will benefit long term growth.

Part 1. Policy options concerning government capacity to assure high-quality regulation

1. Broaden efforts to integrate a "whole-of-government" approach for regulatory quality supported at the highest political level

Regulatory policy may be defined broadly as an explicit, dynamic, continuous and consistent "whole of government" policy to pursue high-quality regulation. In Brazil, the issue of regulatory quality emerged in the context of deregulation and regulatory management for economic sectors. In this framework, the role of the State in the economy changed, a vast privatisation programme was introduced and regulatory agencies were created. There is a need, however, to adopt a broader focus: Brazil is currently looking for options to a more consolidated approach for regulatory quality under the Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG). As with many other OECD countries, Brazil has elements of a regulatory policy in place. It also has a strong centre of government. These need to be integrated into a comprehensive programme for regulatory quality. A broad scope of government actions for regulatory quality, in order to consolidate a modern regulatory state, would minimise the risk of conflicts of interest and of capture, enhancing certainty and more clearly separating policy making from implementation. The implementation of an effective regulatory policy with a "whole of government" perspective is a complex task that cuts across several policy areas, and needs to take account of the diversity of the institutional framework.

In the Brazilian context, there is agreement that regulatory agencies need to be strengthened, as is discussed elsewhere in this report. However, there is limited reflection on other key aspects of regulatory quality, such as the way the quality of overall legislation and regulations could be improved, the need to revise the current stock of regulations, and the use of regulatory tools to improve economic performance. Institutional arrangements for sectoral agencies represent a necessary step; they are not sufficient to build capacities across the whole administration, to create co-ordination mechanisms between institutions, or to improve the quality of regulations in specific policy fields. The final objective is to adopt regulations that are more efficient and effective and the pursuit of environmental, social and economic policy objectives.

The PRO-REG represents a first step to close this gap. But institutionalising a new approach for regulatory quality requires attention to a certain number of fundamental issues. Experience in OECD countries suggests that an effective regulatory policy has three basic components that are mutually reinforcing:

- It should be adopted at the highest political levels.
- It should contain explicit and measurable regulatory quality standards.
- It should provide for a continuing regulatory management capacity.

Adoption of the policy at high political levels lends authority to the institutions of reform and ensures that the government has incentives to strive toward achieving the policy's objectives and goals. Reinvigorated political commitment is essential to maintaining progress. In Brazil, the Civil House, the Ministry of Finance and the Ministry of Planning, Budget and Management are already involved in this effort. They need to play a leading role to make sure that the programme reaches its objectives by getting the political support needed. These institutions should be able to clarify the relevance of regulatory reform to larger social and economic goals and to communicate with stakeholders and the public.

In OECD countries, regulatory policy has evolved to include new elements and more policy areas. International experience shows that decision processes have become progressively more empirical. This trend relies on economic, social and feasibility assessments supported by full-fledged cost/benefit analysis to supplement traditional checks on technical legal quality. PRO-REG should reflect this trend if it wants to become an instrument to expand the capacities for regulatory management across the administration. Even if this initiative concentrates on regulatory agencies, there is a need to broaden the scope of institutions involved. There should not be any justification for making exemptions in different policy areas and institutions once experience has been accumulated. If PRO-REG intends, for instance, to improve consultation mechanisms and to integrate the compulsory use of impact assessments for some sectors and agencies, this should evolve over time and apply in due course for the entire public administration, not only to sectoral agencies. It is fundamental for the success of the project to maintain momentum and to be able to consolidate the need for regulatory quality. PRO-REG could be reinforced by integrating its core principles in more detailed national plans, which could then be linked to a broader strategy for regulatory reform.

2. Set up institutional capacities for regulatory quality

Institutional frameworks for implementing programmes of regulatory reform are essential for success. The institutional architecture for regulatory policy reflects the

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cultural, legal, political and social conditions of any country. This is complex and in many cases remains fragmented, as particular areas might require particular efforts and dealing with different entities might be difficult. The OECD experience shows that each country has found particular solutions, but the trend also indicates the need to set up an oversight body for regulatory quality.

The relationship between an effective, general comprehensive regulatory policy and the existence of a central oversight body appears to be strong. They are mutually supportive. These bodies should act as "engines for reform" with clear accountability for results. They should ensure that regulatory quality principles are successfully applied.

Successful regulatory policies invariably include some mechanisms for managing and co-ordinating the achievement of reform, monitoring and reporting on outcomes. The Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG) envisages setting up a management and co-ordination unit. The Brazilian authorities should also consider the possibility of establishing a yearly programme for regulatory quality, in which clear objectives and measures to be taken should be described, that could provide for continuing regulatory capacities.

Oversight bodies in presidential systems have the advantage of the capacity for cross-cutting, top-down policy reforms, following the institutional structures of these systems. Countries such as the United States, Mexico and Korea have made impressive gains in improving their domestic regulatory systems.

In Brazil, the creation of such a body should be accompanied by adequate resources to undertake its tasks. Its staff should be regularly trained and have the capacity to make effective use of consultation with stakeholders. The idea would be to increase regulatory capacities throughout the administration. Key tasks in support of this role include the dissemination of extensive written guidance and the conduct of training in regulatory quality issues.

An oversight body for regulatory quality in Brazil should also have the authority to find agreement and support from ministries, regulatory agencies and other institutions. While functions need to be adjusted according to the domestic context, the possibility that the scope of its work should cover the entire administration needs to be explored. The Brazilian government could follow the example from other OECD countries that have requested that the ministries and agencies concerned designate a responsible person dealing with regulatory quality in each institution. This could help to create a network of officials responsible for regulatory quality inside the whole administration and to expand knowledge of the different tools to be integrated into the decision-making process. While the centre of government is entrusted with the leadership, the sectoral ministries also need to reinforce their policy-making and quantitative expertise, to be in a position to develop full evidence-based policy making. This may require significant capacity building in Brazil, as many ministries had lost some of their capacities for policy making in the context of the deregulation and privatisation efforts.

If the use of Regulatory Impact Analysis (RIA) is foreseen, the oversight body should have the capacity to act as an independent body assessing the substantive (not only legal) quality of new regulation and working to ensure that ministries comply with the quality principles embodied in the assessment criteria.

Capacities for regulatory quality also concern other institutions that could support the oversight body. The Consultative Committee created in the framework of the PRO-REG

should be reinforced. While the current proposal makes this Committee an internal advisory entity, it could also evolve in the medium term to play a crucial role as an external advisory body for regulatory quality, comparable to those existing in countries such as Canada, the United Kingdom or the Netherlands. OECD experience shows that external advisory entities are fundamental for spreading the understanding of the regulatory agenda. They support with advice and guidance, by giving voice to other stakeholders and interest groups, at early stages of the regulatory process. It would be important to give this Committee a permanent existence with flexible tasks that could evolve according to the needs of the regulatory agenda in the country. The participation of civil society, the private sector and stakeholders is fundamental to lend credibility to the project and to expand the evaluation of possible actions on regulatory quality.

3. Improve co-ordination mechanisms and clarify responsibilities for regulatory quality

A fundamental aspect of the implementation of a sustained regulatory quality programme is the co-ordination and co-operation needed to establish a general framework for regulatory policy. Co-ordination is essential to ensure coherence and comprehensiveness in reforming the regulatory environment. Co-ordination can be done inside the administration, but also with other levels of government that participate in the national regulatory process. A clarification of roles in the regulatory process, avoiding duplication of tasks and reducing the risks of regulatory failures, is a challenging task for the Brazilian government.

In Brazil, there are no formal co-ordination mechanisms between ministries, agencies and other regulatory institutions that could lead to a full use of competencies and to broaden the responsibilities during the regulatory process. Specific arrangements, however, exist between the competition authorities and some of the regulatory agencies and are discussed as part of the policy options concerning regulatory authorities. The Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG) intends to bridge some of the institutions concerned with regulatory issues, but a more strategic vision should be envisaged for the medium and long term of the project. In some OECD countries, formal interministerial co-ordination, *e.g.* in the form of regular meetings or making it compulsory for ministries to present periodically strategies for regulatory quality, has been essential to move forward the regulatory agenda.

Co-ordination between levels of government is a growing issue of concern in some OECD countries, and in Brazil as well. Regulatory decisions taken without any systematic or formal co-ordination are having a clear impact on the economic performance of the country. The issue has not been clearly evaluated and assessed, which reduces the possibility of finding appropriate solutions. One major problem is the overlapping of regulatory competences, which in some cases is due to an unclear definition of responsibilities. In some economic sectors, regulatory agencies at different levels of government, in particular the national and state level, have already established co-ordination mechanisms, which could serve as a starting point for further development. But much remains to be done.

The legal production at different levels of government lacks stable co-ordinated efforts to introduce quality controls and harmonisation on the way legal documents are produced. The Brazilian government could support the setup of a co-ordination mechanism, *e.g.* a conference or meeting, for legal experts at different levels of government, which could

then take responsibility for improving law-making procedures from the technical and legal point of view.

4. Implement Regulatory Impact Analysis as an effective tool for regulatory quality

RIA is a tool to assist governments in making their policies more efficient. This is an important factor in responding to the impact on modern economies of open international markets and budgetary constraints, and the consequences of competing policy demands. A key feature of RIA is its consideration of the potential economic impacts of regulatory proposals. Brazil does not use RIA systematically, but in the framework of the Programme for the Strengthening of the Institutional Capacity for Regulatory Management (PRO-REG) it intends to introduce an RIA system.

OECD experience shows that RIA, to be effective, has to be in the hands of a body responsible for quality control and is able to challenge the use of RIA in other government institutions. In the Brazilian case, this task is closely linked to the creation of an oversight body for regulatory quality. This unit could be located in Casa Civil, since that institution has the political support and plays a key role for co-ordinating government policies. The oversight body should have as one of its main functions to revise and support the use of RIA across the whole administration. Ministries and agencies should be able to undertake RIA as early as possible in the decision-making process. This would imply training the responsible staff so they can successfully accomplish their task.

Some fundamental issues that need to be assessed before putting in place the RIA system are the following.

Legal mandate for RIA

In several OECD countries, RIA is supported by administrative procedures, laws or presidential and cabinet decrees, thereby giving it a legal mandate that cannot be ignored by other institutions. There is a need for Brazil to enforce the use of RIA, once consolidated, and to make it compulsory for all institutional bodies of the Executive branch entrusted with regulatory powers. RIA is an instrument that only can make a difference if it is undertaken in a comprehensive way. However, it requires a process that needs to be embedded in the administrative culture, with a shared understanding. All bodies of the federal administration, without exception, should be responsible for undertaking RIA. One possible solution would be to amend the Decree 4 176 from 2002 to integrate the obligation for RIA. This could be preceded by an experimental phase that could serve to establish and consolidate a process, to prepare and lay the ground for the stage when RIA becomes mandatory.

Public consultation during the RIA process

Systematic public consultation should be also established for the RIA process. Consultation can provide important information on the feasibility of proposals, on the range of alternatives considered, and on the degree to which affected parties are likely to accept the proposed regulation. Furthermore, the assumptions and data used in RIA can be improved if they are tested after the carrying out of the RIA through public disclosure and consultation.

A successful RIA system in Brazil should include some guidance on how to establish consultation, and also make consultation more formal and systemic. This implies

identifying some of the prerequisites for a good consultation process. Among the issues that need to be borne in mind is that consultation objectives should be set in order to identify the target audience and select the appropriate consultation method. The stakeholders need to be carefully identified, as do the departments or agencies that need to be involved in the process. If the Brazilian RIA system opts for written consultation procedures, then the nature and form of the questions should be considered. It could also be useful to envisage that public authorities be given the duty to provide a response to the comments received, and why they may not have been considered as part of a regulatory proposal.

Methodology for RIA

The checklist contained in Decree 4 176 from 2002 constitutes a building block that could be further developed. The Brazilian government foresees consolidating a methodological approach to RIA, perhaps through the implementation of a pilot project in which regulatory agencies could participate. It would be advisable to start with regulatory agencies that do not present wide geographic dispersion, but whose actions cover a wide range of services about which consumers and users have complained. The challenge of the methodology chosen is to scale it to the specific capacities of the country. This means that RIA should serve more as a process of asking the right questions of the right people early enough in the policy-making process, thus creating a framework for regulatory policy making, than about technically precise impact statements that might be difficult to fulfil.

Targeting RIA efforts

As with other OECD countries, Brazil could target RIA efforts based on specific thresholds, to focus impact assessments on those regulations involving significant economic costs. The risk is otherwise that the requirements for an RIA be transformed into an empty administrative process, realised *ex post* and without significant impact. Given the large number of laws and regulations produced yearly, as well as the concrete needs to foster economic activity and to attract investment for infrastructures, the issue of the threshold above which laws and regulations should be subject to RIA is fundamental.

5. *Improve the quality of the regulatory stock to ensure the efficient attainment of economic and social objectives*

Regulatory policy needs to focus on two dimensions of regulatory activity: it has to reform the regulatory appraisal of new regulations (flow), as discussed above with the RIA system, and advocate the reform of existing regulation (stock). This requires the adoption of a dynamic approach to improve regulatory systems over time and to make sure that reforms are carried out in a logical order.

Most OECD countries conduct review of the legal quality of the text of draft laws and regulations prior to their enactment or presentation to Parliament. Brazil lacks a procedural tool to ensure that an empirical and comparative approach to the achievement of the policy goals has been taken during policy development, and that this has been informed by the involvement of a wide range of affected groups. The relationship between primary and secondary legislation, including co-ordination between these two levels of regulation and the consistency of scrutiny and quality controls applied to each, is also missing in the current model, in spite of the legal checks performed by the AGU and the Legal Office in Casa Civil.

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The dynamic approach should also apply to review the existing regulation. OECD countries have followed different strategies to make sure that the existing regulation corresponds to current economic and social conditions. Brazil has made important efforts to consolidate and codify its legal corpus. This has been, however, insufficient. A joint effort between the Executive and the Legislative is needed to adopt an approach that could make a significant difference in the way this has been done so far, and with a view to promoting administrative simplification beyond mere codification. Ministries and agencies producing regulation should be mobilised to participate in this effort, which will need to be conducted over several years, with input from the private sector on the most crucial areas for action in terms of simplification.

6. Improve transparency and increase social participation in regulatory processes

Transparency covers a broad range of issues essential for the regulatory process. Most OECD countries have made considerable improvements in terms of increasing transparency, not only in consulting with stakeholders and making regulations more accessible for the public, but also in drafting laws and regulations in plain language and reducing legal uncertainty by communicating regulatory proposals and decisions on time.

Brazil has made good progress in introducing transparency principles in its regulatory process, at least in a formal sense. But these efforts could be complemented by other measures. Notwithstanding any RIA system discussed above, public consultation, for instance, should be compulsory for the discussion of any regulatory proposal and for all ministries and agencies of the public administration. For the moment, the New Law Bill 3337 on regulatory agencies includes extensive provisions for consultation that will harmonise consultation practices to bring them to the best standards, but will only apply to the agencies. This should be complemented by establishing specific deadlines for public consultation and making available to the public the different opinions received on a particular issue. OECD countries have opted for different tools to deal with public consultation, such as circulation-for-comment or notice-and-comment. Mechanisms already used in Brazil could be improved: informal consultation can be supported by new procedures, such as circulation-for-comment procedures, in a more systematised way, which could have a positive impact on accountability and scrutiny and reinforce confidence on government actions. These comments should be provided in a fixed period of time (in some countries this delay varies from thirty days to three months) and in written form, which could be also a good way to get data for decision making.

The use of information and communication technologies (ICT) to strengthen public consultation by broadening access to more groups, speeding up information flows, and reducing the costs of distributing and obtaining information, could be also improved. Brazil has already well-developed websites with information on government actions. These websites, however, could be more interactive and be easier to access, and have more content. The use of ICT is relevant for another aspect of transparency: communication with the public. In this area, the Brazilian government has made important improvements in making available the existence and content of all regulations. But in a country where regulatory inflation remains a concern, the challenge is to link this positive aspect to more comprehensibility of the legal system and the improvement of the quality of new and existing regulation.

Part 2. Policy options concerning regulatory authorities

1. Consolidate the autonomy and statute of Brazilian regulatory authorities

The growing internationalisation of activities in core infrastructure sectors has highlighted the need to provide a level playing field for operators and investors and to guarantee the neutrality of the regulatory framework. This requires attention to regulatory structures and to the independence of the enforcement and regulatory oversight, to provide an appropriate and clear framework supporting change and fostering long-term investment. This is particularly the case in communications, transport and energy. In Brazil, as in other Latin American countries, high regulatory risk has often restricted investment opportunities in the past, or made them more expensive. The experience of a number of OECD countries that have adjusted their regulatory frameworks in recent years, either as a result of international commitments as part of the WTO, or as a result of European directives in Europe, may provide examples of institutional practice.

In Brazil, the status of "special autarchy" has been chosen for regulators operating at arms' length from government. The example of CADE also shows that it is possible to set up fairly independent bodies with this status in Brazil. At the moment, the Brazilian regulators studied have, at least from a strict legal sense, provisions that ensure a diversified albeit significant level of independence. The proposed New Law Bill would systematise provisions for autonomy across the agencies, in terms of the duration of the mandates, their renewal, and processes for the nomination of the boards. The key and essential requirement is that the members of the boards still be nominated with staggered terms that should not coincide with political mandates. It may be desirable to explore if, for some agencies where the duration of the mandate is currently already greater than four years, this could not be maintained, for example requesting that the mandates be *at least* four years in the general law.

The more important elements include aspects that go beyond the strict provisions of the law. They may be related to resources, staffing or governance. In terms of governance, it is important that agencies can function effectively at all times, and that their neutrality remains beyond doubt. It is important to establish a provision allowing for interim directors to be appointed provisionally in case of a vacancy longer than a certain time period, for example after a duration of two months. Interim board members could only be proposed by the Chair of the agency, and could only be selected among the internal directors of the agency (superintendencies). Related to this, procedural mechanisms should be used to consolidate and strengthen the professional profile of all members of the boards of agencies. An agency's reputation can be harmed when nominations lead to the appointment of a senior member without an appropriate professional background. For this reason, all members of the boards should have their complete biography publicly presented on the website of the agencies, and a period for public scrutiny and comment should be opened when their nomination is transmitted to Congress for approval.

Agencies must be confident of their funding. It may well be the case that resources computed as part of the fees have been more than what the agencies might have needed. However, the extent of the cut at some stage was such that it has had implications for some of the agencies in the past. Hence, a revision of the financing mechanisms is required. The proposed constitutional amendment PEC 81 may also help to reduce uncertainty on funding. While no perfect solution exists, a shared understanding of the need for agencies to dispose of stable and predictable resources will be important to consolidate their

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operations and to retain well-trained professional staff. Significant efforts have been made towards the professionalisation of staff, through Provisional Measure 155 converted into Law 10 871 related to career and staffing issues. Further steps may involve the possibility of increased staff mobility across agencies, offering greater flexibility and diversification of professional choices. This could be organised on a wider basis, taking into account the various mix of qualifications required.

Finally, consolidating autonomy also requires further attention devoted to preventing possible conflicts of interest. Autonomy needs to be ensured not only from the Executive, but also from the regulated interests in the sector. These issues are only partly addressed in Brazil. The currently adopted cooling-off period of four months, when senior staffs leave the agency for the private sector, is too short, and should be extended to a minimum of one year in line with best international practice, with adequate compensation for the staff concerned. Strict provisions for disclosing conflicts of interest and private interests at senior level should also be adopted.

2. Strengthen the strategic framework for planning and decision making in regulated sectors

Regulatory authorities need to function in relation to a general regulatory and strategic framework. General issues of significant importance, including long-term planning and strategic planning, need to be resolved to enable regulatory authorities to fulfil their task of enforcement. These issues are pending in Brazil and in some sectors, clear gaps remain.

Brazil has made significant progress in recent years towards consolidating capacities in some ministries, or in related bodies such as the EPE in the energy sector. Recent decisions have and will allow ministries to consolidate their staffing resources. However, more is required. There is a need for ministries to develop a strategic vision and to share it with stakeholders. This is particularly important for transport and for communications. An integrated transport policy with clear objectives to address the most significant bottlenecks and to structure the long-term channels for transport will help Brazil overcome some of the current bottlenecks. The CONIT, which was foreseen as part of the law, should be established to function effectively. Consolidating the planning and analytical function in that sector, either within the ministry or outside, would help. It would provide relief to the agency, which sometimes has to compensate for some of the shortcomings of the current framework. Similarly, in the field of telecommunications, a broader strategy to develop broadband access, facilitating greater access to a wider set of communication facilities – taking into account population dispersion, income per capita and local capacities – is still required.

This would help agencies and ministries to engage in a more fruitful dialogue in matters where policy and regulation clearly overlap. These relations exist and function well in some cases – for example in the private health insurance, where the regulator seems to be involved in a positive collaboration with the Ministry. However, in other policy areas, including energy and telecommunications, this dialogue needs to be promoted in a way that will not undermine agencies' autonomy. This would allow stronger consensus on core issues for the regulated sector, thus ensuring that regulation can be more effective.

3. Strengthen social accountability mechanisms without undermining the authorities' autonomy

Increased autonomy has to be balanced with a clear framework for accountability. Effective independence from short-term political interventions, as well as from the regulated interests, requires that regulatory authorities establish a broad dialogue with all stakeholders.

In Brazil, the concept of ministerial responsibility has often prevailed in public debates in a country where social participation was not always very strong. Regulatory authorities need to establish an open dialogue, both with the Executive, as mentioned above, but also with the legislative branches. The chairman of the agencies should be allowed to attend Congressional hearings with the possibility of coming every year to introduce their annual report and to communicate on progress in the regulated sector. However, the management contracts that had been proposed were probably not suited to strengthen accountability, as they would have had implications for the autonomy of the agencies. The proposed alternatives will have to be carefully considered in order to provide clear medium-term objectives to the agencies without interfering in day-to-day practice and individual decisions.

In addition, regulatory authorities need to strengthen their accountability and legitimacy towards the public by encouraging dialogue with NGOs, consumers' associations and citizens. The experience in Brazil shows that in some cases the expression of civil society may need to be strengthened, as is the case with consumer organisations where positive efforts have been made. The PROCONs are also playing a useful role in consultation processes. A suspicion has existed in Brazil that regulatory agencies did not pay sufficient attention to consumers' needs. However, stronger consultation processes would certainly help to ensure that the consumer perspective is fully integrated. These exist at the moment in some agencies, such as ANATEL, but are still deficient in other sectors, such as for ANS. The New Law Bill 3 337 with its systematic approach will certainly offer significant improvement. Some Brazilian agencies have already demonstrated that they were able to function in ways fully similar to the best examples in OECD countries. There is therefore a need to ensure that this practice can be diffused across agencies.

A strengthening of performance assessment will also help promote accountability. Agencies are subject to the audit of the TCU, assisting Congress. These efforts are welcome and performance assessment by national audit offices can serve to protect the public interest. What is unusual in Brazil is the extent to which *ex ante* assessment and advice from the TCU is applied to the agencies. Strengthening *ex post* assessment, and assisting the agencies when faced with complex assessment tasks, may offer an opportunity to strengthen accountability without undermining the autonomy of the agencies.

Provisions envisaged in the New Law Bill would ensure that consumer representatives are involved through resources provided by the agencies. Such practice does not exist in OECD countries, where it is more common to fund relevant consumer organisations on a general basis. In the Brazilian case, another element to consolidate is the consumer perspective: there is a need to ensure full coherence between consumer protection codes and sectoral laws. In some cases, such as private health insurance, issues have been raised; increased coherence could help to strengthen consumer protection.

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Similarly, provisions to establish and strengthen the role of the *Ouvidors* are more specific to Brazil. While these certainly represent useful tools for channelling the views of the public in a context where some voices encounter difficulty in being heard, it may be important that this be done in a way that does not undermine the authority's autonomy.

Regulators should also be encouraged to develop an active communication strategy with the media, to explain the value of their action and make sure that their case and arguments are well understood and received.

4. Systematise the co-operation with competition authorities

High-quality regulation requires achieving a coherent competitive environment through a well co-ordinated policy. This calls for effective collaboration between sectoral regulatory authorities and competition authorities.

Existing relationships, which have tended to support collaboration between the sectoral regulators studied and the competition authorities, are supported by an uneven regulatory framework. While some sectoral laws provide for effective co-ordination and clarify the terms under which this should happen, others are less explicit, such as in the case of ANS – even though clearly anti-competitive behaviours have been discovered in the private health insurance field. For the Brazilian competition and regulatory system to function effectively, a more systematic framework for co-operation is required.

The New Law Bill 3 337 has a number of provisions to systematise the relationships between sectoral regulators and competition authorities. These are welcome and should be co-ordinated with the current projects to modernise the Brazilian system for the defence of competition, which would help to put these relationships on a more stable and systematic footing.

5. Improve co-ordination mechanisms in specific sectors

Effective co-ordination is also required on a number of technical issues to ensure regulatory coherence. This is also important to ensure regulatory quality from a whole-of-government perspective.

Brazilian regulatory authorities have a short history. They have made significant efforts to consolidate and ensure their independence in some cases, such as ANEEL or ANATEL. In some cases, several agencies were created, such as ANTT and ANTAQ, whereas a co-ordinated policy with a single agency might have proved more effective to ensure effective and integrated oversight. In this context, it is important to address the shortcomings that result from the current lack of co-operation.

In the field of energy, it is important to address some of the gaps in the framework for natural gas. This is a complex issue that involves both ANP and ANEEL, but that also has implications across levels of government with state regulatory authorities. A stronger relationship between ANEEL and ANP on those issues, including close co-ordination on relevant downstream/gas power issues, could help. Similarly, ANEEL and IBAMA need to keep in close contact over the process of environmental licensing for power installations, so that possible blockages are more effectively understood and prevented, and do not require an intervention in the context of the CNPE. In addition, other more technical issues might have to be addressed, such as the personal responsibility of staff in the case of the licensing process, which hampers a quick and effective process.

In the field of transport, it is essential to strengthen co-ordination between ANTT and ANTAQ, as a first step. In addition, strengthening co-ordination further with IBAMA will also help to address wider environmental issues. The goal should be to promote an integrated perspective for transport policy, so that users of transport services and basic industries can be better served. This could help to promote alternatives to road transport, at a time when Brazilian roads tend to be overloaded. In addition to that, some involvement in the OECD International Transport Forum, which is now replacing the European Conference of Ministers of Transport, could help Brazil benefit from the wide resource of knowledge of that organisation.

In the telecommunications sector, efforts are already under way to address issues related to technical convergence. In this field more effective co-ordination with other regulatory authorities in other countries could help to share understanding and contribute to redefining the Brazilian perspective for communications. A stronger attention to, and possible involvement in the work of, the OECD Committee for Information, Computer and Communications Policy (ICCP) could help strengthen co-ordination of this policy in Brazil.

In the private health insurance field, methodological exchanges with SUSEP could help consolidate the supervisory approach. Effective co-ordination with the ministry of health and related entities seems to have been already established. In addition, a more harmonised approach between different legal acts could also serve to resolve uncertainty about the reimbursement by private health insurers to the SUS.

6. Further strengthen multi-level co-ordination mechanisms to strengthen safety and performance

Establishing effective mechanisms for co-ordination across levels of government is also an important element to ensure regulatory quality, particularly in large federal countries. Co-ordination across levels of government has also been highlighted from a general regulatory perspective (see Recommendation 3 on government capacity for assuring quality regulation).

Concerning the agencies, mechanisms of co-ordination have already been established in some sectors, such as energy and transport, to ensure regulatory oversight at the local level and control safety. These represent a necessary step, but more could be done. In the energy sector, it is important to ensure the effectiveness of distribution companies, as it affects the quality and cost of service to ordinary customers. ANEEL's efforts to improve the terms on which it delegates tasks to the state regulators need to be supported. In the case of transport, further strengthening of safety requirements might need to be accompanied by further action at the local level. This could concern more effective crackdowns on illegal passenger transportation, and include a continuation of the effort to consolidate the crossing between railroads and highways to ensure effective safety.

7. Strengthen some of the powers of the Brazilian regulators

Regulatory authorities need to have sufficient powers to accomplish their mission. They need sufficient leverage to implement core decisions.

At the moment, the powers of Brazilian regulators are significant from an international perspective. They have helped them improve the situation in their respective sectors over the years. It is therefore important that these powers be maintained and consolidated. In some cases, additional strengthening of the powers may be necessary.

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This also concerns unbundling of the local loop for telecommunications and access to the rail paths for railroads. The current implementation of a cost-based mechanism in 2008 is a welcome measure, but effective implementation requires more regulatory powers for the agency. Current mechanisms do not offer sufficient flexibility and leeway for the agency to intervene. Strengthening these powers could help improve competition and also services for new entrants and users of services. This could serve to further facilitate the diffusion of broadband access. In the case of rail, it could improve the use of some core railroad infrastructure. In the case of railroads, it could be important to specify maximum tariffs and minimum levels of service for their party access and mutual traffic. In the future for the transport sector, an effective framework for monitoring the new concessions awarded in 2007 and reducing the scope for costly renegotiations should be established.

In the energy sector, strengthening provisions to ensure competitive neutrality, possibly by giving the agency the ability to monitor regulatory accounts, could help prevent the possibility of abuse and reassure investors that they will get even-handed treatment. This is particularly important for state-owned companies and those with links to different activities.

In the health sector, further powers could also help ANS better regulate collective plans for price readjustments. In the current Brazilian framework, a cost-plus approach tends to prevail, where all cost increases are automatically factored into the price of the contracts. The current system lacks incentives for private health insurers to contain costs and protect the interest of consumers. Similarly, the powers of ANS concerning price readjustments for individual and family plans could be established more strongly from a legal perspective. Additional powers could also be given to ANS to strengthen the quality of care provided, through the health plans. The implementation of the Programme of Quality in Supplementary Health represents a very positive first step. Ensuring portability of coverage is another important issue, one that could require further powers for ANS.

8. Consider institutional and legal changes to streamline appeals processes, possibly by designating specialised judges and appellate panels

A high quality regulatory system includes the need to provide possibilities for efficient and fair appeals that will not cause delays in the decision-making process within firms. The existence of an effective and consistent appeals process can help create an environment favourable to investment and the development of economic activities.

The current system of appeals in Brazil, which relies on the general justice, can be slow and result in delays. It can also offer opportunities for powerful stakeholders to partly undermine the regulatory and enforcement function of the agencies, given the number of appeals that some of them have received. An improved system for appeal of regulatory decisions will need to be co-ordinated with the competition policy function. While constitutional constraints exist on the creation of specialised courts, there could be possibilities for regional appellate courts to designate specialised panels for issues related to regulation as well as to competition. Suggestions for having designated specialised judges may help towards strengthening the ability of the judiciary in revolving cases that either involve sector regulatory agencies, or raise economic issues. Agencies could also join efforts with SEAE in terms of advocacy, reaching out to the judiciary, and promoting regulatory analysis through seminars and workshops to increase the familiarity of the judiciary with regulatory issues.

This needs to be accompanied by clear and deterrent sanctioning powers for the agencies. The case of ANEEL illustrates the capacity that some Brazilian regulators have established in ensuring through effective sanctions that enforcement and compliance with regulatory provisions be met. This could be usefully transposed to some of the other sectors.

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BRAZIL

STRENGTHENING GOVERNANCE FOR GROWTH

This review analyses the challenges of strengthening regulatory governance in Brazil to improve economic growth with appropriate regulatory frameworks for core infrastructure sectors. The debate on a market-based economy has now entered a new phase in Brazil, addressing the broader context of quality regulation and the reduction of regulatory risk. The improved macroeconomic situation and the progress made by the sectoral regulatory agencies have paid off, and there is also wider social participation in the improvement of the regulatory framework with a stronger consumer engagement. But Brazil still needs to further improve its capacities for regulatory quality and increase transparency and accountability in the system to reinforce regulatory performance.

Improved institutional capacities would also enhance support for regulatory policy across various government areas. Setting up an appropriate architecture for sectoral regulatory agencies and balancing autonomy with accountability will contribute to improved governance. Challenges include consolidating the autonomy and status of Brazilian regulatory authorities, reinforcing the strategic organisation for planning and decision making, increasing social accountability mechanisms, and improving co-ordination with competition authorities. Regulatory reform will help Brazil boost growth opportunities, and improve the quality and value of core services provided to its citizens.

Brazil has requested a broad review by the OECD of its regulatory practices and reforms. This review presents a general picture of the overall frameworks to assure high quality regulation with a special focus on four core infrastructure sectors: power, private health insurance, land transport and telecommunications.

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