

Regulatory Reform in Italy

Regulatory Reform in the Telecommunications
Industry



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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FOREWORD

Regulatory reform has emerged as an important policy area in OECD and non-OECD countries. For regulatory reforms to be beneficial, the regulatory regimes need to be transparent, coherent, and comprehensive, spanning from establishing the appropriate institutional framework to liberalising network industries, advocating and enforcing competition policy and law and opening external and internal markets to trade and investment.

This report on *Regulatory Reform in the Telecommunications Industry* analyses the institutional set-up and use of policy instruments in Italy. It also includes the country-specific policy recommendations developed by the OECD during the review process.

The report was prepared for *The OECD Review of Regulatory Reform in Italy* published in 2001. The Review 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 16 member countries as part of its Regulatory Reform programme. The Programme aims at assisting governments to improve regulatory quality — that is, to reform regulations to foster competition, innovation, economic growth and important social objectives. It assesses country's progresses relative to the principles endorsed by member countries in the 1997 *OECD Report on Regulatory Reform*.

The country reviews follow a multi-disciplinary approach and focus on the government's capacity to manage regulatory reform, on competition policy and enforcement, on market openness, specific sectors such as electricity and telecommunications, and on the domestic macroeconomic context.

This report was principally prepared by Wonki Min, of the Directorate on Science, Technology, and Industry, with the participation of Dimitri Ypsilanti of the Directorate on Science, Technology, and Industry. It has benefited from comments provided by colleagues throughout the OECD. It benefited from extensive comments provided by colleagues throughout the OECD Secretariat, as well as close consultations with a wide range of government officials, parliamentarians, business and trade union representatives, consumer groups, and academic experts in Italy. The report was peer-reviewed by the 30 member countries of the OECD. It is published under the authority of the OECD Secretary-General.

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Executive Summary

Background Report on Regulatory Reform in the Telecommunications Industry

The telecommunications industry has undergone significant regulatory reform over the last decade. By the beginning of 2001, 27 OECD Member countries have liberalised their telecommunications market, including voice telephony, infrastructure investment and foreign investment in the telecommunications service industry. The success of the liberalisation process depends on the presence of a transparent and effective regulatory regime that enables the development of fair competition in the marketplace. Together with the transparent and effective regulatory regime, the regulator's readiness and willingness to apply pro-competitive regulatory measures in favour of promoting competition play a key role in making a smooth transition of the telecommunications sector from monopoly to full competition. In this context, this report analyses the effectiveness of the Italian telecommunications regulatory regime together with the evaluation on the performance of the regulatory bodies.

By and large, the telecommunications market liberalisation in Italy has been driven by the European Commission's efforts to liberalise the European telecommunications market. Indeed, in most important policy issues such as interconnection, licensing, universal service, etc., EU Directives have played a key role in moulding the Italian regulatory framework. The Italian government has made many important policy decisions to promote competition since the mid 1990s. Now, with the completion of the implementation of EU Directives into national legislation, Italy has a fairly comprehensive regulatory regime enabling it to promote competition in the telecommunications sector. Furthermore, for certain regulatory measures such as the coverage of carrier pre-selection, monitoring service of quality and the unbundling of the local loop, the Italian regulatory regime has one of the most pro-competitive approaches amongst all OECD member countries.

Italy, as regards the structure of the regulator (AGCOM or *Autorità per le garanzie nelle comunicazioni*), has a unique regulatory system among OECD countries. In particular, the regulator has the responsibility to supervise the telecommunications sector as well as the broadcasting sector and the press. This can enable the regulator to make technologically neutral regulatory decisions and take consistent regulatory approaches for the whole communications sector. At the same time, the regulator has demonstrated its willingness to promote competition through successive regulatory rulings and new legislation.

However, there are a number of issues, which need to be promptly addressed in order to expedite the level of competition in the marketplace. First of all, the AGCOM needs to have the necessary staff to exercise its regulatory power appropriately and in a timely manner. In spite of the full empowerment of regulatory responsibility by law, currently the AGCOM still shares regulatory powers with the Ministry, partially due to a lack of adequate staffing. This regulatory power sharing has created confusion for market players in trying to determine which is the relevant regulatory body governing specific issues such as spectrum management and numbering. At the same time, there is a need to change regulations so that they are more user-friendly and market oriented. For example, the licensing regime is still very complicated, and included up to the beginning of 2001 the use of concessions. In addition, the government's golden share in the incumbent creates uncertainty in the marketplace.

The incumbent still has a largely dominant market share in the access and local call market and leased line markets. The dominance of the incumbent in the local market highlights the importance of the role of the regulator in the Italian telecommunications market since there would not be fair competition unless the regulator ensures a non-discriminatory and cost-oriented access regime.

1. THE ITALIAN TELECOMMUNICATIONS SECTOR

1.1. *The national context for telecommunications policies*

The reform of telecommunications markets in Italy has initially been driven by European Union (EU) policies. Since the release of the 1987 “Green Paper on the Development of the Common Market for Telecommunications Services”, the European Commission has played an important role in promoting the liberalisation of the EU telecommunications market through successive liberalisation directives and harmonisation directives.

Unlike the UK and Scandinavian countries, which undertook national initiatives to liberalise their markets ahead of the EU efforts, the EU directives have mostly guided Italy’s liberalisation of the telecommunications market. In fact, the liberalisation of the Italian telecommunications market can be best described as the adoption of EU directives into national legislation, a process in which Italy has barely met deadlines and was often late in keeping the EU’s deadline. In recent years the situation has improved and liberalisation deadlines are being met with more regularity.

The late liberalisation of the market has helped the incumbent to maintain a dominant position in the access and local voice market as well as the leased line market. Since there is practically no CATV networks in Italy, the incumbent’s local loop is and will remain an essential facility for new entrants to access end customers until wireless local loop (WLL) is in place. It implies that all new entrants need to interconnect with the incumbent’s local loop to terminate their fixed to fixed and mobile to fixed phone calls unless they have an agreement for local loop unbundling (ULL) with the incumbent. This emphasises the importance of the role of regulator because the only way for new entrants to access end customers is through the incumbent’s local loop.

Most OECD countries allow telecommunications operators to follow a legal proceeding through the courts when they are not satisfied with the regulator’s ruling, and telecommunication operators, in particular, incumbents use this recourse as a means of slowing down implementation of new rules. Nevertheless, it is extraordinary that in Italy the incumbent, Telecom Italia, has gone to court against almost all regulatory rulings made by the regulator. Of particular importance the dispute on the completion of rebalancing which resulted in the regulator and the incumbent taking different positions on most regulatory issues such as pricing regulation, and unbundling.

Telecom Italia is subject to “golden share regulation” based on the “Golden Share Decree¹” issued on 11 February 2000 and Telecom Italia’s constitution. According to the Golden Share Decree, the Italian government can use its special powers to block an acquisition of Telecom Italia in order to protect the vital interests of the State and the public. Although the Italian government did not exercise its special power when Deutsche Telekom and Olivetti competed to take over Telecom Italia (Olivetti finally succeeded), the existence of a “golden share regulation” means that the Italian government still is empowered to intervene in the case of an acquisition of the incumbent.

Table 1. Italy's transposition of the EU harmonisation directives (as of 1 October 2000)

| Directive | Transposition | Note |
|---|---------------|--|
| ONP Framework (90/387/EEC, modified by 97/51/EC) | S | The original ONP directive is substantially transposed by Decree No. 55 of 9 February 1993, later integrated and supplemented by the framework Law No. 318 of 19 September 1997. Directive 97/51/EC is not yet transposed. |
| Leased Lines (92/44/EEC; modified by 97/51/EC and by Decision 98/80/EC) | P | The original leased lines directive (92/44/EEC) is substantially transposed by Decree No. 289 of 2 May 1994 and further integrated by the framework Law No. 318 of 19 September 1997. The amended directive has been transposed by the Government in January 2001; the regulatory regime is consistent with the Directives. |
| New Voice Telephony (95/62/EC, modified by 98/10/EC) | N | The old voice telephony directive (95/62/EC) is substantially transposed; the new directive was transposed in January 2001; the regulatory regime is consistent with the Directive. (Some of its principles take place in the AGCOM Decision No. 101/99, dated 24 June 1999). |
| Licensing (97/13/EC) | P | Partially transposed by the framework Law No. 318 of 19 September 1997 and by the Ministerial Decree of 25 November 1997 (as modified by Decision No. 217/99, dated 22 September 1999 and by the decision No. 657/00/CONS, dated 4 October 2000). Only recently, through Decision No. 467/00/CONS, dated 19 July 2000, the AGCOM issued the provisions regarding general authorisations. The transposition is now complete in relation to conditions attached to general authorisations; non-public services will be subject to a new regulation. In addition, the existing legislation on satellite co-ordination still needs to be brought into line with the provisions of the directive. |
| Interconnection (97/33/EC, modified by 98/61/EC with respect to number portability and carrier pre-selection) | S | The Directive is substantially transposed by the Decree on interconnection of 23 April 1998, the Ministerial Decree on numbering of 27 February 1998, updated by the Decision of the AGCOM of 29 July 1999 on new numbering plan and related norms and the Decree on universal service of 10 March 1998, which supplemented the general provision of the framework Law No. 318 of 19 September 1997. Additional provisions on number portability and carrier pre-selection have been issued by AGCOM, on 7 December 1999, through Decision No. 3/CIR and No. 4/CIR. |
| Numbering (97/33/EC modified by 98/61/EC with respect to number portability and carrier pre-selection) | S | The provisions relating to carrier pre-selection have been fully transposed by the framework Law No. 318 of 31 July 1997, the new numbering plan of 29 July 1999, by the Licensing Decree and by several implementation directives issued by the NRA (3/00/CIR, 4/00/CIR and 6/00/CIR). |
| Data Protection (97/66/EC) | S | The Directive is substantially transposed by Decree No. 171 of 13 May 1998. |

Note: S – Substantially transposed, P – Partially transposed, N – Not transposed.

Source: European Commission “Fifth Report on the Implementation of the Telecommunications Regulatory Package”, OECD.

Box 1. How to control the incumbent in a liberalised telecommunications market?

Even after the liberalisation of telecommunication markets, a large number of OECD countries still maintain measures to control ownership of the incumbent, in addition to asymmetric regulation based on telecommunications regulations and general competition rules.

One way this has been done is by maintaining a majority shareholding of the incumbent or by imposing “golden share” regulation. Since privatisation of the incumbent is not included in WTO commitments or in EU directives as a condition of market opening, some governments such as the Netherlands and Germany still have a majority shareholding in the incumbent. In particular, the Dutch government also has a “golden share” of KPN. In Italy and Spain, in spite of the fact that the government does not hold enough shares to control the incumbent, the government can influence certain activities of the incumbent through a “golden share”.

On the other hand, there are a number of countries such as Japan and France, which have a special law for supervising the incumbent. In many cases, this special law requires a minimum percentage of government ownership and imposes foreign ownership and/or individual ownership restrictions.

In principle, in a liberalised telecommunication service market where there are an increasing number of market players and where capacity is being traded as a commodity, it does not make much sense to maintain special regulations on the incumbent in addition to regulation based on general competition principles. In particular, considering the rapid development of alternative infrastructure such as cable television networks and wireless networks, there is no reason to impose special regulations on the incumbent other than regulations based on concepts of market power or essential facilities. In any event, all countries have special requirements for national emergencies that they can use to impose requirements on the incumbent.

1.2. General features of the regulatory regime, telecommunications market and market participant

1.2.1. Brief History

In Italy, until 1992, telecommunications services were provided directly by the State through the ASST (Telephone Services State Agency) and the Posts and Telegraphs Administration (PT), or indirectly through several concessionaires such as SIP, ITALCABLE, TELESPIAZIO, SIRM, and TELEMAR.²

In 1992, the Italian government decided to give management of all telecommunication services to the concessionaires (Law No.58/92). In 1994, recognising that the division of telecommunication operations weakened the overall development of the Italian telecommunications industry, the Italian government merged all concessionaires into a single company, Telecom Italia, with the exception of TELEMAR. A year later Telecom Italia Mobile was established, and in 1997 Telecom Italia was incorporated into STET (*Società Finanziaria Telefonica*), following which STET changed its name to Telecom Italia.

In 1995, all telecommunications services were liberalised except fixed voice telephony, mobile and satellite services and network installations. In 1997, networks and services by satellite were liberalised by Decree-Law 11 February 1997, No. 55. On 31 July 1997 the Italian Parliament enacted Law No. 249 on the “creation of the telecommunications National Regulatory Agency (AGCOM – *Autorità per le Garanzie nelle Comunicazioni*)” and provisions on telecommunications and broadcasting systems. The Presidential Decree of 19 September 1997, No. 318 completed full liberalisation of the telecommunications market.

In November 1997, the Ministry of Treasury privatised Telecom Italia by selling virtually its entire stake through a global offering and a private sale to a group of shareholders. On 21 May 1999 Olivetti obtained control of Telecom Italia when approximately 52.12% of Telecom Italia Shares were tendered to Olivetti. As of 21 June 2000 Olivetti, through its subsidiary Tecnost S.p.a., owns 54.99% of Telecom Italia Shares, and the Treasury retains a 3.46% stake in Telecom Italia.

In the mobile market, Omnitel, the second mobile operator commenced services in 1995 and Wind, the third mobile operator commenced operation in March 1999. Blu S.p.a., which obtained a licence as the fourth national operator on August 4 1999, began providing a DCS 1800 service in the summer of 2000.

Box 2. Brief history of telecommunications market liberalisation in Italy

Before 1992: Provision of radio and telecommunications services by the State either directly or through concessionaires.

1992: The responsibility to provide all telecommunications services was given to the concessionaires.

1994: All concessionaires were merged into a single company, Telecom Italia, with the exception of TELEMAR.

1995: Liberalisation of telecommunications services except voice telephony, mobile and satellite services and network provision.

Start of services of the second mobile operator (Olivetti).

1997: Establishment of the regulator (AGCOM).

Privatisation of Telecom Italia.

Liberalisation of satellite services.

1998: Liberalisation of voice telephony market.

1999: Start of services of the third mobile operator (Wind).

2000: Start of services of the fourth mobile operator (Blu).

1.2.2. Telecommunications market and participants

Telecommunications market

At the end of 1999 Italy's telecommunications market size is estimated at USD 32.9 billion,³ the sixth largest telecommunication service in the OECD (and 4th largest among EU Member countries).

In particular, Italy's mobile market was the third largest in the OECD in terms of revenue (USD 12 billion) and the number of subscribers (2nd and 1st in the EU respectively). The rapid growth of mobile services is largely due to the introduction of prepaid card services. After the introduction of prepaid card service in 1996, Italy's mobile penetration rate ranking jumped from 12th to 8th among OECD member countries between 1996 and 1997. Approximately 82% of TIM customers, as of 31 December 1999 used prepaid cards. The only other OECD country, which has a comparable pre-paid card subscription percentage with Italy, is Portugal.

Table 2. **Distribution of revenues in the Italian telecommunications market, 1996-1999**

| (percentage) | | | |
|------------------------------------|-------|-------|-------|
| | 1997 | 1998 | 1999 |
| Fixed telephony services | 64.8 | 57.5 | 50.7 |
| Mobile telephony services | 27.5 | 34.9 | 41.3 |
| Data services and leased lines (*) | 7.7 | 7.6 | 8.0 |
| Total | 100.0 | 100.0 | 100.0 |

(*) – including Internet revenues.

Source: AGCOM evaluation on Communications Outlook and IDC data

Table 3. **Italy's mobile subscriber penetration ranking among OECD countries**

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | June 1999 |
|---------|------|------|------|------|------|------|------|------|------|-----------|
| Ranking | 17 | 14 | 14 | 14 | 12 | 12 | 12 | 8 | 6 | 7 |

Source: OECD.

At the end of 1999, the incumbent operator, Telecom Italia, was the world's seventh largest fixed telecommunications operator with approximately 26.5 million fixed lines including ISDN, and its subsidiary TIM was the largest mobile operator in Europe and the third largest in the world with 18.5 million mobile customers.⁴

As of the end of 1999, there were approximately 448 000 lines (points of entry of data network) leased to business customers of which 240 000 related to data transmission. In addition, there were almost 25 000 digital leased lines related to backbone networks and almost 8 500 digital lines for interconnection with the Telecom Italia network leased to other domestic telecommunications operators.

In Italy, cable television networks have not developed due to the rapid development of analogue terrestrial television, which was completely liberalised in 1976. As of 30 November 1999, there were 11 national terrestrial television channels, over 700 local television broadcasters (analogue) and 1 709 000 subscribers for satellite television.⁵ TV subscribers can view 57 to 60 terrestrial broadcasting channels. TI is the largest shareholder of Stream,⁶ which was the only cable TV service provider in Italy until the Autumn of 2000, when Canal + reached an agreement with TI to distribute its own channels. Stream leases its facility from TI and has no plans to install its own networks. As of 30 November 1999 Stream had about 500 000 customers, of which only 82 000 are served by cable and the others are served via digital satellite programming.⁷

In the Internet market, as of the end of 1999, there were 4 930 000 subscribers.⁸ Telecom Italia Net (Tin.it), the Internet service provider subsidiary of the incumbent telecommunication operator had the largest market share with 1 990 000 subscribers. In spring 2000 several providers began marketing broadband services using ADSL technology which permits fast access to Internet and the use of interactive multimedia services.

Market participants

An overview of the participants in the Italian telecommunications market is summarised in Table 4. As the table indicates, Telecom Italia, including its subsidiary Telecom Italia Mobile (TIM), has a dominant position in all telecommunications market segments.

In the fixed voice telephony market, there were 122 licences for PSTN network and/or service providers as of 1 June 2000. Except for the incumbent, Telecom Italia, major fixed voice telephony service providers are Infostrada⁹ (owned by the National Electricity Co. [ENEL]), Albacom, Wind, Tiscali and Tele2.

In the mobile market, TIM is the sole provider of analogue mobile telecommunications services, which account for about 8% of the mobile market in terms of users. Analogue service is based on the TACS 900 standard and began operation in 1990. There are four operators including TIM with licences for GSM and/or DCS 1800 mobile services. TIM and Omnitel began their GSM services in 1995. Wind had begun to commercialise GSM/DCS services in March 1999. Wind and Omnitel are the only Italian telecommunications operators that have both a mobile and a fixed licence. Blu began service in summer 2000, using DCS-1800, with cost-oriented roaming in the 900 MHz band. The late entrance of the third and the fourth mobile operators gave a competitive advantage to TIM and Omnitel allowing them to obtain the lion's share of the market.

In addition 5 UMTS licenses were awarded in November 2000; a ruling allowing trials for wireless in the local loop services (40.5-42.5 GHz band) shall enter into force soon, as well as licensing in the 24.5-26.5 / 27.5-29.5 GHz bands.

It is noteworthy that Italian mobile operators do not provide any handset subsidies. Considering the fact that handset subsidies take a significant portion of mobile operator's cost structure in other countries, the lack of handset subsidies enables Italian mobile operators to offer lower service charges on mobile services. (See Section 3.1)

Table 4. **Overview of the Italian telecommunications market**

| | No. of licensees (as of 1 June 2000) | Market share (as of the end of 1999) | Notes |
|--------|--|--|---|
| Fixed | Service based operators (operators without their own infrastructure): 100. | Telecom Italia (market share in %): - Local: (~100%). - Long distance (% of minutes) (93%). | There are three types of fixed voice telephony licences: - Voice telephony services. - Network installation and provision. - Network installation for the sole purpose of voice telephony provision. |
| | Facility based operators (including network providers): 22. | - International (% of outg. min.): (68%). - Leased Lines: (100%). | |
| Mobile | Analogue: 1 (TIM). Digital: 4 (TIM, OPI, WIND and BLU). | Analogue: TIM - 100% Digital: -TIM - 48.7%. -OPI - 38.7%. -WIND - 11.1%. -BLU - 1.5%. | Market share is estimated on the basis of number of subscribers as of Sept. 2000 in GSM/DCS market (some 35.5 million total subscribers). |
| CATV | 2 | Stream: 100%; TELE+ (operation started in October 2000). | |

Source: AGCOM.

Table 5. **Ownership status of the major operators in the Italian telecommunications market**

| Operators | Ownership Status |
|----------------|--|
| Telecom Italia | Tecnost S.p.a. 55.02%, Bank of Italy 1.14%, Treasury 3.46%, employees 0.36%, market 40.02% (as of 29 February 2000). |
| Infostrada | ENEL + France Telecom. |
| Albacom | Albacom Holdings: British Telecom and BNL 45.5%, ENI 35%, Mediaset 19.5% (as of June 2000). |
| Tiscali | Renato Soru 61.22%, Andala 8.01%, Kiwi Fund 8.01%, market 22.76% (as of June 2000). |
| Wind | Enel 56.3%, France Telecom 43.7% (as of September 2000). |
| TIM | Telecom Italia 52.46%, market 47.54% (as of 31 December 1999). |
| Omnitel | Mannesmann 55.2%, Bell Atlantic 23.1%, Vodafone Airtouch 21.7% (as of 30 June 2000). |
| Blu | Autostrade 32%, British Telecom 20%, Distacom 9%, Edizione Holding 9%, Mediaset 9%, BNL 7%, Italgas 7%, Gruppo Caltagirone 7% (as of June 2000). |

Source: AGCOM.

2. REGULATORY STRUCTURES AND THEIR REFORM

2.1. *Regulatory institutions and processes*

Regulator in the telecommunications sector

The AGCOM, based in Naples, is the regulator in the telecommunications sector while the Ministry of Communications (Ministry) has the responsibility of policy making in the sector.¹⁰ The AGCOM was established by Law No.249 of 31 July 1997 and became operational from 22 July 1998. According to Law No. 249 the AGCOM is fully independent and has authority on all regulatory issues in the telecommunications sector (See Box 1). In addition, the AGCOM has investigative powers as well as the authority to impose sanctions on operators who do not comply with their directives and resolutions.

Box 3. **AGCOM's regulatory responsibility in the telecommunications sector**

- Regulations on interconnection.
- Spectrum planning and allocation in collaboration with the Ministry of Communications.
- Market entry: granting licences and issuing authorisations. This competence has been transferred to the Ministry of Communications as from 26 March 2001.
- Numbering: number planning and management.
- Price regulation.
- Monitoring quality of service.

The horizontal regulatory competency over the whole communication sector (broadcasting, telecommunications, and press) provides the AGCOM with one of the most comprehensive regulatory roles in the OECD area. The AGCOM is one of five regulators¹¹ in the OECD, which has regulatory power both in the telecommunications sector and the broadcasting sector. Furthermore, the AGCOM is the only regulator whose organisational structure is not based on specific services, such as telecommunications, broadcasting and press, but structured on the basis of more general framework such as networks and services. Accordingly,

its Departments and Services are integrated to cover horizontally telecommunications, broadcasting and press sectors. Fragmented regulation in the communications sector can restrict companies from taking full advantage of the rapid convergence taking place between broadcasting, content and communications technologies and services. The structure of AGCOM enables it to address regulatory issues across the communication sector in a technological and competitively neutral way.

The organisational structure of the AGCOM consists of a council and two commissions (Network & Infrastructure Commission and Services & Products Commission) which have specific regulatory responsibilities in their own areas. Each commission is a collegial body made up of the president of the AGCOM and four commissioners. The council consists of the president and all the commissioners.

The Senate of the Republic and the Chamber of Deputies each elect four commissioners, the president of the AGCOM is appointed by the President of the Republic upon proposal of the Prime Minister in agreement with the Minister of Communications, after a parliamentary hearing. AGCOM's first year operating expenditure was covered by a 0.35 per thousand levy, (rising to 1 per thousand for following years) on revenues of national operators (except new entrants operating for less than two years) in the sectors under its responsibility as well as administration fees such as licence fees, numbering fees, etc. According to the law, the number of AGCOM's permanent staff cannot exceed 260 persons. Currently there is about 200 staff at the AGCOM.

There is a concern in the telecommunications industry that the nomination of commissioners is too political. It is very important for the regulator to ensure its independence from all interested parties if there is to be fair competition in the marketplace. In this regard, it is useful that the AGCOM publish not only its regulatory decisions, but also the reasoning for its regulatory decisions.

Although the new law gave most of regulatory power to the AGCOM, lack of staff has meant that the AGCOM has taken some time to become fully operational. In fact, the AGCOM has carried out a number of tasks jointly with the Ministry under a bilateral agreement,¹² which was supposed to expire in December 1999. However, the AGCOM and the Ministry extended this joint operation by renewing the agreement. This joint operation has sometimes created confusion among market players in that they are not sure which organisation is responsible for specific regulatory issues, such as spectrum allocation. The two year period required for the transfer of full regulatory power from the Ministry to the regulator, the fact that AGCOM was not fully operational when the market opened to competition and difficulties in recruiting professional staff have all acted to slow implementation of appropriate regulatory safeguards in some market segments

The Ministry and the AGCOM have taken a public consultation approach (Green Paper approach) for important decision making process. In particular, since 1999 the Ministry and the AGCOM have started to use the Internet for public consultations, such as those on UMTS, wireless local loop and the general authorisation regime. The consultative approach in decision-making is widely welcomed by the industry since it helps to enhance transparency of decisions.

General competition authority

In Italy, like other OECD Member countries, as the telecommunications market shifts from monopoly to competition, there has been increasing involvement of the competition authority in the telecommunications sector. The Italian competition authority has been very actively involved in the telecommunications sector. In particular, until 1998 it contributed significantly, together with the Ministry of Communications, to regulate the telecommunications sector, mainly due to the absence of a sector specific regulatory body. Compared with other competition authorities in the OECD region which often do not have enough professional staff to supervise the telecommunications sector, the Italian competition authority is well staffed.¹³

The Italian Competition Law (Law No. 287/90) applies to the telecommunications sector without exemption. Consequently, the competition authority has power to enforce competition rules into the telecommunications sector. In practice, the competition authority has a competency for anti-competitive behaviour and mergers.

Relationship between the regulator and the competition authority

As the role of the competition authority has grown in the telecommunications sector, OECD countries have give more attention to the issue of potential overlap between the sector specific regulator and the competition authority in order to prevent inconsistent regulatory rulings between the competition authority and the telecommunications regulator.

In Italy, apart from general informal consultation, the competition authority and the AGCOM are required to request the opinion of the other institution in specific cases. The competition authority is required by law to ask for prior non-binding advice from the AGCOM on decisions concerning agreements restricting competition, abuses of dominant power and mergers involving operators active in the communications sector (Law No. 249/97, Section 1, Paragraph 6, Letter c), Point 11).

On the other hand, the competition authority is required to issue prior non-binding advice to the AGCOM, on the identification of telecommunications operators with significant market power, conditions of interconnection and access to networks, universal service funding, and accounting separation. As mentioned in the background report to Chapter 3, which examines Competition Policy, a lack of agreement between two regulators does not give the other agency a veto over action, but it may compel a more complete explanation of the decision.

While the regulatory relationship and the consultation mechanism between the AGCOM and the competition authority is well established, some operators complain about the delay in regulatory decisions resulting from the long consultation period between two regulatory bodies. The AGCOM replies that this period of time do not normally exceed two months.

2.2. Regulations and related policy instruments in the telecommunications sector

2.2.1. Regulations of entry and service provision

Licensing regime

Italy established a general licensing regime when the telecommunications market was liberalised. The incumbent, Telecom Italia, and the two dominant mobile operators, TIM and Omnitel, initially have maintained concessions. Telecom Italia's concession was changed into a licence in November 2000, while the change of the concessions of TIM and Omnitel took place in March 2001. The special and exclusive rights in the concessions were, in any event, abolished on 1 January 1998.

Table 6. **Italian licensing regime**

| Type of business or operators | Entry condition |
|--|---|
| Fixed and mobile voice telephony services including the installation and provision of networks | Individual Licence |
| Telecommunications services other than the above mentioned activities | Authorisation |
| TIM, Omnitel | Concession (subject to the individual licensing regime) |

In Italy, operators need to receive an individual licence from the AGCOM (from the Ministry as of 26 March 2001) for the provision of voice telephony and mobile telephony, and the installation and provision of public telecommunications networks (including mobile networks). The individual licence has a duration of 15 years and is renewable through a prior application filed at least 6 months before the expiration date. In principle, the AGCOM is required to make its decision within six weeks after receipt of the application. Initial delays have been reported by the EU with regard to the issuing of licences but recent efforts made by the regulator have reduced the time to acquire a new licence to an average of seven weeks, according to AGCOM. The previous average was approximately 12 weeks.

Individual licence holders are required to pay licence fees, which may cover only the administrative expenses incurred by AGCOM in the issuance and management, control and enforcement of the individual licence. Moreover according to the budget law¹⁴ holders of individual licences or public concessions for the provision of public networks voice services to the public and mobile and personal communications are subject to a fee calculated as a percentage of turnover. The level of licence fees in Italy is approximately within the average of EU member countries.¹⁵ If there is a lack of resources, such as for frequencies and numbers, AGCOM can limit the number of individual licences for specific services. AGCOM has a right to amend the conditions provided for an individual licence in objectively justified cases and in a proportionate manner. In addition, AGCOM is entitled to revoke or suspend general authorisations and individual licences in the event of repeated violations by the holder.

Companies only need to submit a declaration to AGCOM to begin providing services, which are subject to the authorisation procedure (*e.g.* Internet services). Unless an applicant receives a formal opinion from AGCOM within four weeks after submission of a declaration of business, it is deemed to receive an authorisation. According to the Presidential Decree of 19 September 1997 No. 318, AGCOM has the authority to impose special conditions on an authorisation if the use of spectrum or numbering is required.

Individual licences and general authorisations can only be transferred to third parties with the AGCOM's approval. Foreign companies, which are based in EU member countries or WTO signatory countries, have the same rights as local firms, while for other foreign companies a principle of reciprocity is applied. As of 31 June 2000, 122 licenses, 1 100 authorisations for other liberalised telecommunication services and about 100 authorisations for communication services via satellite have been granted.

In July 1999, the AGCOM modified the decree of 2 November 1997 on licensing by abandoning the requirement for a performance bond and investment in research and development by operators, which the European Commission had criticised. Nevertheless, the current individual licensing regime,¹⁶ which requires the AGCOM to verify the business plans and financial status of applicants, not only places an unnecessary and costly regulatory burden on applicants, but also uses the scarce manpower of the AGCOM. The expansion of the authorisation system to fixed voice telephony services, which are currently subject to an individual licensing system, would lift unnecessary regulatory burdens from the telecommunications industry as well as eliminate long lead times to enter the market. In this regard, the European Commission also said "priority given to general authorisations, as opposed to individual licences" in its proposed Directive (COM(2000) 386).

Indeed, for fixed telecommunications services, if the market is fully liberalised, the issuance of a licence is only required as a means to verify if minimum requirements to enter the market have been met. As competition develops in the fixed voice telephony market, a number of Member countries, such as Denmark and the Netherlands, have introduced a simple market entry procedure on the basis of registration or simple declaration.

The procedure to grant licences for mobile services is very complicated. According to the decree of 19 September 1997, mobile licences should be awarded through a public tender procedure, determined by the Committee of Ministries, which is headed by the Prime Minister. This Committee is also responsible for the selection of evaluators. This complicated mobile licensing regime has resulted in the adoption of a two step procedure – combination of public tender and auction - to select UMTS licences (see Section 2.2.5). AGCOM will be responsible for granting WLL licences. AGCOM plans to issue regional licences for WLL services.

In spite of the fact that the Italian telecommunications market has been fully liberalised, concessionaires remained in the marketplace until early 2001. The last telecommunication concessions attributed to TIM, and OPI were changed into licences in March 2001. According to the concessions, concessionaires and licence holders are required to pay to the State fees calculated as a percentage of their previous year's gross revenues from regulated services.¹⁷

The Telecommunications Regulations provided that by 1 January 1999 the existing public concessions had to be modified to make them consistent with the new regulatory framework. The public concessions of TI and Telemar have been modified in December 2000. Under its public concession, Telecom Italia had the right to provide all mobile public telecommunications services, regardless of the technologies used. However, TIM participated in the licence allocation for UMTS on the same basis as other market operators.

In spite of the existence of the sector specific independent regulator, in many OECD countries the government retains competency to allocate spectrum due to public ownership of spectrum and the need to take into account the demand for broadcasting services. Nonetheless, the Italian regulatory arrangement is unnecessarily complicated and requires a long lead-time to decide on the procedure to select licensees. The Italian governments need to make the licensing procedure more transparent and simpler. In addition, if auctions are to be the chosen method to allocate spectrum licenses then this method needs to be inserted in the law.

The decision to transfer licensing authority from AGCOM to the Ministry was a retrograde step in terms of ensuring the proper functioning of regulation and the independence of the regulatory body. AGCOM has the responsibility to develop a competitive market in telecommunications and supervise the telecommunication sector. In this context market entry, and thus licensing, should be an integral part of their responsibility, as should be the decision with regard to streamlining the market entry process.

Rights of way

Rights of way regulation in Italy is based mostly on several laws. Art. 4, Par. 3 of Law 249/97 stipulates that the licensed operators can lay down backbone networks. However, in terms of territory, which is controlled by the local municipalities, the local municipalities have the authority to grant rights of way based on local rules that shall be in line with a ruling issued by the national regulatory authority. If rights of way cannot be granted to a new operator, AGCOM and the local municipalities can order facility sharing using existing infrastructures. There is a mechanism to resolve conflict between companies concerning facility sharing, conflict regarding rights of way between municipalities and telecommunications operators can be brought to court in the first instance.

Since each local municipality has its own rights-of-way regulation, operators are required to receive separate permission from municipalities for the construction of local networks. Furthermore, since municipalities have the regulatory power to grant rights of way in their regional area, the purpose of the ruling issued by AGCOM is to minimise the risk that operators face different rights of way regulations in different municipal areas.

In addition, the involvement of local utilities in the telecommunications sector raises a concern of possible discrimination in granting rights of way.¹⁸ It is important that conditions and requirements to attain rights of way are transparent and non-discriminatory. In this respect, a public consultation is currently underway for the introduction of a new regulatory framework on rights of way. AGCOM plans to introduce a new regime by the summer of 2001. In the new rights-of-way regulatory regime, it would be strongly recommended to give regulatory power to AGCOM to intervene in conflicts between municipalities and telecommunications operators and to make binding resolutions.

While agreements for collocation and facility sharing between operators without significant market power are normally a matter of commercial negotiation, AGCOM may intervene to resolve disputes if requested by either party. Where AGCOM's does intervene, it imposes arrangements regarding facility and property sharing only after an appropriate period of consultation period during which all interested parties must be given an opportunity to express their views.

The operators with significant market power have an obligation to meet reasonable requests for collocation. In particular, with regard to the issuance of the third and the fourth mobile licences, TIM and Omnitel are required to provide site-sharing agreements at cost-oriented prices to Wind and Blu under the supervision of AGCOM. In addition, in order to ensure fair competition between Blu and other mobile operators, the existing mobile operators are required to provide national roaming service to Blu.

For the provision of international cables, licensed operators for public network provision can construct their own cable landing stations. However, considering the high investment cost to construct a cable landing station, AGCOM has ensured that access to the incumbent's cable landing stations is available for new entrants and covered within the framework of interconnection regulation at the Telecom Italia's RIO 2000.

Line-of-business and ownership restrictions

Except for a special regulation on Telecom Italia that prohibits it to enter the terrestrial broadcasting market due to its concession in the telecommunications market, there are no line-of-business restrictions in Italy. If a cable operator wants to provide telecommunications services on its network it may ask for a voice telephony licence either when applying for a CATV network licence or at a later stage. Law 249/97 provides that networks used for broadcasting purposes may be used for the provision of telecommunication services (provided that accounting or structural separation is assured, depending on whether the broadcaster has a national or local TV licence).

There are no restrictions on foreign ownership in Italy and on the share holding of a single party. However as mentioned earlier, Telecom Italia is subject to the golden share regulation. In a liberalised market, there is no reason to impose special regulations on specific companies.

2.2.2. *Access Regime*

Following the liberalisation of the telecommunications market, probably the most important regulatory safeguard to ensure fair competition is the establishment of a fair and transparent access regime. Indeed, such a fair and transparent access regime is vital if there is no alternative local loop to that of the incumbent, which is the case in Italy. In particular, the pricing mechanism of the access regime determines the profitability of new entrants and eventually determines the level of competition in the marketplace. The AGCOM has made very important regulatory decisions on the access regime recognising the dominance of Telecom Italia in the local loop market.

Interconnection

Due to the lack of alternative infrastructure in the local loop, it is essential for other operators to interconnect with Telecom Italia's local loop in order to terminate their calls.

Like most OECD countries, in Italy interconnection agreements between operators without significant market power are regarded as a commercial matter in which the AGCOM may intervene only in the case of disputes between the two parties. According to the Decree of 23 April 1998, individual licensees are obliged to open negotiation with requesting parties within fifteen days from receiving an interconnection request. This negotiation should be completed within forty-five days. The parties are required to notify that an interconnection contract has been agreed upon to the AGCOM within ten days from the completion of a contract. Unless interested parties reach an agreement within this period, they are required to inform the AGCOM of the failure of negotiation with required information.¹⁹ Upon receiving a notice of failure, the AGCOM has to make a decision on this matter within 90 days.

In contrast to interconnection agreements between operators without significant market power, many specific ex-ante obligations are imposed on operators with significant market power in order to ensure access to bottleneck facilities (see Box 4.).

Box 4. Interconnection obligations imposed on SMP operators

- Interconnection charges should be transparent and cost-oriented
- Interconnection should be available on the same terms and conditions for competing operators as SMP operators providing for their own services
- Reference Interconnection Offers need to be published
- Interconnection should be offered at any technically feasible points
- SMP operators are required to keep separate accounting for interconnection services and other telecommunications services.

Currently Telecom Italia, TIM and Omnitel are designated as operators with significant market power in the interconnection market by AGCOM's Determination No. 197/99 of 7.11.99. The AGCOM makes an annual review to determine SMP operators and relevant markets.

Interconnection with Telecom Italia's fixed telephone network

The interconnection framework for fixed networks has been in place since 1998, when the telecommunications market was liberalised. The Italian interconnection regime is based on a service competition model with no minimum requirement on interconnection points, and no discrimination in interconnection charges between facility-based operators and simple resellers. While this service-based competition model can help new entrants enter the market without a significant economic burden arising from investing in network installations, in the longer term there is a risk that facility-based competition may not develop if there is not sufficient incentive for new entrants to build their own networks.

Currently Telecom Italia's interconnection charges are calculated using a fully distributed accounting (FDC) model based on historical costs in spite of the fact that Decree of 23 April 1998 requires the AGCOM to set up a new accounting methodology based on long run incremental cost by 1 January 1999. Order 10/00/CIR²⁰ committed AGCOM to publish a determination establishing the criteria of an accounting system based on current costs by May 2000 after a public consultation. Although the results of the consultation were published in November 2000 no guidelines were published outlining an implementation process. In addition to cost orientation requirements, SMP operators' interconnection charges are also required to meet the EU "best practice guideline" according to the Decree. If SMP operators' interconnection charges are higher than those of the EU "best practice guideline", the burden of proof is on the operator to

justify the difference in interconnection charges. In fact, Telecom Italia's double and single transit interconnection charges are determined by the EU "best practice guideline" while local interconnection charges are determined by the FDC model. This has resulted in Telecom Italia's interconnection charges to be exactly the same as the upper limits of the EU "best practice guideline" (see Table 7).

Table 7. **Comparison of Telecom Italia's interconnection charges and the upper limits of EU "best practice guideline" (as of Sep. 1999, Euro cents per min.)**

| | Telecom Italia's interconnection charges | The upper limit of EU "best practice guideline" |
|---------------------------------|--|---|
| Local switch (fixed to fixed) | 1.00 | 1.00 |
| Local switch (mobile to fixed) | 1.00 | 1.00 |
| Single tandem (fixed to fixed) | 1.60 | 1.60 |
| Single tandem (mobile to fixed) | 1.60 | 1.60 |
| Double tandem (fixed to fixed) | 2.30 | 2.30 |
| Double tandem (mobile to fixed) | 2.30 | 2.30 |

Source: EU, "Fifth report on the implementation of the telecommunications regulatory package".

Box 5. **Service competition vs. facility based competition**

In spite of the merits of service competition, which can lead to a rapid introduction of competition, reduction of prices, and an increase in consumer choice, there is a consensus that in the longer term facility based competition brings more benefits to consumers. In particular, facility based competition enables competition in the wholesale market, which in turn stimulates reductions in retail prices and brings new innovative services through competition between infrastructure providers.

To promote infrastructure competition, some countries have opted for favourable interconnection conditions for facility-based operators or impose specific interconnection requirements on new licensees. For example, in the United Kingdom, 'Annex II' operators, which require 'significant investment in infrastructure' including Indirect Access operators have enjoyed cost oriented interconnection rate while service providers (resellers) have been subject to 'retail minus' schemes. A similar approach has been taken also by the United States,²¹ France,²² Denmark²³ and Spain.²⁴ In the United States, the FCC, on the basis of the 1996 Telecommunications Act, began to regulate local resale rates, and state regulators have since then maintained a positive difference between wholesale rates, which are set at a discount from retail rates, and interconnection rates which are cost based. As a result, local resale of telephone services is considered a low margin business in the United States.²⁵ Under cost-orientation principles, it is not necessary for there to be a difference in interconnection charges between facility-based operators and service operators if interconnection costs are the same for the incumbent. However, there is a concern that this would create a disincentive to the incumbent and to new entrants to invest in infrastructure.

The current Italian regulatory regime concerning the calculation of interconnection charges is based on the FDC accounting methodology that tends to over-compensate the incumbent by subsidising inefficient historical costs incurred by the incumbent. As a result, there is a possibility that high interconnection charges based on the FDC methodology can hamper a new entrant's ability to compete with the incumbent. Thus, AGCOM needs to introduce the LRIC accounting model as soon as possible as stipulated in the Decree. The interconnection procedure allows AGCOM the possibility to determine its interconnection charges either by accepting the incumbent's proposal based on the FDC model or to impose "EU best practice" if the proposed interconnection charge is above EU best practice. The longer term aim should be to attain cost-oriented interconnection charges as quickly as possible and the best practice methodology for this is the LRIC model.

In 1999, Telecom Italia had interconnection agreements with the networks of 17 more operators in addition to the 6 operators in 1998. In addition, a total of 57 agreements were reached in July 2000.

Table 8. **Changes on Telecom Italia's interconnection charges (ITL per minute)**

| | 1998 | | 1999 | | 2000 (*) | |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | Peak | Off peak | Peak | Off peak | Peak | Off peak |
| Local | 19.5 | 12.1 | 19.4 | 12.1 | 14.5 | 10.2 |
| Single Transit | 35.1 | 21.9 | 31.0 | 19.5 | 25.8 | 18.1 |
| Double Transit | 50.7 | 31.7 | 44.0 | 28.0 | 34.9 | 24.5 |

(*) approved by AGCOM with Determination 10/CIR/00.

Source: AGCOM.

A contentious interconnection issue in Italy relates to the linkage introduced by AGCOM in retail charges and wholesale charges. AGCOM believes that changes in retail tariffs should be reflected by changes in interconnection charges. The incumbent argues that this in effect imposes a fixed margin between interconnection charges and retail charges and is thus a distortion of the cost-orientation principle and a disincentive to competition. However, until interconnection charges are deemed to be cost-oriented, and until there is an adequate level of competition, the danger remains that the incumbent can use changes in retail prices to squeeze the profits of new entrants by maintaining high interconnection prices. The difficulty for the regulator is to determine when it is appropriate to withdraw from such direct price intervention. It would, in this context be useful for the regulator to draw up some general guidelines indicating the circumstances under which it would streamline its price intervention.

Fixed to mobile interconnection charges

In September 1999, TIM and Omnitel were designated as SMP operators in the interconnection market. This meant that in principle TIM and Omnitel should have been subject to general obligations of SMP operators in the interconnection market like Telecom Italia. In practice, a charge-cap was applied to fixed to mobile interconnection charges while no specific regulation was imposed on mobile to mobile interconnection charges. In June 1999, the AGCOM set up a charge cap for TIM and Omnitel's fixed to mobile interconnection charges (360 Lit/min). Since TIM and Omnitel are allowed to differentiate interconnection charges based on the retail charging mechanism, in practice fixed to mobile interconnection charges differ between peak (430 LL/min) and off-peak (190 LL/min).

The AGCOM's decision to change the charging structure of fixed to mobile phone calls and to designate TIM and Omnitel as SMP operators in the interconnection market was a right decision which resulted in an important reduction (average reduction of 29%) on fixed to mobile interconnection charges. This decision is based on the assessment of an international best practice as identified by an external auditor into an investigation conducted by the DG Competition of the European Union. Nevertheless the charge cap imposed on TIM and Omnitel is higher than the one recommended by the competition authority. Currently there is no regulation on mobile to mobile interconnection charges. In practice, a reciprocal interconnection accounting scheme has been in place between mobile operators since January 1999.

Unbundling of the local loop

With the development of electronic commerce and high speed Internet application services, there is a growing demand for direct access to end customers in order to provide value added services such as Internet services and cable television services as well as voice telephony services. In this context, regulators have given priority to unbundling of the local loop (ULL) in many OECD member countries.

Italy is among a growing number OECD countries, which have decided to introduce regulations on ULL. In March 2000, the AGCOM decided to introduce ULL regulation on the fixed incumbent operator and implement ULL service by September 2000. According to AGCOM's decision (Order 2/00/CIR), the coverage of ULL encompasses a wide range of unbundling solutions and the cost will be calculated by the FDC accounting methodology. Considering the fact that different forms of unbundling solutions are complementary rather than substitutes, Italy's ULL regulation provides flexibility for new entrants to specialise in the type of entry that suits their business plan. Telecom Italia has appealed against this Order to the Lazio Court, in particular relating to the inclusion of fibre optics in the mandatory offer and the costing criteria.

AGCOM has formed a monitoring group of the implementation of ULL in order to ensure the rapid development of ULL in the Italian telecommunications market. Currently fifteen new entrants who plan to use ULL for their service provision are participating in the monitoring group. Telecom Italia's RIO for ULL has been reviewed by the AGCOM, which has set the following charges for the local loop: monthly rental Lit. 22 200 for POTS, ISDN lines; 24 300 for ADSL enabled lines; the one-off set up fee is 174 400 Lit; the monthly fee per fibre loop is Lit 1 145 400.

Box 6. Coverage of ULL in Italy

- Access to raw copper.
- Access to fibre.
- Bit stream access.
- Permanent virtual circuit.
- Extension capacity from remote MDF (main distribution frame) sites to the local exchange (SGU).
- Co-location capacity.

The implementation of ULL is especially important in Italy for new entrants since, due to the lack of cable television networks and delays in introducing the regulatory framework for WLL services, there are no alternative infrastructures. However, there is no doubt that the real issue, which will determine the success of ULL regulation, is the level of price for ULL offerings. There is concern regarding Telecom Italia's price for ULL agreed to by AGCOM. Telecom Italia's fixed line prices will increase over 2001 to Lit 20 700 in July for residential customers. The price for ordinary unbundled loop will be Lit 22 200,²⁶ that is Lit 1 500 higher than the monthly residential charge. However, the price for ULL is lower than the retail offer of Telecom Italia for ADSL and ISDN, and business subscriber lines, which are expected to be the main services offered by new entrants using ULL. AGCOM needs to remain vigilant to ensure that ULL prices provide an incentive to new entrants to obtain direct access to end customers.

Box 7. Rebalancing in Italy

Importance of rebalancing

To ensure effective competition, it is essential to have a fully rebalanced tariff structure, which reflects the cost structure of an efficient operator's telecommunications services both in retail and wholesale markets. Thus, fixed costs resulting from the provision of subscriber lines need to be fully recovered by fixed line rental charges and connection charges, and variable costs caused by the conveyance of calls should be recovered by per usage charges. At the same time, the incumbent needs to rebalance its usage charges between local and long distance calls reflecting underlying costs of delivering services. When fixed costs, so called non-traffic sensitive costs, are not fully recovered through fixed line rental charges and connection charges, an access deficit results. In particular, this can happen when a monthly line rental charge is subject to special price regulation in the context of universal service provision. At the same time, the regulation of local call charges can prevent an incumbent from rebalancing its usage charges. It is essential for the regulator to allow full rebalancing of the incumbent's prices in order to ensure effective competition in the telecommunications market. In addition, if there is economic loss due to the lack of rebalancing, this should be compensated through a competitively neutral funding mechanism which neither distorts competition nor penalises a specific user group.

Rebalancing in Italy

In order to conform to EU directives, which require the completion of rebalancing by the end of 1999, the AGCOM has taken a series of rebalancing measures. In December 1998, AGCOM reduced Telecom Italia's national long distance (7%) and international (9.6%) calls, while increased line rental charges (3%). AGCOM did not make any change in local call charges. In June 1999, a specific charge for calls within the same district was introduced along with a further reduction on long distance and international call charges. In addition, AGCOM decided to introduce a "per-second" billing system by the end of 1999. In July 1999, price-cap regulation was introduced to regulate Telecom Italia's voice telephony services. While AGCOM announced that tariff rebalancing has been completed in compliance with the EU deadline, Telecom Italia insists that it still has access deficits due to insufficient rebalancing. According to the Presidential Decree of 19 September 1997 (DPR No. 318), if there had been any access deficit until 31 December 1997, the access deficit would have been financed by charging an additional amount on the interconnection fees. Based on this regulation, for the year 1997 AGCOM recognised an access deficit (for tariff rebalancing purposes) of ITL 5 477 billion (Telecom Italia had claimed a network access deficit of ITL 5 477 billion). The audit carried out by the independent auditor (KPMG) on behalf of the AGCOM confirmed the existence of an access deficit on the basis of 1997 data. For 1998 Telecom Italia has claimed an access deficit of ITL 4 117 billion and has filed with AGCOM a claim for a deficit of ITL 3 330 billion for 1999. The AGCOM pointed out that the access deficit, audited by the independent advisor can be gradually recovered by 2002 within the current price-cap mechanism.

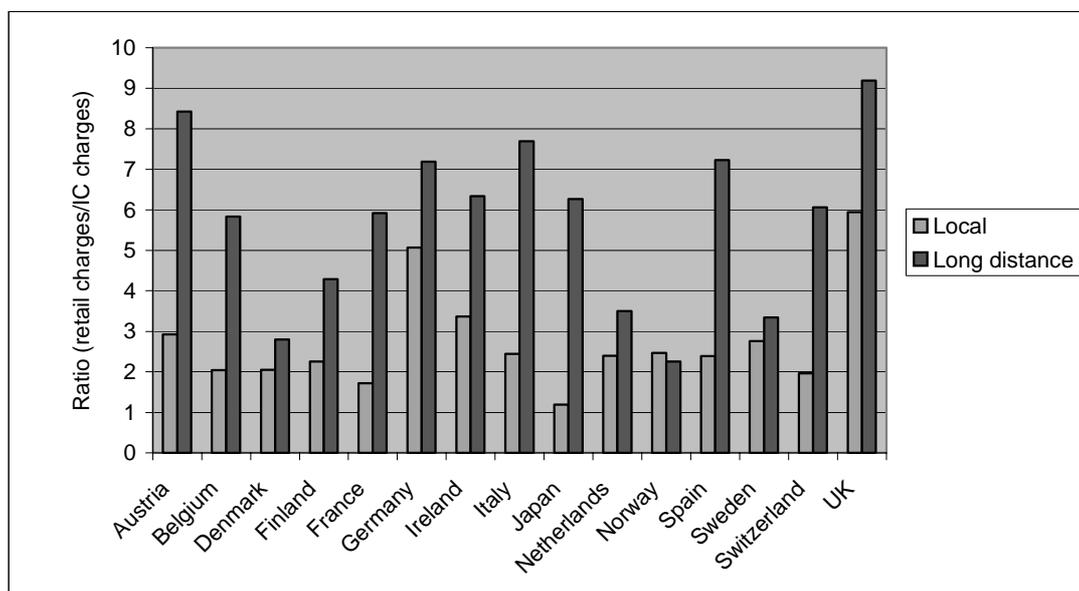
Infringement procedure concerning tariff rebalancing

In 1998 the Commission of the EC opened an infringement procedure against Italy concerning rebalancing of tariffs of voice services, in particular those of access services. In September 2000 this procedure led to a "reasoned opinion" of the Commission stating that the existing price cap regime would not allow a complete rebalancing of the price of access services by the end of the present price cap scheme. In December the Competition Directorate of the EC Commission indicated that the existing sub-cap on the monthly subscription charge should be modified, allowing for an increase of +6%. AGCOM answered to this allegation with Decision 847/00/Cons (11 December 2000), which introduced the requested modification, thus allowing the Commission to lift the procedure.

Margins available to competitors in the local call market

TI's local charges are constrained by the existing price cap on local call charges (RPI+0%); in fact, prices in the local call market provide a limited margin for new entrants. Italy is not an exception in this context (see Figure 1).

Figure 1. Comparison of ratio between retail prices and interconnection charges



Note 1. The local interconnection charges are a weighted average of using 80% of the 5-kilometre charge and 20% of the 20-kilometre charge.

Note 2. The long distance interconnection charges are a weighted average, using 10% of the 5-kilometre charge, 30% of the 20-kilometre charge and 60% of the 50% kilometre charge.

Note 3. For the long distance retail charges, using the tariff that applies to a 100-kilometre call as a proxy for long distance.

Note 4. For the retail charges, using the time of day call profiles to average the charges into peak and off peak.

Note 5. For the retail charges, including call set-up charges assuming a call duration of 2.5 minutes but not minimum call charges.

Note 6. For the retail charges, excluding tax charges.

Source: Ovum "Interconnect: Quarterly Update October 1999".

2.2.3. Pricing regulation

In Italy the AGCOM is responsible for price regulation in the telecommunications industry. Until 31 December 1997, the Ministry determined Telecom Italia's retail prices through a Ministerial Decree. Even after the introduction of competition the AGCOM maintained a tariff approval system on Telecom Italia's retail service charges until 31 July 1999. Since August 1999, price cap regulation has been applied to Telecom Italia's voice telephony services. The price cap will be applied until 31 December 2002 to a whole basket of Telecom Italia's public voice telephone services composed of connection fees, monthly subscription charges, local, long distance and international tariffs. Currently RPI – 4.5% is used as the price cap formula for the general basket. In addition to the general basket, there are three specific sub-baskets concerning residential voice telephony services, access charges (connection fees and monthly subscription charges) and local calls. RPI – 2.5%, RPI + 6% and RPI + 0% is respectively applied for these sub-baskets.

Price cap regulation has been introduced as a tool for tariff rebalancing and as an incentive for the incumbent to increase efficiency. Although Telecom Italia has complained that the existence of sub baskets substantially restricts flexibility to rebalance, AGCOM applied RPI + 6% to access charges as a response to the need to rebalance.

Based on the AGCOM's instructions in December 1998 and June 1999, in November 1999 Telecom Italia introduced per second billing, with a call set-up charge.²⁷

In terms of mobile tariffs, operators are free to set tariffs except in the case of TIM's analogue services. Mobile operators are only required to provide 30 day prior notice to the AGCOM before launching new tariffs. In the case of TIM's analogue services, the "Contratto di Programma" between TIM and the

Ministry stipulates that subscription and connection fees cannot exceed those set out in the Ministerial decree in 19 September 1996, and cannot be lower than those for GSM services. Usage charges are also regulated by the decree.

Previously fixed to mobile call charges were determined by mobile operators in Italy. Since no regulation was imposed on setting fixed to mobile charges, TIM and Omnitel were charging very high prices for fixed to mobile services. In fact, these two companies were found guilty and fined by the competition authority, for colluding to set identical prices on fixed to mobile calls. When the EC decided to investigate fourteen cases in July 1998, where the situation indicated a possible distortion of market conditions between fixed and mobile networks, Italy was, along with Germany, one of two countries, which were investigated in all three categories; mobile to fixed termination rates, fixed operator's retention on fixed to mobile calls and mobile termination rates.

As a consequence, in January 1999, the AGCOM established the principle that the operator from whom the call is originated should determine prices. After two interim decisions in March and September 1999, the AGCOM approved the new pricing scheme on fixed to mobile calls and the corresponding mobile termination charges (see Box 8).

In terms of leased line services, a tariff approval system is applied to Telecom Italia's leased line charges. In 1999 the incumbent was still the sole supplier of leased lines. Competition is now developing in long-distance and backbone services provided by alternative operators. The incumbent still dominates the local and short-distance markets. The AGCOM's Decision amending the RIO 2000 imposes the inclusion of terms and conditions for the provision of half circuits for interconnection, for circuits of 64 Kbits, 2 Mbits and 34 Mbits, 2 km and 5 km long. In assessing the corresponding economic conditions, the AGCOM will take account of the price ceiling indicated in the Commission Recommendation on leased lines interconnection pricing. Data for July 2000 indicate that the situation with regard to international leased lines has improved, with a significant fall in tariffs from 1999 to 2000. With regard to 2 Mbit/s half circuits, reductions of about 40% are reported for a line to the US, and about 30% for distant and near EU lines. With regard to 64 kbit/s half-circuits, tariffs for a line to the US have decreased by about 30%; the reduction is about 19% for lines to distant and near EU. However, tariffs remain significantly above the EU average for all kinds of leased lines, except for 2 Mbit/s lines to the USA (which are below the average), and for 2 Mbit/s lines to far EU (just above the average). The EC had in the first half of 2000 concluded that Italy's leased line prices (for 64 Kbit/s and 2 Mbit/s) were above EU average so that recent changes are important in bringing Italy's prices into line with EU best practice. However, on 31 October 2000 AGCOM approved new prices for leased lines offered by Telecom Italia. The new offer provides for a reduction of 23.7% in prices of national leased lines, together with a more transparent pricing system consisting of a new method for the calculation of distance based on the actual distance between switches and in the elimination of the difference among local and long distance circuits.

Box 8. Structure of fixed to mobile call regulation

The retail price of fixed to mobile call is composed of two elements.

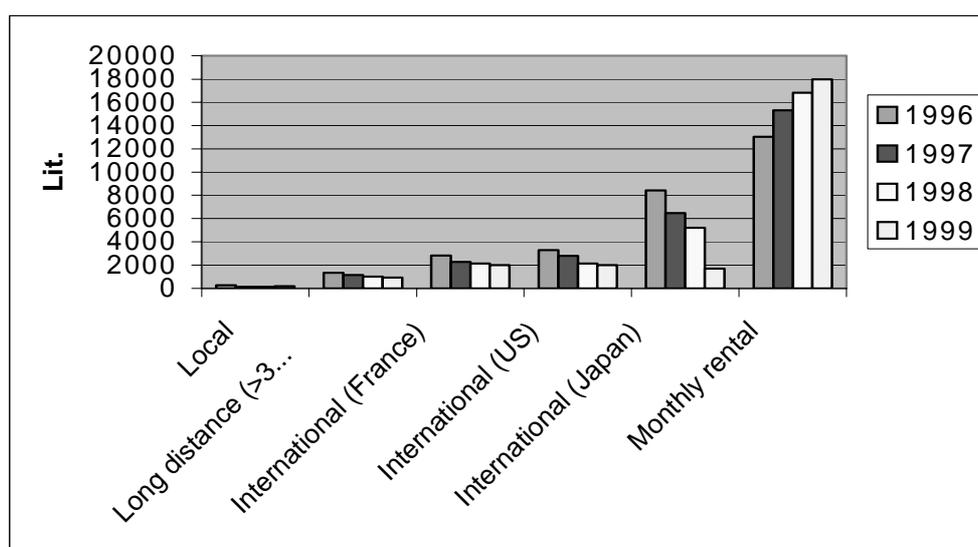
- Retention share of Telecom Italia: A price cap is applied to the retention share of Telecom Italia (ITL 110/min, down from ITL 172/min). Telecom Italia may differentiate its retention share into two different price "profiles" (residential and business) and differentiate it in two price bands (peak and off-peak) corresponding to the current ones for national calls, but is not forced to do so.
- Mobile termination rates: A price cap is applied to TIM and Omnitel's mobile termination rates (ITL 360/min, down from respectively, ITL 475/min and ITL 500t/min). Like Telecom Italia's retention, TIM and Omnitel are allowed to differentiate their termination rates in two price-bands (peak and off-peak) corresponding to the current ones for local calls. WIND and Blu's termination rates are subject to commercial negotiation with Telecom Italia.

Table 9. Pricing control mechanism on Telecom Italia's services

| | Fixed voice telephony | Fixed to mobile call origination | Leased Lines | xDSL |
|-------------------------|-------------------------|-----------------------------------|-------------------------|--|
| Price control mechanism | Price-cap | Administered retention | Approval | Mandatory wholesale offer at "retail minus" prices |
| Accounting methodology | FDC/ Historical Cost | Retention: FDC/Historical Cost | FDC/ Historical Cost | "Retail minus" scheme |

Source: AGCOM.

Figure 2. Rebalancing in Italy: changes of peak fixed to fixed call charges



Note: Except monthly rental charges, other charges are based on a three-minute call including call set-up charges and excluding VAT.

Source: AGCOM.

2.2.4. Universal service regulation

The Presidential decree of 19 September 1997, No. 318 (Art.1, par 1, letter z) defines "universal service" as a minimum set of services of a specified quality, which is available to all users independent of their geographical location at an affordable price.

Box 9. Coverage of universal service

- PSTN services (including fax and data transmissions via modem at minimum speed of 2 400 bits).
- Free access to emergency services.
- Uniform tariffs across the national territory.
- Operator assistance.
- Directory services.
- Subscriber information (including free itemised billing service).
- Public pay-phone services.
- Special tariffs for disabled people and low income users.
- Special connections and services for general interest.

The coverage of universal service in Italy is limited to PSTN related services. Because the funding of a broadly defined universal service requirement through levies on the telecommunications industry can reduce efficiency and undermine other policy objectives, the narrowly defined Italian universal service regime helps to minimise any necessary economic burden on telecommunication operators. Nevertheless, the item of special connections and services for the general interest in the coverage of universal service obligations needs to be more specifically defined because currently “the general interest” heading includes almost all public activities such as public security, public aid, national defence, justice, education and government. However, under current regulation the provision of services for the general interest cannot be funded through the universal service funding scheme.

Currently, as a part of the Information Society Project, a plan for connecting schools and libraries to the Internet is being developed by the Prime Minister’s Office. It needs to be emphasised that this project should be funded from the national budget and should not be included in the coverage of universal service obligation, which is financed by levies from telecommunications operators.

Until 1 January 1998, Telecom Italia was, during the monopoly regime, the only operator obliged to offer throughout the entire Italian territory the same set of services in the context of its universal service obligations (dPR 13 August 1984, No. 523). Now, in theory all licensed operators can bear USOs through their licence condition, but only Telecom Italia is currently required to provide USOs. The net costs of providing such universal services are calculated on a fully distributed historical cost basis. If such costs represent an unfair burden on the supplier, licensed fixed and mobile operators may be required to contribute to an ad hoc fund managed by the Ministry to cover such costs. Telecom Italia and other operators subject to USOs must keep separate accounts to calculate the cost of providing these services. The operators required to provide universal service must submit on a yearly basis the relevant net costs to the AGCOM by March 31 of each year. The AGCOM needs to determine if the net costs represent an unfair burden on the suppliers and, in such case, appoint an independent body to audit the calculation. By 15 July of each year, the Ministry announces the amounts, which need to be contributed from licensed operators; such amounts have to be paid to the fund by 15 August. The USO service providers will then be refunded by 15 September of that year.

Telecom Italia has estimated the costs of USO for 1998 as ITL 1.450 billion, and for 1999 as ITL 640 billion. In practice, on 4 August 1999, the AGCOM determined that, for the year 1998, universal service obligations did not amount to an unfair burden. The decision was mainly based on the fact that there was no substantial competition in the fixed telephony market in 1998. The methodology for calculating the net cost proposed by Telecom Italia has been assessed by an external auditor (WIK-NERA in association). For the year 1999, the AGCOM acknowledged ITL 120.83 billion as the cost for Telecom Italia’s universal service provision after independent auditor’s (a consortium of NERA, WIK and ERCS) assessment on Telecom Italia’s submission taking into account indirect market benefits of the USO provision. In principle licensed operators are required to contribute to the universal service fund on the basis of their turnover, however the AGCOM set up a threshold (1% of the revenue minus payments on interconnection, leased lines and roaming to other operators) for the protection of new entrants. As a result 43% of universal service costs is levied from three major companies - TIM (ITL 33.98 billion), Omnitel (ITL 16.67 billion) and Infostrada (ITL 1.2 billion).

2.2.5. *Spectrum allocation*

The Ministry of Communications, General Directorate for Planning and Frequency Management, is responsible for spectrum planning in telecommunications. Spectrum planning and allocation is very complicated in Italy. In practice, the Ministry is responsible for spectrum planning for telecommunications and spectrum allocation for broadcasting. On the other hand, the AGCOM is responsible for spectrum allocation for telecommunications and spectrum planning for broadcasting.

The method used in Italy to grant the UMTS licences is a combination of a beauty contest and an auction. Interested parties were first required to pass the pre-qualification process by submitting their commercial and technical business plan along with evidence of some standard requirements (*i.e.* to have a minimum capital and to have been involved in telecommunications business for at least three years). The evaluation of the technical and commercial plans did not give rise to a point score, but simply to a declaration that the various bidders were admitted (or excluded) to the auction phase of the procedure. On 14 January 2000, a decision of the AGCOM for the award of individual national licences for the third generation mobile communications system (UMTS) was published in the Official Journal of the Italian Republic. According to it, the procedure was planned to be carried out in two stages: 1) qualification, for the purpose of pre-selecting candidates with appropriate technical, financial, and commercial capabilities, and 2) selection. The selection phase of the procedure was then specified and set as an auction by subsequent AGCOM decisions (decisions 367/CONS 14 June 2000 and 388/CONS 21 June 2000); the precise auction rules and mechanisms were finally set by an act issued by an inter-ministerial committee on 25 July 2000 (“Disciplinare di Gara”).²⁸ Eight bidders applied to the first phase of the process: the four existing mobile operators and four new potential entrants: Andala (a consortium led by China’s Hutchison Whampoa and Tiscali), Ipse 2000 (a consortium led by Spain’s Telefonica and Finland’s Sonera), Tu Mobile (controlled by Tu Tlc Utilities) and Anthill (a consortium of small and medium sized firms led by International Last Mile SpA). Only six candidates out of the eight qualified for the auction process (Tu Mobile and Tu Tlc Utilities were excluded on the basis of lack of the standard requirements). The auction started with six candidates on 19 October 2000 and ended after 11 rounds on 23 October, when the sixth bidder Blu, the youngest of Italy’s four incumbent mobile operators, withdrew, leaving five bidders for the five licences on offer. The Government raised ITL 23 550 billion (12 billion Euro) for the five licences granted. On top of the core spectrum (each licence has the same spectrum of 2x10MHz paired and 1x5MHz unpaired) there was an additional paired spectrum in two blocks of 2x5MHz reserved for potential new entrants. As two new entrants (Andala and IPSE 2000) were awarded the core spectrum and expressed, as required, their interest for the additional spectrum during the bidding phase, they were allocated the two additional blocks, at a fixed cost of ITL 1 600 billion (826 million Euro) for each block. Therefore the total revenue for the Government from the spectrum auction was ITL 26 750 billion (14 billion Euro).

Box 10. Italian UMTS licensing schedule

- 24 August 2000: Submission of call for tender.
- 2 September 2000: Ministry’s announcement on the acceptance of bidding offers.
- 11 September 2000: Submission of technical and business plans to the Ministry.
- 22 September 2000: Completion of evaluation on technical and business plans.
- 19 October 2000: Starting of the auction.
- 23 October 2000: End of the auction.
- 3 November 2000: The Italian interministerial committee approved the results of the UMTS licences auction.

UMTS auctions in Europe have led to considerable debate, in particular because of the high licence fees that have resulted from this process. One view has been that a high licence fee resulting from the auction process would stimulate the quick delivery of the UMTS service. A view has also been expressed that the high licence cost will eventually be transferred to end customers, thus having a negative impact on the rapid take-up of broadband mobile services. At this stage it is not clear how high licence fees will affect the future of UMTS services. However, it is clear that the use of auction has enhanced transparency and efficiency in the allocation of scarce resources such as frequencies. The final cost per UMTS license deriving from the Italian 3G auction process is well above the licence cost in the Netherlands and Spain but lower than in Germany and the UK.²⁹

The choice by Italy to have a competitive tender linked with an auction for UMTS licences is unique among OECD countries. The use of a hybrid methodology for spectrum allocation is due to the current regulation, the PD 318 of 1997, that requires to use a competitive tender for spectrum allocation. If this hybrid methodology is to be retained for the future spectrum allocation, then its legal basis should be clarified by the revision of the law.

According to the plan, Telecom Italia's TAC service based on analogue technology will remain until the end of 2005. Considering a significant number of TAC users and the fact that Blu is not assigned the 900 MHz band due to the lack of frequencies, the suggested period for retention of analogue services should be reviewed in that it hampers fair competition in the mobile market. It is recommended to phase out analogue services much more quickly and make these frequencies available for new service providers.

The introduction of WLL has been delayed in Italy. Finally AGCOM made a ruling to auction several regional WLL licences in different bands at the end of November 2000. There is, however, concern that the extension of an open-ended auction process to WLL licensing may leave the fledgling broadband wireless market mostly in the hands of those companies that have already invested huge sums in the roll-out of digital subscriber lines that compete with broadband wireless. AGCOM defined procedures for granting frequencies for WLL in 2000 and is expected to complete the process of WLL allocation by mid-2001,

2.2.6. *Numbering policy*

The AGCOM is responsible for the management of the numbering resources. This regulatory function is supported by the National Numbering Commission, set-up by the Minister of Communications and composed of representatives from the incumbent, the other licensed operators, the AGCOM and the Ministry of Communication. However, currently, the Ministry, on the basis of the bilateral agreement with the AGCOM, manages numbering resources.

According to the Authority Deliberation 6/00/CIR (National Numbering Plan and rules for its implementation), numbering resources are granted to licensed operators for the provision of fixed and mobile telecommunication networks and services. There are four different sets of numbers (special national services, mobile services, geographic services and non-geographic services) which have specific rules for the management and allocation of numbering resources.³⁰ In principle, numbers are allocated by a 'first come first served' basis. Operators are required to pay annual numbering fees for the use of numbers per number basis and the use of carrier selection codes. Compared to other OECD countries, the level of Italy's numbering fees appears reasonable.³¹

The rapid development of competition in the Italian telecommunications sector with the increasing number of new facility based carriers has highlighted the importance of numbering policy in Italy. In recognising the importance of numbering policy, together with the pressure to meet the EU deadline to implement carrier pre-selection and number portability, the Italian government has made a series of regulatory decisions.

In terms of number portability, in fixed voice telephony services, the AGCOM's Deliberation 4/CIR/99 introduced both geographic numbers within the local call zone and non-geographic numbers such as toll free, shared cost and premium services. While number portability for non-geographic numbers started in May 2000, number portability for geographic numbers, although expected to become very important with the implementation of the unbundling of the local loop, which is supposed to be implemented by the end of 2000 is already in place in the form of service provider portability.

According to the original plan, number portability in mobile should have been implemented by July 1999, but it was postponed. As a transitional measure until number portability for mobile is in place, the AGCOM has introduced the obligation for mobile operators to provide an automatic message indicating the

new number of the subscriber. This service is provided free to customers for at least 60 days. More recently (Decision No. 388/00 of 21 June 2000) the AGC has fixed the 30 June 2001 as the target date for the introduction of number portability in the mobile sector.

The three main mobile operators in Italy do not favour number portability. These mobile operators argue that the introduction of number portability in mobile services would not only impose significant economic burden on operators but also make it difficult for them to maintain new services such as “ON-NET”, since these services are based on specific numbers. Nevertheless, considering the dominant position of TIM and Omnitel in the mobile market, especially in the business market, and the late entrance of Blu, the introduction of number portability seem essential to ensure fair competition in the marketplace. Furthermore, there is no doubt that the introduction of number portability will give more choice to customers to select their service providers.

Ensuring equal access to customers is one of the most important roles of the telecommunications regulator since the incumbent still has a dominant position in the local loop market. Before the introduction of ULL, carrier pre-selection was the only regulatory measure, which allowed new entrants to obtain direct access to end customers. It still is often considered one of the most effective regulatory measures for ensuring equal access.

In Italy, call by call carrier selection was introduced for long distance and international calls on 1 January 1998. On 15 July 1999, the AGCOM expanded the coverage of carrier selection to calls within the same national destination code. From the 1 January 2000, the AGCOM introduced carrier selection also for local calls.

From February 2000, customers can make inter-district, international calls and calls to mobile networks using a pre-selected carrier, as an alternative to Telecom Italia. Calls within a district may be made with carrier pre-selection starting from May 2000 in Milan, June 2000 and in Rome and July 2000 in other local call areas. The comprehensive coverage of the Italian carrier pre-selection scheme, in particular the inclusion of carrier pre selection for local calls and mobile networks is helping to promote competition in the marketplace.

Specific codes dedicated to Internet service access were introduced by the AGC in the new numbering plan decision of 8 June 2000 (Decision 6/00/CIR).

In summary, the AGCOM has made sound regulatory decisions with regard to numbering policy.

2.2.7. *Quality of service*

The supervision of quality of service is the responsibility of the AGCOM. However, currently the Ministry and the AGCOM share the responsibility based on their bilateral agreement. A consumer council (*Consiglio Nazionale degli Utenti*) was established at the AGCOM in May 1999. This is made up of eleven members appointed by the AGCOM and selected among experts in the telecommunications and audio-visual sectors on the basis of lists drawn up by consumer associations. In addition, the AGCOM has established a couple of working groups for the quality of interconnection traffic and the transparency of telephony charges.

The EU ONP Directive (95/62/EC) requires EU Member State NRAs to establish and publish targets for a number of technical elements. Italy has taken regulatory measures to meet EU ONP requirements, but also taken regulatory action to protect consumer interests in the evolving telecommunications market where increasing attention is paid to quality of service aspects and to customer care beyond the traditional technical assessments (line quality, number of faults, etc.).

Telecommunication operators providing fixed public networks and publicly available telecommunications services are required to publish quality of service requirements every year. Moreover, they need to publish annually the definitions of such quality of service requirements, the methods of measure and the services actually rendered. The AGCOM has the right to carry out inspections and to review, at least every three years, the definitions, the measurement methods and the targets. Furthermore, these operators are required to inform users and the AGCOM at least one month ahead of any changes in existing service offerings and information on new offerings.

To resolve consumer complaints two different sets of procedures were put in place. If there is a formal request from users of a general nature such as the content of laws or on the interpretation of a ruling, the AGCOM is required to respond. For specific complaints, the regional offices of the Ministry are called into action, but AGCOM has recently officially opened a desk to receive comments from users.

In addition, Telecom Italia has a conflict resolving procedure for users: if the conciliatory procedure does not lead to approval by both parties, then an arbitration procedure may be used.

2.2.8. *International aspects*

Italy as a member country of the EU, made commitments in the context of the WTO Agreement on basic telecommunications service which was signed on 15 February 1997 and came into effect on 5 February 1998. Italy committed to the WTO schedule of the EU with no exceptions or conditions. Access to the Italian market is totally open to foreign service providers who are WTO signatories and EU member countries. In other cases, market access is subject to reciprocity principles. There are no restrictions regarding the size of share holding or other ownership restrictions on individuals and corporations investing in telecommunication service providers.

Table 10. **Italy's WTO commitment as a member country**³²

| Range of services ³³ opened | Timing of liberalisation | Commitment to common set of regulatory principles | Foreign ownership restrictions | MFN exemptions |
|--|--------------------------|---|--------------------------------|----------------|
| Full | By 1 January 1998 | Full | No | No |

Source: WTO.

As a result of the market opening measures, foreign telecommunications companies are able to establish new network infrastructure inside Italy and become facilities-based carriers providing cross-border services or resale carrier services. In addition, foreign telecommunications companies have access to the same interconnection rights as local telecommunications companies.

2.2.9. *Application of competition principles*

With regard to the application of competition principles, Italy has very pro-competitive regulatory bodies, which are willing to apply regulatory measures to ensure fair competition. In terms of the sector specific regulator, the most significant measures taken by the AGCOM were the designation of TIM and Omnitel as providers with significant market power in terms of cellular service, interconnection, and the definition of new pricing for fixed to mobile communications. While it is the norm to designate the incumbent as an operator with significant market power, there are only a few countries, which designate mobile operators as operators with significant market power in the interconnection market.

In April 1998, Telecom Italia was identified as an operator having significant market power in the markets of fixed telecommunications networks, fixed public voice telephony services, leased lines and interconnection services. In April 1998, TIM was identified as having significant market power in the mobile

telecommunications service market. In September 1999, the AGCOM identified TIM and Omnitel as operators with significant market power in mobile telecommunications services and domestic interconnection. The evaluation of significant market power operators is reviewed every year.

On the other hand, the competition authority is very active in applying competition rules in the telecommunications market (see Table 11). For example, in October 1999, the competition authority fined TIM ITL 100.5 billion, and Omnitel ITL 47.0 billion after finding both guilty of price fixing and of coordinating strategies to compete with other telecommunication companies. While, both companies appealed to the Lazio regional administrative court, the court rejected the appeal on 31 May 2000; in December 2000 the national supreme administrative court (*Consiglio di Stato*) partially accepted the companies' view and discharged them from the collusion charge, reducing the fine to TIM and Omnitel to, respectively, ITL 38 billion, and ITL 18 billion.

Table 11 **Main interventions of the competition authority in the telecommunications sector**

| Year | Case | Results |
|------|--|---|
| 1992 | Case 3C Communications-SIP (refusal to deal) | The competition authority ruled that Sip S.p.a. had abused its dominant position by refusing to grant 3C Communications the use of telephone lines, and hence prevented it from providing services. |
| 1993 | Case Ducati-Sip (vertical restriction) | The competition authority ruled that Sip abused its dominant position by preventing other distributors from gaining access to retail distribution channels for cellular telephones. |
| 1994 | Case GSM- cellular telephone market (pre-emption of the mobile GSM market) | The competition authority ruled that this Sip's GSM service promotion activities constituted an abuse of dominant position. |
| 1995 | Case Assistal-Sip (illegitimate competitive advantage) | The competition authority ascertained an abuse of dominant position by Sip S.p.a. on the private switching systems installation and maintenance markets. |
| 1995 | Case Telsystem-Sip (refusal to deal) | The competition authority ordered Sip to immediately supply Telsystem with the links. |
| 1997 | Case Albacom-Telecom Italia - Servizio Executive (discrimination practices) | Following the observations made by the competition authority, Telecom Italia undertook to offer its competitors the same discounts that were available to its own customers, as from 1 July, 1997 and to guarantee them the best possible conditions in terms of quality standards and promptness in bringing lines into operation. |
| 1997 | Case Albacom-Telecom Italia-leased lines (discrimination practices-penalty: ITL 95 million) | The competition authority ascertained that Telecom had abused its dominant position in the provision of leased lines. |
| 1997 | Case Telecom Italia-Intesa (merger not cleared) | At the end of an investigation completed in November 1997, the competition authority prohibited Telecom Italia from acquiring control of the company Intesa in the light of the concentration of market power. |
| 1999 | Case TIM-Omnitel (collusive agreement - Penalty: ITL 100.5 billion to TIM and 46 billion and ITL 868 million to Omnitel) | In September 1999, the competition authority ascertained a collusive agreement between TIM and Omnitel Pronto Italia, the two Italian telecom operators active in the market of mobile telephony services. |
| 2000 | Case AIIP-Telecom Italia-Internet Services (anticompetitive cross subsidy and discrimination practices- Penalty: 1 billion and 240 million ITL. to Telecom Italia) | The competition authority ascertained the damage inflicted to ISP in respect of Telecom Italia's cross subsidisation practices. |
| 2000 | Case Tiscali/Telecom Italia (Reverse Interconnection) | On August 2000, the competition authority ascertained the abuse of dominant position of Telecom Italia in the market for reverse interconnection services. |
| 2000 | Case Telecom Italia/SEAT PAGINE GIALLE | The competition authority authorised upon conditions the concentration pursuant to which Telecom Italia acquires control over SEAT, laying down the measures aimed at preventing |

| Year | Case | Results |
|------|---|---|
| | | anti-competitive consequences. |
| 2000 | Case Infostrada/Telecom Italia (ADSL service) | On November 1999, the Authority has opened another investigation in Telecom Italia behaviour in the liberalised markets of value added and Internet services, after a complaint from Infostrada, concerning a possible abuse of Telecom Italia by the exclusive provision of ADSL access to final clients. The case is still pending. |
| 2000 | Case UMTS-BID | On October 2000, the competition authority initiated an investigation aimed at appraising whether the bidding for UMTS licenses has been the result of an agreement among the participants (Telecom Italia Mobile Spa, Omnitel Pronto Italia Spa, Wind Telecomunicazioni Spa, Andala Opco Spa, Ipse Spa e Blu Spa) restricting competition in the market for the awarding of the third generation mobile services licenses. |

Source: Italian Competition Authority.

2.3. *The dynamic view: convergence in communications markets*

The rapid convergence taking place between broadcasting, content and communications technology and services is bringing into focus the need for “next generation regulations”. For regulators, the trend in technology and service convergence requires looking beyond current regulatory frameworks to consider how to facilitate the process of convergence, maximise the benefits of competition among traditionally different sectors and ensure that their economic benefits from convergence through the development of new services, such as electronic commerce. Italy has an institutional advantage in meeting these challenges since the AGCOM not only is responsible for telecommunications, broadcasting and press, but is designed to respond communications issues in a technologically neutral way.

The AGCOM is the only regulator whose internal administrative structure is designed to reflect convergence in the communications sector. This advanced structure supports the AGCOM in dealing with regulatory issues in a technologically neutral way, which is essential for promoting fair competition throughout the entire communications sector.

3. PERFORMANCE OF THE TELECOMMUNICATIONS INDUSTRY

The aim of regulation is to increase industry efficiency and to increase consumer benefits. Reductions in tariffs, introduction of new services and the increase in service quality are often used as measures to assess the result of regulatory reform. However, in consideration of the difficulties in measuring the direct impacts of regulatory reform, perhaps the best way to assess the result of regulatory reform is to analyse the intensity of competition in the marketplace, because eventually strong competition is the key driving force which will bring benefits to consumers. In this section, the status of competition in the Italian communications market and its performance in the OECD region will be analysed.

3.1. *Competition analysis*

Fixed voice telephony market

In the fixed telecommunications market, there has generally been a clear demarcation between local, long distance and international services. This demarcation has also been used in telecommunication regulations in many Member countries, in particular for granting licences. Italy has also used this demarcation for licensing, although there is no restriction for applicants to hold both national and local licences. When competition was first introduced in the telecommunications market, the normal scenario has been that new entrants first enter the long distance and international markets, since the lack of rebalancing means that these market segments are much more lucrative for new entrants, and the investment costs of

market entry lower. When new entrants gain a healthy market share in the long distance and international markets and essential regulatory safeguards such as the completion of rebalancing, and cost-oriented interconnection charges are ensured, competition has begun in the local telecommunications market. In particular, as we can see in the United Kingdom, the development of alternative local access networks such as cable television networks is a key factor for the success of competition in the local market.

This general principle applies to the development of competition in the Italian fixed voice telephony market. However, due to the lack of rebalancing and alternative access networks, there has not been much competition as yet in the local market. In the access market, the fact that CATV networks are virtually non-existent, and Telecom Italia's control of the major cable network service provider, Stream, means that there will not be any meaningful competition in the access network market until WLL services are introduced. It is likely that some competition in the local call market will result from the inclusion of local calls in carrier pre-selection and the introduction of ULL. In fact, as of September 2000, over eighteen operators are offering local calls through carrier-selection and eleven operators had signed carrier pre-selection agreements with Telecom Italia. Furthermore, operators like Infostrada have introduced new services like "*Tempozero*" which offers unlimited local and national long distance calls with fixed monthly fees. However, Telecom Italia is also allowed to introduce similar services for its customers, so the success of new entrants depends on the level of tariffs they can offer customers. This implies that meaningful competition can only develop if Telecom Italia's interconnection charges and charges for ULL allow for a sufficient margin for new entrants. In this respect, the success of competition in the local call market largely depends on the AGCOM's regulatory vigilance to ensure cost-oriented prices for the access to Telecom Italia's local loop.

While there is no meaningful competition in the local access market, the introduction of new prices during the first half of 2000, such as Infostrada's "*Tempozero*" and Telecom Italia's "*Teleconomy NoStop*", demonstrates that consumers are already enjoying the benefits of competition even in the local call market, considering the fact that these unmeasured local call services were not available previously (see Table 12).

Table 11. Fixed voice telephony services offered by Telecom Italia and Infostrada (Euro per minute, VAT included)

| Operator | Telecom Italia | Infostrada | Telecom Italia | Infostrada | Telecom Italia | |
|----------------------------|---|---|---|---|---|---|
| Service name | Teleconomy NoStop | Tempozero | Teleconomy 24 | SpazioZero | Teleconomy 24 Aziende | |
| Users | Residential | Residential | Residential | Residential | Business | Business (*) |
| Basic monthly fee | 11.59 | 11.59 (to Telecom Italia) | 11.59 | 11.59 (to Telecom Italia) | 16.36 ISDN: 35.95 | 16.36 ISDN: 37.95 |
| Additional monthly fee | 55.16 | 58.88 | 5.58 | 5.58 | 5.58 ISDN: 11.16 | 7.44 ISDN: 14.87 |
| Call set-up | 0 | 0 | 0.062 | 0.062 | 0.079 | 0.079 |
| Cost per minute | 0 | 0 | 0.0149 | 0.0124 | 0.0149 | 0.0149 |
| Fixed to mobile (average) | 0.332 peak 0.176 off-peak | 0.307 peak 0.152 off-peak | 0.332 peak 0.176 off-peak | 0.307 peak 0.152 off-peak | 0.266 | 0.266 |
| International | 0.310 plus from 0.161/min to 1.21/min | 0.155 plus from 0.217/min to 1.55/min | 0.310 plus from 0.161/min to 1.21/min | 0.155 plus from 0.217/min to 1.55/min | 0.310 plus from 0.155/min to 1.55/min | 0.310 plus from 0.121/min to 1.55/min |
| Internet access Per minute | 20 hours free, after: 0.0093 | Free for "Liberò" ISP | 0.0093 | 0.0093 for "Liberò" ISP | NA | NA |

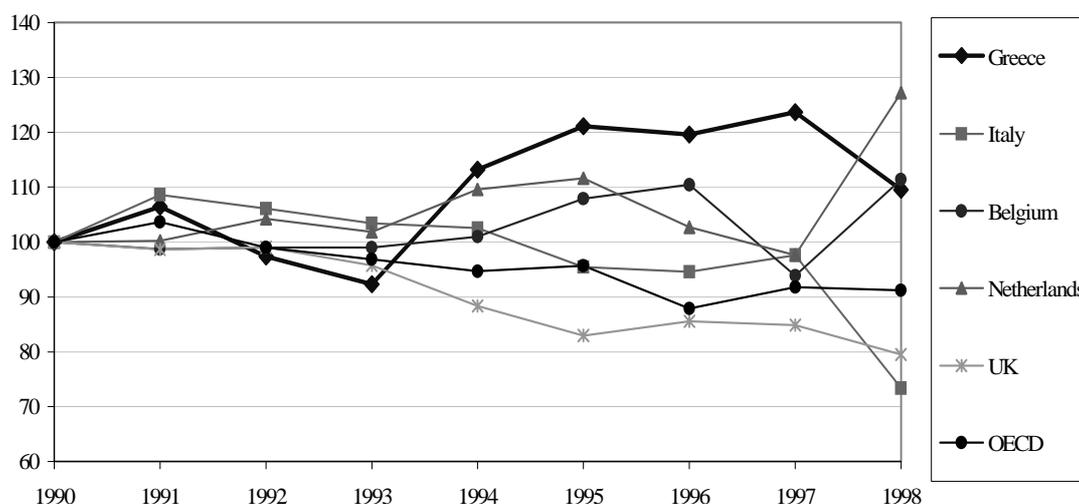
(*) Special offering including a special rate for European Countries, USA and Canada

Source: ANUIT(<http://www.anuit.it>).

In the long distance and international markets, new entrants have already acquired about 30% market share and it is apparent that their market share will increase as competition grows in these market segments. In particular, competition coming from resellers and Internet telephony will significantly increase customer choice for these services and in return will reduce prices.

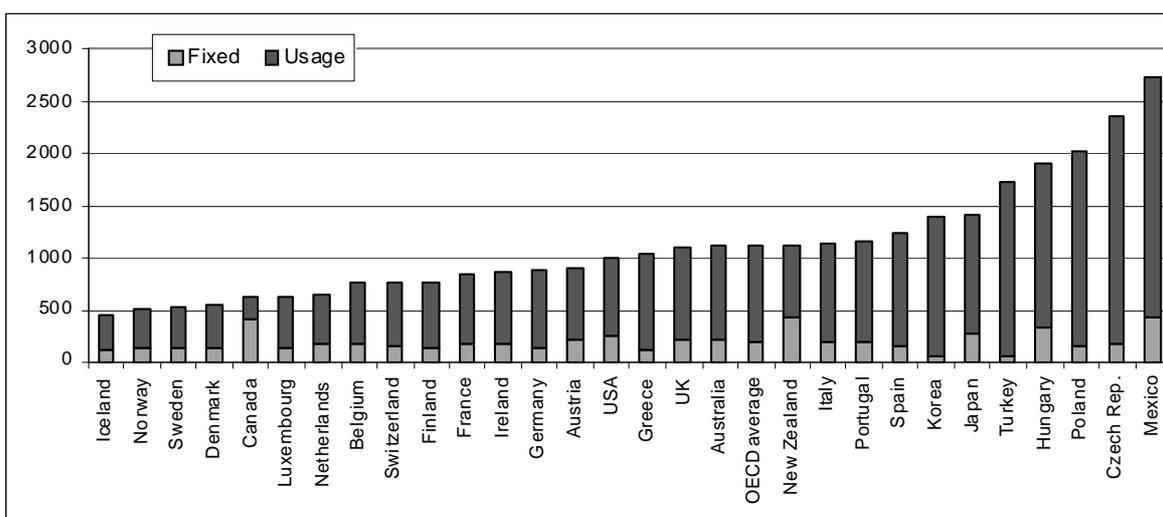
In fact, Figure 3 shows that Italy's national business tariffs, which had been fairly static prior to competition, have declined significantly with the introduction of competition in 1998. Nevertheless, Figure 4 and Figure 5 show that the Italian fixed voice telephony service charges are still higher than the average for OECD countries. This indicates that there still is an incentive for new entrants to enter the market.

Figure 3. OECD National Business Tariff Basket, 1991-98 (Index 1990 = 100)



Source: OECD, EURODATA.

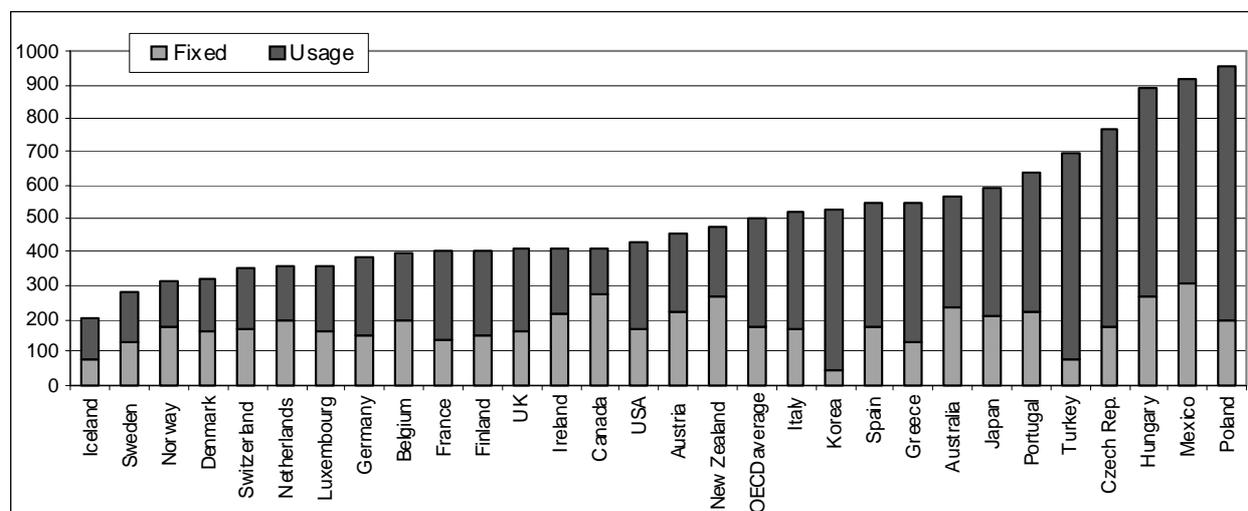
Figure 4. OECD Composite Business basket, November 2000, VAT excluded, UDS PPP.



Note: Excludes calls to mobiles.

Source: OECD.

Figure 5. OECD Composite Residential basket, November 2000, VAT included, USD PPP



Note: Excludes calls to mobiles.

Source: OECD.

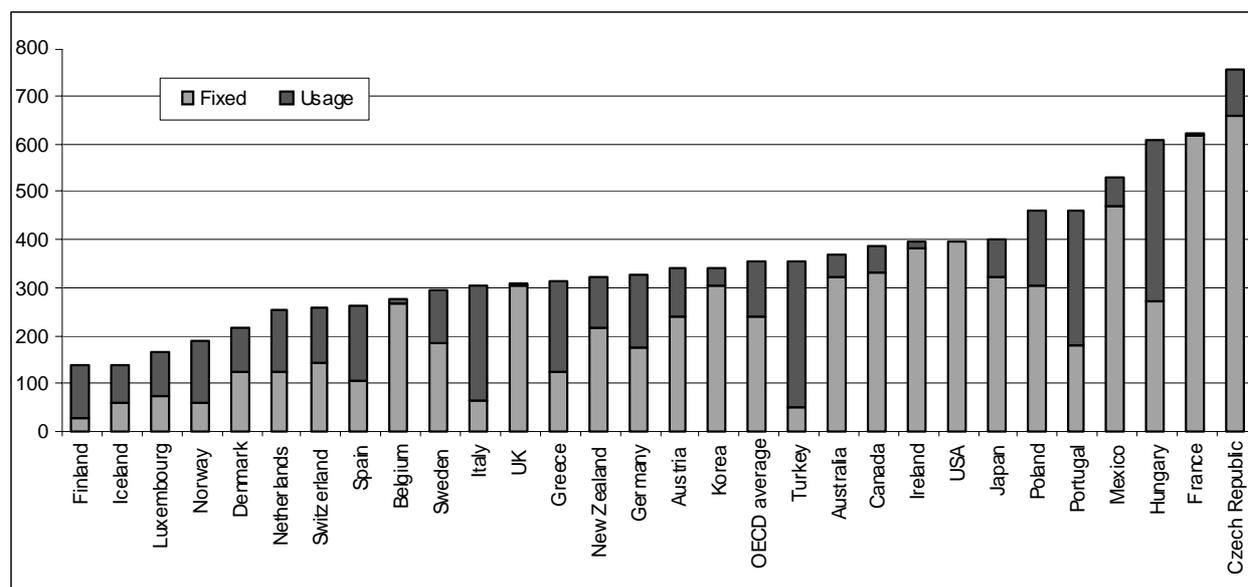
Fixed to mobile call market

AGCOM's decision to change the pricing mechanism of fixed to mobile phone calls together with the inclusion of fixed to mobile phone calls for carrier pre-selection has made it possible for new fixed operators to compete in this market. However, considering the fact both Telecom Italia's retention charges and TIM and Omintel's interconnection charges are subject to a charge cap mechanism, new entrants need to offer retail prices which are lower than prices set up by the AGCOM. It implies that new operators' competitiveness largely depends on access costs to Telecom Italia's network. The AGCOM's regulatory role is necessary here to ensure cost-oriented access charges, which are a vital factor to determine the level of competition in this market segment.

Mobile market

The start of Blu's cellular mobile services in the second half of 2000 has increased competition in the Italian mobile market. In fact, Figure 6 shows that Italy's mobile tariffs are already cheaper than the OECD average. However, considering that there are no handset subsidies in Italy, which traditionally account for a large portion of mobile operator's costs in other countries, it seems clear that there is room for improvement.

Figure 6. Mobile consumer basket, November 2000, VAT included, USD PPP



Note: The basket includes 50 minutes per month and excludes international calls. VAT is excluded.

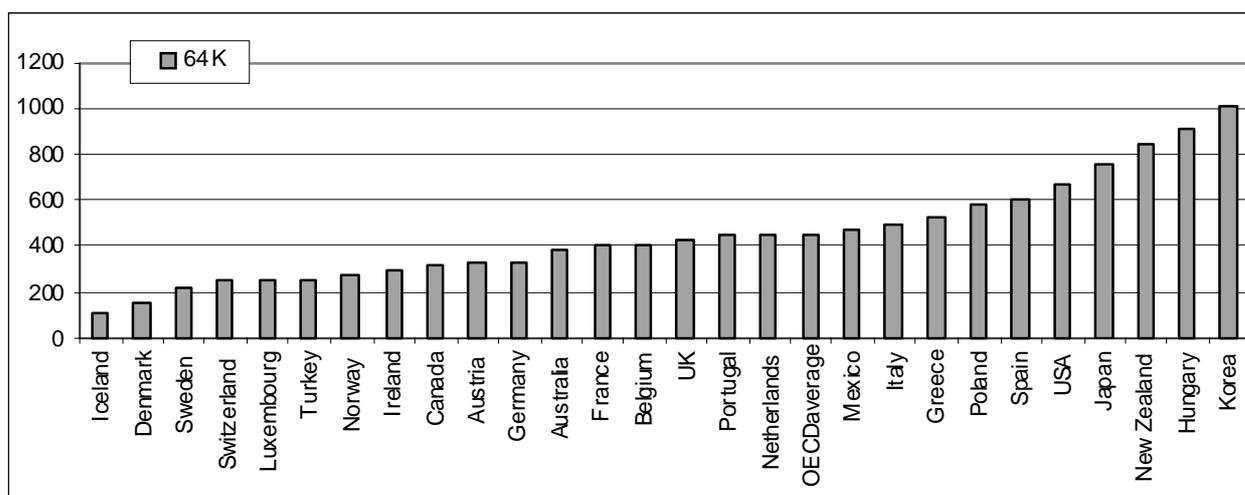
Source: OECD and Teligen.

Leased line markets

In the leased line market, Telecom Italia has a 100% market share. This lack of competition in the leased line market has meant that leased line tariffs have remained high in spite of the tariff approval system that applies to Telecom Italia's leased line charges. The Fifth Implementation Report indicated that, with regard to 2 Mbit/s national circuits prices of a 50 km and 200 km circuit in 1998 and 1999 were above the EU average. Following an investigation of the provision of leased lines, in July 2000 the AGCOM instructed the incumbent to reduce its prices for urban and inter-urban lines by an average of 23.7%. The modified tariffs have been approved and published on 31 October 2000. The decision also includes measures to increase the transparency of the offer (calculation of the actual distance on air instead of electrical distance and elimination of the difference between local and long-distance circuits), to change the terms of the Service Level Agreement offered by Telecom Italia (improving the timing of delivery and of repair and introducing an automatic refunding mechanism for delays and delivery and of repair), and widen the range of services offered. Figure 7 indicates that 64K leased line charges are higher in Italy than the OECD average.

In September 2000, the European Commission had noted that "excessive prices" were being charged in Italy for 34 Mbps and 155 Mbps national leased lines in addition to the "discriminatory delays in the provision of leased lines".

Figure 7. Leased lines charges, November 2000, VAT excluded, USD PPP



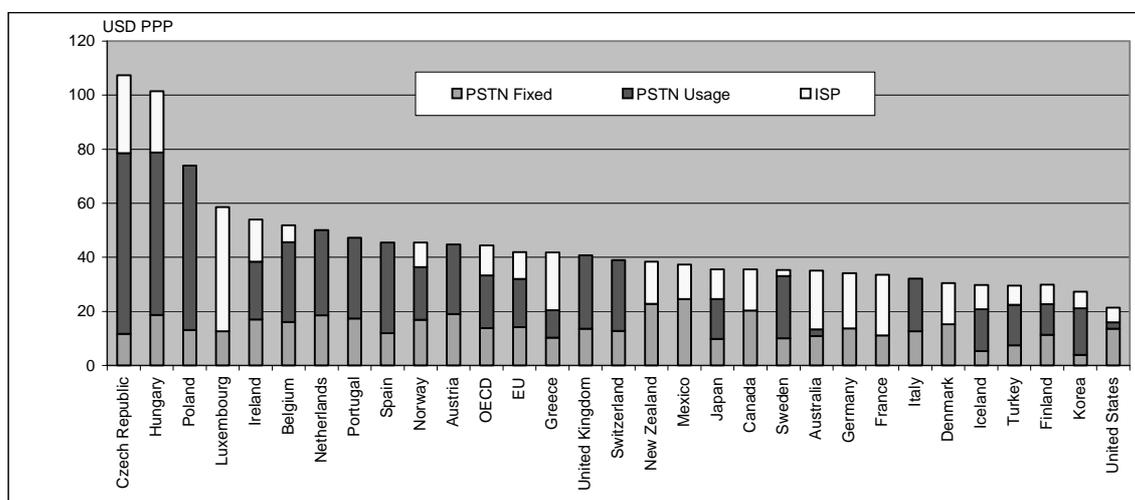
Source: OECD.

Internet

In Italy healthy competition in the Internet Service Provider market has helped in placing pressure for lower Internet access charges using the PSTN. The level of Telecom Italia's PSTN charges for Internet access charges is relatively low compared to other OECD countries. Although the number of Internet subscribers had increased more than 60% from 1998 (2.5 million) to the end of 1999 (4.1 million), Italy still trailed behind the OECD average with nine subscribers per 100 population compared to an OECD average of 11 per 100 population.³⁴ This performance may be improved during 2000 given that the more attractive prices were introduced at the end of the first half of 2000. One of the reasons for growth in number of subscribers was the introduction of the "Freeserve" model by Tiscali³⁵ (Tiscali has over one million subscribers to its FreeNet service).

It is noteworthy that both AGCOM and the competition authority have actively supported competition in the Internet market. AGCOM is exploring the possibility to assign specific numbering options to the ISPs (currently operating under general authorisation), while numbering is normally reserved to operators with an individual licence. On 10 July 1998 the Italian competition authority commenced an investigation of Telecom Italia on the basis of a claim brought by the Italian Association of Internet Providers, for potential abuse of dominant position in the Internet market. On 9 September 1999 Telecom Italia and the Italian association of Internet providers signed an agreement to eliminate discrimination towards Internet Service Providers and Other Licensed Operators, having positive effects also on infrastructure costs supported by Internet Service Providers. On 28 January 2000 the competition authority fined Telecom Italia ITL 1 248 million.

Figure 8. **OECD Internet Access Basket for 20 hours at peak times using discounted PSTN rates, September 2000, Including VAT**



3.2. Other performance indicators

Network development

In Italy, in spite of the steady growth in the number of subscriber fixed lines, in 1999 for the first time Telecom Italia's operating revenue from fixed line services decreased from that of the previous year. This is mainly due to substitute effects between mobile and fixed services and strong competition in the fixed long distance and international markets. As of the end of 1999, Italy had 46.4 access channels³⁶ per 100 inhabitants which is lower than the OECD average (53.3 in 1999)

Table 12. **Telecom Italia's gross operating revenues from fixed and mobile telecommunications services**

(ITL billion)

| | 1998 | 1999 |
|--------------------------------|--------|--------|
| Fixed voice telephony services | 36 292 | 35 856 |
| Mobile services | 11 904 | 14 425 |

Source: Telecom Italia "SEC 20F submission".

Table 13. **Telecom Italia's fixed lines**

| | 1995 | 1996 | 1997 | 1998 | 1999 |
|--|--------|--------|--------|---------|--------|
| Subscriber fixed lines (thousands) (1) | 24 845 | 25 259 | 25 698 | 25 986 | 26 502 |
| Subscriber fixed line growth (%) (2) | 1.8 | 1.7 | 1.7 | 1.1 | 2.0 |
| ISDN equivalent lines (thousand) (3) | 150.2 | 341.3 | 896.8 | 1 735.3 | 3 049 |

Notes:

1. Data include multiple lines for ISDN and excludes internal lines.

2. For each of the years ended December 31, the percentage growth figure represents growth per annum over the prior year.

3. Excluding internal lines. Include also in subscriber fixed lines.

Source: Telecom Italia "SEC 20F submission".

Network Digitalisation

In terms of network digitalisation, as of the end of 1999, 99.9% of Telecom Italia's domestic telecommunications lines were digital, which is above the OECD average (94.2 in 1999). However it needs to be mentioned that there are a number of Member countries – Finland, France, Germany, Iceland, Japan, Luxembourg, the Netherlands, New Zealand, Norway and the United Kingdom – which already had attained full digitalisation of fixed networks by 1997. Commercial ISDN service was introduced in 1994 and now ISDN services are accessible to virtually all parts of Italy. As of the end of 1999, there were approximately 2.5 million basic rate ISDN subscribers and 568 thousand primary rate ISDN subscribers in Italy. In 1997 the total number of ISDN subscribers in Italy (2.07 millions) was just under that of Germany (2.89 millions) in the OECD region. In terms of the deployment of fibre optic cables measured by fibre km, at the end of 1999 Telecom Italia had installed approximately 2.9 million Kms. of fibre optic cables.

Table 14. **Digitalisation in fixed network**

| | 1993 | 1995 | 1997 | 1999 |
|--------------|-------|-------|-------|------|
| Italy | 57.0 | 76.00 | 94.00 | 99.9 |
| OECD average | 69.25 | 81.65 | 89.22 | 94.2 |

Source: OECD.

Quality of service

At the end of 1999, 74.0% of the public telephones in service were equipped with phone card readers. Italy had 6 payphones per 1 000 inhabitants in 1999, a reduction since 1997, whereas in most OECD countries this ratio has been increasing. However, Italy still had a higher per capita number of payphones than the OECD average.

Table 15. **Number of payphones per 1000 inhabitants**

| | 1995 | 1996 | 1997 | 1999 |
|--------------|------|------|------|------|
| Italy | 6.7 | 6.7 | 6.7 | 6.0 |
| OECD average | 4.1 | 4.6 | 4.9 | |

Source: OECD.

By the end of 1999, 98.9% of faults were repaired within 24 hours. The call completion rate of the local fixed network has steadily increased from 98.2% in 1993 to 99.7% in 1999. Similarly, the call completion rate of the long distance fixed network increased from 95.4% in 1993 to 99.1% in 1999. In Italy, the incumbent is obliged to provide the itemised billing service and the caller identification service is available for all customers.

Employment and productivity

At the end of 1999, the total number of employees working for the main telecommunication operators was 99 869 persons including 17 791 employees working for the mobile sector. It is noteworthy that the total number of employees in the sector has steadily increased except between 1996 and 1997, in spite of the large reduction of Telecom Italia employees,³⁷ (a decrease of 3 395 employees between 1998 and 1999), largely thanks to the increase in number of employees in the mobile sector.

Table 16. **Employment in the telecommunications services sector**

| | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|--------|--------|--------|--------|--------|
| Total staff in telecommunications service | 91 802 | 93 983 | 93 782 | 97 734 | 99 869 |
| Total staff in mobile telecommunications services | 5 280 | 7 348 | 10 116 | 14 388 | 17 791 |

Source: OECD

The incumbent's productivity, measured by subscriber lines per employee, has been increased gradually. Italy's productivity is well above the OECD average and the fourth best among OECD countries in 1997.

Table 17. **PTO access lines per employee**

| | 1996 | 1997 | 1998 | 1999 |
|--------------|--------|--------|-------|-------|
| Italy | 284.8 | 307.1 | 323.6 | 343.4 |
| OECD average | 197.13 | 203.02 | | |

Source: OECD.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1. *General assessment of current strengths and weaknesses*

Italy has made steady progress in telecommunications market liberalisation in the 1990s in conformity with the EU Directives. As a result of the Italian government's efforts to promote competition in the telecommunications market, Italy has a fairly comprehensive regulatory regime enabling it to promote competition in the telecommunications sector. In addition, the AGCOM has the responsibility to supervise the telecommunications sector as well as the broadcasting sector and the press, which enables the AGCOM to make technologically neutral regulatory decisions over the whole communications sector.

However, there still exist a number of problems, which need to be promptly addressed. In particular, there have been delays reported in a number of important issues from the full operation of the AGCOM to implement specific regulatory decisions in the Italian telecommunications sector.

Box 11. **Strengths**

- Advanced structure of regulatory body which enables technologically neutral and consistent regulatory rulings over the whole communications sector.
- Implementation of necessary pro-competitive regulatory measures.
- Rapid development of the mobile sector;
- Low access charges for Internet services.

By transposing almost all EU Directives, Italy now has a more or less comprehensive regulatory framework to make the transition to a competitive telecommunications market. There is no limitation to market access except the case of limited spectrum resources. At the same time equal access is ensured through interconnection and numbering policies. Italy also has a competitively neutral universal service funding mechanism. Furthermore, it has adopted regulatory measures for local loop unbundling, which is very important for a market like Italy where no alternative infrastructure is available in the local loop.

As the nature of mobile service changes, from a complementary service to a substitute for fixed voice telephony, services through the decrease in charges and the introduction of pre-paid cards, the growth of the Italian mobile sector is bringing real competition to the Italian telecommunications market.

It is noteworthy that, in Italy, the level of PSTN charges for Internet access charges is among the lowest in the OECD region. This low Internet access charge allows customers to access data services using the PSTN. At the same time, the low Internet access charges help Internet content providers to benefit from economies of scale, which is very important for an industry which is largely dependent on advertising revenues.

Box 12. Weaknesses

- Complicated licensing regime and golden share regulation.
- Delay in introducing mobile number portability and WLL services.
- Delay in defining and implementing Long Run Incremental Cost (LRIC) accounting methodology.
- Lack of alternative infrastructure to the local loop.
- Higher than average short leased line prices.

While three years have passed since the establishment of the AGCOM in 1998, the AGCOM the sharing of regulatory powers between the AGCOM and the Ministry based on bilateral contracts has caused some confusion and inconvenience to the industry.

The Italian licensing regime is complicated and places unnecessary regulatory burdens on the industry. The change of concessions into licences was finally completed in March 2001. Telecom Italia is subject to “golden share regulation” based on the “Golden Share Decree³⁸” issued on February 11 2000 and Telecom Italia’s constitution. According to the Golden Share Decree, the Italian government can use its special powers to block an acquisition of Telecom Italia in order to protect the privatisation policy. Although the Italian government did not exercise its special power when Deutsche Telekom and Olivetti competed to take over Telecom Italia (Olivetti finally succeeded), the existence of a “golden share regulation” means that the Italian government still has a chance to intervene in the case of an acquisition of the incumbent by a government-owned undertakings.

Considering the weak market position of new entrants in the mobile sector and the lack of competition in the local access market, the introduction of mobile number portability and WLL services should be secured.

The FDC accounting methodology, used at present by the regulator, tends to over-compensate the incumbent through subsidising the historical inefficiencies. The implementation of interconnection charges, as well as local loop unbundling access charges, based on forward looking long run incremental costs should be a priority for the regulator.

There are no alternative local loops in the Italian telecommunications market. For this reason, it is important to ensure that the implementation of local loop unbundling is effective and at prices which allow for effective entry. In addition, it is also important to ensure the rapid rollout of wireless in the local loop technologies to enhance local competition.

4.2. *Potential benefits and costs of further regulatory reform*

Section 3 pointed to some early evidence that market liberalisation and competition are bringing significant benefits through:

- Lowering of national and international long distance prices.
- Introduction of unmeasured local call services.
- Expansion and modernisation of telecommunication networks.

The immediate task is to ensure local competition, noting in particular the need for alternate infrastructures. A sustained commitment to simplifying the licensing framework will also benefit market players by reducing the regulatory burden.

In general, in spite of recent regulatory efforts by the AGCOM, there is room for improvement in the effectiveness of the regulatory system to facilitate the transition from a monopoly to a competitive telecommunications market. As described in Section 4.1, there still remain a few regulatory issues that need to be addressed appropriately and promptly if the benefits of competition are to be maximised. High priority should be given to ensuring that the AGCOM has the necessary resources at its disposal through prompt recruitment of unfilled posts.

4.3. *Policy recommendations*

The following recommendations are based on the above analysis, taking into account the “Policy Recommendations for Regulatory Reform” set out in the *OECD Report on Regulatory Reform* (OECD, June 1997).

1. *Ensure that regulations and regulatory processes are transparent and non-discriminatory and applied effectively*

Ensure that the AGCOM can fully exercise its regulatory responsibilities by ensuring that it has its full complement of human resource through rapid recruitment of staff

The Italian government needs to take prompt action to enable the AGCOM to meet its legal responsibilities. The sharing of responsibility between the Ministry and the AGCOM should be terminated as soon as possible and the AGCOM needs, by hiring appropriate staff, to take full responsibility of the sector.

Mobile number portability and WLL services should be introduced without any delay in order to promote competition in the mobile market and the local access market.

Considering the weak market position of new entrants in the mobile sector and the lack of competition in the local access market, the delay in introducing mobile number portability and WLL services gives an increased advantage to the existing mobile operators and the incumbent. The AGCOM needs to make regulatory steps to expedite the introduction of mobile number portability and continue to place priority in expediting the introduction of WLL services.

2. Reform regulations to stimulate competition, and eliminate them except where clear evidence demonstrates that they are the best way to serve the broad public interest

To promote competition, the present carrier market entry requirements should be made simpler by transforming individual licences to authorisations.

It is unnecessary to maintain an individual licensing system for fixed voice telephony services since the regulatory costs exceed the benefits. The expansion of the authorisation system to fixed voice telephony services, which are currently subject to the individual licensing system, would lift unnecessary regulatory burden from the telecommunications industry as well as eliminate long lead times to enter the market. Obligations imposed on providers of public voice networks and services can be integrated in appropriate regulations. Responsibility for licensing should revert to AGCOM, which has the responsibility for creating competitive market conditions and is best placed to monitor market developments.

The golden share regulation imposed on the incumbent should be removed in order to allow the incumbent to carry out its activities unconstrained by the threat of potential government intervention, subject to the general telecommunications and competition regulations.

In a liberalised market, there is no reason to impose specific regulations on the incumbent rather than regulation based on market power. The golden share is not necessary in that there is a legal and regulatory framework that already sets the parameters in which the incumbent can operate.

It is necessary to ensure that the schedule for rebalancing is maintained and completed.

It is important that the access deficits in the provision of the local loop are eliminated by the rebalancing of retail prices. Price changes in subscriber line charges that took place in early 2001 are important in this context. Without a completion of rebalancing, there exists a risk of price distortion since the incumbent needs to recoup this deficit through other prices.

3. Review, and strengthen where necessary, the scope, effectiveness and enforcement of competition policy

As competition develops, the role of competition law in the telecommunications market should be strengthened, and sector specific regulation should be reviewed periodically in order to streamline the regulation.

The AGCOM should forebear from regulation in areas or for activities where sufficient competition has emerged and conditions will allow the development of effective and sustainable competition between carriers. Excessive sector-specific regulation on carriers may hamper development of the full benefits of competition. Periodic reviews of regulation to determine where streamlining can take place should be undertaken. It is recommended that all market players should be able to request streamlining reviews.

The AGCOM needs to take pro-competitive regulatory measures to ensure fair access to end customers.

Since there is no competition in the local loop, the role of the AGCOM is critical to ensure fair access to end customers. To this end, the recent decision on the early introduction of the unbundling of the local loop is commendable. Nevertheless, there still is a dispute on the price of this service. The AGCOM should put high priority on this issue so new entrants can obtain direct access to subscribers and compete with the incumbent on a level playing field.

NOTES

1. According to the Golden Share Decree, the Italian government may exercise its special powers to prevent acquisitions of shares of privatised companies such as Telecom Italia if such acquisitions (1) are not transparent and would not ensure full disclosure with respect to controlling share ownership of the companies whose shares are being acquired and the objectives and industrial plans proposed by the buyers of the target companies, (2) compromise liberalisation and market competition or are not in line with the company's privatisation goals, or entails situations of conflict of interests which could compromise the company's missions with respect to the objectives of public interest, (3) entail objective risks of being affected by criminal organisations, or involve the company in unlawful activities, (4) jeopardise conservation of the special powers of the State, or (5) represent a considerable risk of serious harm to the vital interests of the State described above, including the supply of essential raw materials and goods, the supply of essential public services and the security of related installations and networks and, further, the development of advanced technological sector..
2. The ASST provided national long distance calls and international calls in Europe and in the Mediterranean region and the PT provided telex and telegraph services. The concessionaires provided specific services such as the installation and management of fixed networks and the provision of national telecommunications services (SIP), intercontinental services (ITALCABLE), space communications (TELESPAZIO), and maritime communications (SIRM and TELEMAR).
3. OECD Communications Outlook 2001, OECD, Paris (forthcoming).
4. Telecom Italia, 1999 SEC 20F submission.
5. AGCOM.
6. Currently, Telecom Italia owns 35% of Stream. The other shareholders are News Corporation (35%), Gruppo Gecchi Gori (18%) and SDS (12%).
7. AGCOM.
8. Telecom Italia, SEC 20F, 1999, page 30.
9. Infostrada had 5.8 million subscribers of which 3.1 million were for voice services and 2.7 million for Internet services at the end of June 2000.
10. The Ministry of communications has the responsibility to:
 - Transpose the European directives.
 - Regulate the market of radio and terminal equipment.
 - Actuate the surveillance of the services market and the radio and terminal equipment market in order to protect the user's interests.
 - Plan frequencies and to grant individual licences for private services.

11 OECD (1999), “Telecommunications Regulations: Institutional Structures and Responsibilities”: The United States, Canada, Japan and Switzerland are the other four countries which have a regulator responsible for both telecommunications and broadcasting.

12 A first set of requirements for formal co-operation between AGCOM and the Ministry is based on the legal provisions (article 1, paragraph 25 of Law 249/97) which aims to support the gradual transfer of regulatory responsibility from the Ministry to AGCOM. The collaboration agreement between AGCOM and the Ministry has been published in the Official Journal of Italian Republic No. 169 of 22/7/98 and is still operating after being renewed several times.

This collaboration agreement deals with:

- Frequency assignment planning.
- Frequency reallocation for mobile systems.
- Numbering national planning.
- Quality of services.

13. In the period 1992- March 2000 the Area «Telecommunication» of the Direction Enquiry Activity «A» had five staff members (three economists and two lawyers). In the same period there were about two staff members working on deceptive advertising proceedings in telecommunication markets.

Starting April 2000, after a general re-organisation of the Competition Authority, the new Direction D «Communication», with responsibilities in telecommunication, information technology, radio and TV broadcasting, publishing, and advertising proceedings has 10 staff members.

14. NR 448 of 1998.

15. European Commission (1999), “Fifth Report on the Implementation of the Telecommunications Regulatory Package”.

16. In addition to the verification of the financial structure and the business plan, the current licensing regime requires the applicant to satisfy the following requirements:

- The establishment as a PLC (public limited company) or as Mutual Limited Ownership (a mutual company in the form of a public company), in which the assets shall be not less than 10% of the investment, accounting for net budget loss.
- The CEO or legal representative of the applicant company must not have been prosecuted and sentenced.
- The applicant must be an Italian, EEA or WTO resident company.
- In addition, the holder of an individual licence is subject to the following obligations:
 - Respect of essential requirements on operation safety, network integrity, service interoperability and data protection.
 - Apply technical standards approved at International or European or national level.
 - Apply health and environmental measures.
 - Determine and publish the services to be provided and their terms and quality parameters.

- Adopt and publish the contract framework with the users.
 - Negotiate, if necessary, interconnection with other national and foreign operators.
 - Implement, if necessary, requests for interconnection coming from authorised operators in third countries having ratified the agreements relevant to the telecommunications liberalisation stipulated with WTO.
 - Contribute to the provision of the net costs of Universal Service.
 - Provide for the payment of the contributions.
 - Install network type approval equipment according to existing standards.
 - In particular, the holder of an individual licence for voice telephony shall:
 - Avoid undue discriminations of numbering sequence used to access the services.
 - Provide, free of charge, the access to emergency services.
 - Take into account the needs of disabled people when providing public telephone booths.
 - Ensure geographic coverage as stated in the application.
17. The public concession fee paid for 1997 and for 1998 was on average 3.5% of revenues related to such services. Concessionaires and individual licence holders whose yearly revenue exceeds 200 billion Lire. According to the Italian Budget law for 1998, concessionaires and licence holders which fall within the category pay 3% for 1999, 2.7% for 2000, 2.5% for 2001, 2.0% for 2002 and 1.5% for 2003 from their revenues. Previously public concession fees were imposed. According to the Ministerial Decree of March 21 2000, the fees should only be applied to revenues from telecommunications networks installation and provision, voice telephone service and mobile personal services. Licence holders whose yearly revenues are below 200 billion Lire, unless is at a loss, have to pay 2% up to year 2002 and 1.5% in 2003.
18. European Commission (1999), “Fifth Report on the Implementation of the Telecommunications Regulatory Package”.
19. The parties are required to submit: 1) the parties’ position in the negotiation, 2) the technical, economic and juridical reasons supporting the parties’ position and c) an acceptable negotiation breaking off and viable alternatives.
20. Dated 15 February 2000.
21. In the United States all incumbent LECs are required to offer for resale any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers. State commissions are required to identify marketing, billing, collection, and other costs that will be avoided or that are avoidable by incumbent LECs when they provide services wholesale and calculate the portion of the retail rates for those services that is attributable to the avoided and avoidable costs. If a state elects not to implement the methodology, it may elect, on an interim basis, a discount rate from within a default range of discount rates established by the FCC. The FCC established a default discount range of 17 – 25% off retail prices, leaving the states to set the specific rate within that range, in the exercise of their discretion.
22. In France, the difference between interconnection charges for infrastructure operators and charges for service providers amounts to about 40%. (European Commission, “Fifth Report on the Implementation of the Telecommunications Regulatory Package”).

23. In Denmark, the interconnection charges for service providers are determined by the 'retail – 21%' scheme. (European Commission, "Fifth Report on the Implementation of the Telecommunications Regulatory Package").
24. In Spain, the interconnection charges for service providers are 30% higher than those of facility based operators. (European Commission, "Fifth Report on the Implementation of the Telecommunications Regulatory Package").
25. Thomas Kiessling and Yves Blondeel "Effective competition in European telecommunications" an analysis of recent regulatory development" Info vol. 1 number 5, October 1999.
26. The price per month for raw copper used to provide ADSL services is 24 300 lire.
27. The price per call set up is ITL 100 for local calls, ITL 127 for national calls (fixed to mobile and fixed to fixed) and same area calls and ITL 500 for international calls.
28. The main features of UMTS licensing conditions were the following:
- Number of licenses: up to five.
 - Term of the licenses: 15 years.
 - Licensing procedures: procedure carried out in two stages: 1) qualification, for the purpose of pre-selecting candidates with appropriate technical, financial, and commercial capabilities, and 2) auction by competitive biddings, starting from of a base of Lit 4 000 billion (€ 2.1 billion).
 - Spectrum resources: The basic licenses were of 2X10 MHz paired spectrum plus 1X5MHz unpaired spectrum. Two additional 2x5 MHz blocks were available for new entrants. No transfer of licences to a third party was permitted.
 - Licensees' obligations: independently from any obligation voluntarily undertaken in the offer, by end of 30 months' period starting 1 January 2002, licensees will have to cover the regional capital cities; by the end of next 30 months' period, licensees will have to cover other major cities.
 - Pro-competitive measures: a detailed regulation adopted by the Authority on 21 June 2000 has set pro-competitive measures such as roaming obligations, as well as rules on sites, facility and infrastructure sharing.
29. European comparison 3G licence Cost

| | UK | Netherlands | Germany | Spain | Italy |
|-------------------------------|------|-------------|---------|-------|-------|
| Population (mln) | 58.9 | 15.9 | 83 | 39.2 | 57 |
| Penetration mobile (%) | 51 | 53 | 42 | 49 | 65 |
| Licenses awarded | 5 | 5 | 6 | 4 | 5 |
| Spectrum awarded MHz/licenses | 28 | 28.8 | 24.2 | 35 | 25 |
| Total spectrum awarded MHz | 140 | 144.2 | 145 | 140 | 125 |
| Licenses Total cost (€ bn) | 38.7 | 2.68 | 50.8 | 0.516 | 12.1 |
| Cost per license (€ bn) | 7.74 | 0.536 | 8.46 | 0.129 | 2.42 |
| Cost per Population (€) | 657 | 168 | 612 | 877 | 212 |
| Cost x license per POP(€) | 131 | 34 | 101 | 3 | 42 |

30. Special national services include emergency services, public utility services and customer care services. As for the latter, codes are assigned to the telecommunication services operators for access to their customer care centres only. As for the remaining services, codes are assigned on request by the competent administrations.

For mobile services, operators receive a number of prefix codes and are responsible for the allocation of the subscriber numbers.

As far as geographic services are concerned, numbering resources are assigned to the requesting operator in blocks of 10 000 numbers per local area. Operators can specify (and obtain, if available) a preference for the numbering of the block(s).

Non-geographic services include, inter alia, toll-free numbers, VAS, premium rate services, shared cost services. According to type of services, numbering resources are assigned in single number or in blocks of 100 numbers. Operators can specify a preference for the single number or the block(s) requested.

31. European Commission (1999), "Fifth Report on the Implementation of the Telecommunications Regulatory Package"
32. The EU offer commits to complete liberalisation of basic telecommunication services (facilities-based and resale) across the EU for all market segments (local, long distance and international). The offer also covers, for instance, satellite networks and services and all mobile and personal communications services and systems. Restrictions include foreign equity limits by France (20%: radio-based services, direct investment only) and Portugal (25%). Full liberalisation of public voice telephony and facilities-based services is to be implemented on a delayed basis only by Spain in December 1998; by Ireland in 2000; by Greece in 2003; and by Portugal in 2000 for public voice telephony and July 1999 for facilities based services. Liberalisation of internationally connected mobile and personal communications services is to be implemented on a delayed basis only by Ireland and Portugal in 1999.
33. In the EU commitment on WTO basic telecommunications services agreement, telecommunications services are defined as the transport of electromagnetic signals-sound, data image and any combinations thereof, excluding broadcasting.
34. See OECD, Communications Outlook 2001, forthcoming.
35. Internet subscribers do not pay any Internet Service Provider charges under this model. The ISP earns revenue from advertising and/or from interconnection charges.
36. Access channels includes main lines adjusted for ISDN subscription.
37. Telecom Italia, 1999, SEC 20F submission.
38. According to the Golden Share Decree, the Italian government may exercise its special powers to prevent acquisitions of shares of privatised companies such as Telecom Italia if such acquisitions (1) are not transparent and would not ensure full disclosure with respect to controlling share ownership of the companies whose shares are being acquired and the objectives and industrial plans proposed by the buyers of the target companies, (2) compromise liberalisation and market competition or are not in line with the company's privatisation goals, or entails situations of conflict of interests which could compromise the company's missions with respect to the objectives of public interest, (3) entail objective risks of being affected by criminal organisations, or involve the company in unlawful activities, (4) jeopardise conservation of the special powers of the State, or (5) represent a considerable risk of serious harm to the vital interests of the State described above, including the supply of essential raw materials and goods, the supply of essential public services and the security of related installations and networks and, further, the development of advanced technological sector.

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