Increasing private participation in the Southern African Development Community’s infrastructure: Policy bottlenecks and the way forward

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1. Introduction

1.1. A growing infrastructure funding gap

1. Since the 1980s, the gap between demand and supply for basic infrastructure sectors (including power generation and distribution, water and sanitation, telecommunications and transport) has been rapidly growing in Africa. While demand has massively increased due to strong population growth as well as high rates of urbanization, supply has remained constant or has even decreased in some cases (Estache, 2006). Today, while the total annual expenditures required to meet Africa’s infrastructure investment needs stand at approximately USD 93 billion (WB and AFD, 2010); only USD 45 billion are currently spent (with 66% corresponding to budget expenditures, 20% to private investment, and 12% to ODA); this leaves a financing gap of about USD 48 billion per year.  

2. This gap is also important within the Southern African Development Community (SADC). As concerns regional infrastructure alone, the projects covered in the SADC Regional Infrastructure Development Master Plan (RIDMP, approved by SADC Ministers of Finance and Infrastructure in late 2012) has estimated capital requirements of USD 500 billion. At least USD 100 billion of this amount will have to come from private sector sources if the Plan is to successfully be rolled out over 2014 – 2027. These requirements come on top of the resources needed for maintaining and upgrading existing domestic infrastructure networks at country level. As public investment and ODA will not suffice to fill these national and regional gaps, enhancing private sector participation in infrastructure will be critical.

1.2. Poor quality and efficiency of existing infrastructure: a market structure issue

3. Besides these financing issues, infrastructure development in SADC has also been confronted to a problem of investment effectiveness. In the past, public infrastructure investment has often been associated with poor management and inefficient service provision. As State owned Enterprises (SOEs) have traditionally played a dominant role in Southern Africa’s infrastructure markets, these inefficiencies partly reflect weak governance arrangements which have resulted in poor SOE performance. The existence of ‘natural monopolies’ in itself is not necessarily problematic or unusual in infrastructure sub-sectors: the extremely high fixed costs for operation and maintenance of infrastructure networks are difficult to shoulder for all but large enterprises. However in Africa some of these monopolistic firms have been characterized by inefficient management and under-investment (Nellis, 2005). Government intervention through discretionary pricing policies and restrictions on private investment has also distorted competition on utility markets.

4. Across the region, poor SOE performance has had important operational and financial consequences – including on the state budget as government subsidies are often required to keep the companies afloat. As a result, a sizeable share of public sector spending in infrastructure continues to be diverted towards subsidies to SOEs, rather than used to maintain existing infrastructure or/and to expand network coverage.

5. Financing constraints coupled with inefficient resource allocation are the underlying factors behind inadequate infrastructure. On every measure of infrastructure quality and coverage, African countries currently lag behind their peers in the developing world. The inadequacy of infrastructure...

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1. In 2006, 40% of Sub-Saharan Africa’s total population was urban (representing 300 million people) versus only 25-30% in 1980.

2. Of which 2/3 relates to new infrastructure and 1/3 to rehabilitation and maintenance of existing ones.

3. 17 billion dollars could be saved through a more efficient allocation of existing expenses. The additional expenses required would consequently represent 31 billion per year.
services implies that basic end-user needs go unmet, and considerably hampers the competitiveness of both domestic and foreign investors seeking to position themselves on domestic as well as export – including regional – markets.\(^4\)

6. **SADC countries therefore face two imperatives for meeting the rapidly expanding infrastructure challenge:** filling the infrastructure funding gap; and improving the efficiency of infrastructure investment. The two are closely related, in that network performance problems and SOE dominance in utility markets can affect the likelihood of private participation in infrastructure sectors. Likewise for governments seeking to engage in outright privatization of SOEs, investors will be less likely to bid for taking over public enterprises that have suffered from mismanagement in the past. There is much room for improvement in terms of enhancing the attractiveness of Africa’s utility markets for private investors – between 1990 and 2011 Africa only attracted 10% of global private investment in infrastructure, against 40% for Latin America.\(^5\)

1.3. **Managing the shift from public to private infrastructure investment**

7. These joint imperatives are increasingly acknowledged by African governments. SADC countries have made several efforts to create policy frameworks that enable private sector participation in infrastructure (PSPI). Yet due to the specific nature of public utility services, the novelty and complexity of some forms of PSPI (ranging from partial divestiture, through PPP projects, to opening water and energy grids to independent providers – see Box 1), and to the heavy contingent liabilities that such projects may entail for public finances, the shift from public to private provision of infrastructure services involves many risks and must be carefully prepared and managed.

8. **The emergence of regional dialogue and experience-sharing platforms** aiming to address this shift, such as the SADC PPP Network, demonstrate the increasing importance that PSPI is taking on government agendas in Africa. Building on Investment Policy Reviews conducted by the OECD over 2009-2012, this paper considers the experiences of five SADC countries (Zambia, Tanzania, Mozambique, Mauritius, and Botswana), which are all at varying stages in the transition towards greater PSPI. The objective of this report is to identify the main areas where reforms have been conducted, and the common challenges that remain to be addressed.

9. As summarised in Table 1, the paper is structured according to three areas of reform by which African governments can seek to better attract private investment in infrastructure:

- **As far as the national investment regime is concerned,** priority should be placed on strengthening **safeguards for investor protection**, and tackling **restrictions on private participation** in infrastructure sub-sectors (including limits on foreign ownership).

- **In making and implementing the choice between public provision of infrastructure services and PSPI,** countries must avoid unsuccessful and costly attempts at private sector entry into utility markets. These risks can be mitigated by establishing clear **legal rules for the full spectrum of public procurement options** (including PPPs), and by enhancing the capacity and co-ordination of all agencies engaged in public procurement (from procurement authorities to dedicated PPP units).

- **On a more operational level,** it is imperative to create a **level playing field between public and private providers of infrastructure services** – that is, to make more room for the private sector to

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\(^4\) See for instance Escribano et al., (2010).

participate on an equal footing with public providers. This requires action to: improve the corporate governance and efficiency of State-Owned Enterprises (SOEs); unbundle infrastructure networks; and regulate utility markets (especially through sound competition and pricing policies).

10. On a regional level, it is moreover fast becoming essential for countries to develop their capacity for managing cross-border infrastructure projects. Such projects (as recently identified in the SADC Regional Infrastructure Development Master Plan) can help overcome a binding constraint to PSPI: the shallowness of utility markets. To ensure successful preparation and facilitation of the growing pipeline of regional infrastructure projects, neighbouring countries will need to closely co-ordinate and harmonise regulatory and institutional reforms aimed at enhancing infrastructure investment. Especially in the case of PPPs, co-operation on project financing (including consolidating national capital markets) will also become increasingly necessary if SADC governments are to shoulder their full role as public counterparts in infrastructure development projects.

Table 1. Structure of Paper

| Ensuring consistency between PSPI promotion and national investment regimes | 1. Clarity of national infrastructure investment plans |
| | 2. Strength of investor protection |
| | 3. Tackling restrictions on private (foreign or domestic) ownership in infrastructure sectors |
| Managing and implementing the choice between public and private provision of infrastructure | 1. Legal framework for procurement (including PPPs) |
| | 2. Co-ordination of agencies for procurement oversight & implementation |
| | 3. Capacity of procurement agencies |
| Creating a level playing field between public and private providers of infrastructure services | 1. SOE corporate governance and efficiency |
| | 2. Unbundling infrastructure networks |
| | 3. Regulation of utility markets (sound competition and pricing policies) |
| Tackling shallow national markets and building cross-border competitiveness: regional co-operation on infrastructure investment | 1. Strategic importance of cross-border infrastructure |
| | 2. Challenges for upstream and downstream co-ordination |
| | 3. Financing regional infrastructure development |
Private sector participation in infrastructure can occur through full or partial privatization – i.e., the sale of shares or assets held by SOEs to the private sector or through public procurement processes, which can take the form of public private partnership (PPP) agreements.

Although there is no widely accepted definition of what constitutes a PPP and definitions vary across countries, the OECD defines PPP agreements as long-term contractual relationships between a public body and a private partner (or a consortium of private firms) under which the latter may be tasked, to a varying degree, with the design, construction, financing, operation and management of a capital asset to deliver a service to the government or directly to end users. The private partner will be in charge, generally under the terms of a Build Operate Transfer (BOT) contract, of building, asset management and maintenance, service provision and investment financing, in exchange of regular fees by the government and/or user charges. Under a PPP scheme the asset is typically owned by the private co-contractor while being operated, but there are usually provisions in the contract for the transfer of its legal property to the public sector at the end of the contract. There are several variations to this basic definition, depending on the allocation of different risks between the public and the private partners, but most PPPs include both the building and the operation of a facility.

In the context of this paper, PPPs are considered as a subset of public procurement, which also encompasses alternative forms of infrastructure delivery. Traditional forms of infrastructure procurement include “Build and deliver” contracts, through which the government acquires infrastructure assets such as roads. Typically the infrastructure is constructed by private companies to whom the construction is awarded through tender and, once the construction is finished, the asset is operated by the government.

Compared to more traditional forms of procurement, PPPs imply greater participation of the private sector as they transfer both the construction and the operation of the asset and involve private contractors over lengthier periods of time. Therefore, the main distinction between PPPs and more traditional forms of public procurement is the allocation of risk. In traditional procurement processes, the transfer of risk to the private party is limited as it does not extend beyond the construction phase of the project. PPPs are thus sometimes seen as occupying the middle ground between full public provision, where the asset is built through public procurement and managed by the public sector, and full private provision.

2. Ensuring consistency between PSPI promotion and investment regimes

2.1. Clarifying the policy stance for PSPI

11. When deciding whether or not to invest in the infrastructure sector of a country, investors look at the extent to which the government is committed to develop infrastructure and to promote private sector participation in specific utility markets. Political commitment is critical for assuring private investors that their investments in national infrastructure will be protected, and that necessary efforts will be made and upheld to address institutional and regulatory issues that may hamper private participation.

12. The political importance of infrastructure service provision also weighs into government decisions concerning the extent of PSPI. Government commitment to opening infrastructure sectors to private participation may waver at different moments, including within the same administration. In Tanzania for instance, five major utilities (in electricity, harbours, water, ICT and air travel) involved some private participation by 2003. However following the attempts to privatise them, most of these companies were re-possessed by Government on the grounds that they required subsidies due to the nature of the services, as they were not specifically expected to generate profit. Such a significant shift in policy can undermine the positive signal that government aimed to send by passing and updating enabling legislation for PPPs and procurement. Meanwhile in Zambia re-possessions followed the presidential elections in 2011-2012. These changes in government positions on private sector participation in infrastructure (within a single administration but also across election periods and beyond party lines) are to avoid at all costs, as they send conflicting and deterrent messages to private investors potentially interested in these sectors.

13. In other cases, the policy stance towards PSPI seems to reveal an uncertainty on the part of public authorities on what benefits they seek in pursuing the private sector route. In Botswana for instance, the 2009 PPP Policy encourages maximum involvement of citizen companies in PPPs, noting that this could require establishing a dedicated fund to grant domestic companies necessary access to finance. This requirement contradicts the essential rationale of PPP projects – namely, that the public sector benefits from private sector financing and expertise which would otherwise be out of reach. As it is, financing domestic companies that bid for PPP projects would have significant fiscal implications for the public partner. By reducing the coherence and predictability of the government approach to PSPI, such ambiguous provisions undermining PPP policies may also discourage participation from foreign bidders.

14. In order to forestall (or remedy to) such situations, a first step towards establishing a credible policy commitment between government and investors is to set up clear and holistic long-term infrastructure and development plans which firmly emphasize the need for and role of private sector participation. Infrastructure objectives are mainstreamed within the national development strategies of most SADC countries (such as the Government Programme 2012-2015 of Mauritius, Tanzania’s Five Year Development Plan, or Botswana’s Economic Diversification Drive and National Development Plan 10). The latter recognise the catalytic value of infrastructure in terms of attracting investment and facilitating growth and competitiveness. On the operational and budgeting level, infrastructure objectives are often reflected in public investment plans, such as Tanzania’s three-year Medium-term Public Investment Plans (MPIPs) or the annual Public Sector Investment Programmes (PSIPs) of Mauritius.

15. Such investment and national development plans also often affirm the fundamental role to be played by the private sector in infrastructure investment. In certain cases this has been reinforced by setting quantifiable targets for private (and even specifically foreign) participation in infrastructure sectors: in 2012 the Mauritian government thus announced that at least 10% of the financing for major public infrastructure over 2012-2015 should come from Foreign Direct Investment flows. As highlighted in

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Section 2.2, national infrastructure development plans must indeed be underpinned by sound and clear legislations that provide investors with a predictable, consistent and open framework for entering utility markets.

2.2. **Strengthening the legal framework for the protection of investors’ property rights**

16. Because the infrastructure sector presents specific risks to private investors – projects tend to be large-scale, capital intensive and with long development timelines – to an even greater extent than in other economic sectors, it is paramount to have a clear and sound legal framework for investment activities. Investing in infrastructure sectors implies a long-term exposure of investors, who therefore need to be given strong legal guarantees, before entering the market, that governmental actions will not infringe their property rights. Promoting private participation in infrastructure thus requires a **structured and coherent legal framework for public procurement**, within which the PPP legislation, if any, must remain in line with the overall public procurement framework (see Section 3.1).

17. Most important to infrastructure investors, the legal framework must contain a sound, clear and detailed provision that lays down the **obligation for compensation in the event of an expropriation** and that clearly sets out the public benefit purposes for which an expropriation can lawfully occur. In this respect, it is crucial that the expropriation provision not only covers direct expropriation, but also indirect forms of expropriation that can occur through interference by the state in the use of the property, or with the state enjoying certain benefits of the property even where it is not seized and the legal property title is not affected (OECD, 2004). For example, pricing policies that deter investors’ rights and affect their chances of cost recovery may amount to an indirect expropriation against which investors should be granted a prompt, adequate and effective compensation, together with a right to challenge the expropriation decision before an independent administrative body or a judicial court.

18. **Core standards of treatment** that domestic legal frameworks must encompass to facilitate PSPI also include, *inter alia*, a well delineated and defined fair and equitable treatment provision, and a right to resolve through arbitration any disputes that may arise in the course of the project operation. These guarantees, provided by national laws, must be in coherence with the additional layer of rights and protection provided to foreign investors through bilateral investment treaties.

19. These standards of protection are not always adequately addressed in the legal framework for investment of certain countries. In Mozambique for instance, while the protection against unlawful expropriation and the security of property rights seem to be adequately addressed by the investment regime, the PPP law does not contain any standard of protection against unlawful expropriation that may occur in the context of a PPP arrangement. An extra layer of protection against expropriation without compensation could be usefully provided within PPP specific laws, as it would further reassure investors who engage in a long-term investment associated with high costs due to fees imposed by the State. In addition, investors may be deterred by the perceived weakness of Mozambique’s bankruptcy rules.

20. Meanwhile in Tanzania, while the 1997 Investment Act states that expropriation must be motivated by a public purpose or for reasons of national security, it does not clearly define such circumstances, and is also silent on how the amount for compensation should be determined. Investor dissatisfaction regarding the perceived weakness of legal standards of protection in Tanzania is reflected by the fact that the Tanzanian State has been involved in four ICSID cases to date, all related to recent repossessions of divested infrastructure services. This highlights the necessity of providing sufficiently protective domestic frameworks, consistent with countries’ international commitments. This serves the interest not only of investors, but of the government as well: in the event of a dispute arising between the state and a foreign investor, the latter can refer the case to international arbitration (such as before an ICSID tribunal), at very high cost to the host country concerned.
Mauritius and Botswana, for instance, grant investors sound protection provisions, in particular against expropriation without fair and prompt compensation, which is regarded by investors as one of the most crucial standards of treatment. The legibility and access of these provisions for investor protection could however be further improved by grouping the relevant legislations within a common investment guide or code that would clearly set out the array of rights and protections granted to investors. This would make such legal frameworks efficient and transparent enough for reassuring and attracting investors.

2.3. **Tackling restrictions on private and foreign investment in infrastructure sub-sectors**

Sound implementation of policy frameworks for PSPI - especially PPPs - relies on the **coherence of PPP and procurement legislation with already existing investment regulations**, as well as with other relevant legal and regulatory provisions, such as laws governing concessions, competition, and most importantly, laws regulating specific economic sectors.

There are still outstanding **restrictions on private (especially foreign) participation or ownership in the infrastructure sub-sectors** of several SADC countries. Construction and maintenance of the railway network in Botswana is reserved for public investment alone, and closed to both foreign and domestic private investors; the same applies to the telecommunications sector in Mozambique; while in Tanzania foreign capital participation is limited to 65% for both fixed-line and mobile telephony and infrastructure. Even when such sectoral restrictions are set up for legitimate purposes, like the promotion of local entrepreneurship and citizen empowerment, they are likely to prevent PSPI policies from making the most of their potential. Regulations restricting access to various infrastructure sectors should be regularly reviewed and benchmarked against national infrastructure plans, in order to ensure that they stay consistent with broader governmental development strategies.

Furthermore, governments should consider any **alternative measures** that could achieve the same public objectives without establishing barriers to entry. Rather than excluding foreign participation outright, participation in infrastructure sub-sectors could be accompanied by business linkage and training programmes, as well as SME financing schemes to promote greater involvement of domestic suppliers in infrastructure projects. Should sectoral restrictions be left in place, they must be clearly set out and delineated in an easily accessible document, such as a “negative list” that groups all such restrictions. This clarification would contribute to the strengthening of the overall legal framework for PSPI, as it reinforces the predictability and readability of a country’s investment regime.

Sector restrictions on foreign investment are frequently combined with clauses within **public procurement legislations establishing preference margins** for domestic bidders to infrastructure contracts (such as Botswana’s Public Procurement and Asset Disposal Act and EDD Certificate Programme), and/or by privatisation policies reserving a certain share of divested public enterprises for citizens ex-ante (such as Botswana’s Privatisation Master Plan II, for 2013-2018). If the government does use local preferences in its procurement schemes, limiting these preferences to smaller projects and emphasizing the need to ensure value for money in infrastructure projects can help enhance the coherence and predictability of the government approach to infrastructure investment (for instance Botswana allows a maximum preference of USD 12,540 for citizens bidding in ICT projects, and no reservations or preferences are allowed in open international bidding for contracts exceeding USD 6.27 million).
**Ensuring consistency between PSPI promotion and investment regimes: KEY TAKE-AWAYS**

1. **Changes in government positions on private sector participation** in infrastructure (within a single administration but also across election periods and beyond party lines) are to avoid at all costs.

2. Governments should set up **clear and holistic long-term infrastructure and development plans** which firmly emphasise the need for and role of private sector participation, and which clarify the space for PSPI in each infrastructure sub-sector.

3. The **legal framework for investment** must contain a sound, clear and detailed provision that lays down the obligation for compensation in the event of an expropriation. Other core standards of treatment include a well defined **fair and equitable treatment provision**, and a **right to resolve through arbitration any disputes that may arise in the course of the project operation**. By clearly delineating investment protection principles, countries can also better protect themselves from costly cases of international arbitration.

4. Governments should consider **phasing out outstanding restrictions on private (especially foreign) participation or ownership in infrastructure sub-sectors**, and instead consider any alternative measures that could achieve the same public objectives without establishing barriers to entry. Publishing a regularly updated **negative list** of these sector restrictions can also enhance transparency for investors.

5. Where governments use **local preferences in infrastructure procurement schemes**, limiting these preferences to smaller projects and emphasizing the need to ensure value for money in projects can help enhance the coherence infrastructure of the government approach to infrastructure investment.

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3. **Making and implementing the choice on the mode of infrastructure delivery**

3.1. **Establishing a clear legal framework for the full spectrum of PSPI**

26. As highlighted earlier (see Box 1), private sector participation in infrastructure takes various forms, including public procurement, which itself encompasses PPPs. A well-designed policy framework for public procurement, in particular for PPPs, is a prerequisite for public authorities to choose between public and private provision of national infrastructure, and to conduct the evaluation of the desirability and feasibility of the wide range of liberalisation options available. In this light, procurement legislation must also establish **clear and consistent rules for transparent bidding and tendering procedures**. Sound overall public procurement frameworks are also necessary when the option of a private provision is retained to enable public authorities to choose best value for money (VFM) of competing private biddings.

3.1.1. **Legal and institutional framework for public procurement**

27. In order to ensure VFM and avoid disputes and contract cancellations, the choice among **different forms of public, private, and hybrid provision of infrastructure services** should be based on: assessing the comparative advantage of each actor in providing the service (including by calculating a Public Sector Comparator, which estimates the hypothetical risk-adjusted cost if a project were to be wholly financed, owned and implemented by government and any relevant SOE); designing a compensation mechanism for the public or private infrastructure provider, based on performance and accounted for in a transparent manner; and monitoring performance of both the SOE (or other forms of public infrastructure provision) and of private or PPP alternatives on a regular basis.

28. All five SADC countries covered by this study have made efforts to improve their legal and institutional framework for public procurement, especially in order to further encourage transparency and fairness in procurement processes. Sound public procurement policies can help determine whether and to
what extent PSPI can be implemented. Public procurement policies must cover, inter alia, the decision-making process: the decision to pursue PSPI should rely on an analysis of which investment method is likely to yield the most VFM, and will transfer risks to those parties best-equipped to manage them (as outlined in Box 2).

**Box 2. Non-traditional public procurement: process and associated capacity requirements**

Project preparation, negotiation and implementation are resource-intensive undertakings, especially in the case of PPP arrangements, which are more complex than conventional public procurement; as such the public sector requires specialised skills.

1. Government agencies must first ensure the VFM of PPP projects, which requires assessing all social and economic costs and benefits, including the cost to taxpayers – this is often harder than for traditional projects because of the long-term and often uncertain nature of government commitments (WB, 2006).

2. Evaluating the project’s fiscal implications, as well as other costs and risks, through the Public Sector Comparator (PSC) method can help determine whether the PPP route truly costs less than a public sector project alternative which could deliver the same services. Although PSC calculations can be manipulated and the PSC does not always yield a full estimation of the public cost of a project (which only becomes entirely apparent at financial close), this tool is nevertheless effective for introducing the necessary rigour in planning and developing procurement projects.

3. Based on this assessment, government agencies must select the most efficient bidder based on transparent criteria. Finally, once the candidate has been selected, government bodies and agencies have to negotiate balanced risk-sharing arrangements with the private party, taking into consideration the full life-cycle of the project. Accurate risk evaluation (through different forms of sensitivity analysis to take into account the probability of positive and negative project outcomes) is particularly useful at this stage, as it can influence the respective shares of risk and any options and flexibility for ex-post re-negotiation agreed with the private partner.

29. Legal frameworks for public procurement also structure the operationalisation of private participation in infrastructure projects. Many SADC countries have opted for an increasingly decentralised procurement process. In Mozambique for instance, procurement contracts are established in sector ministries and government agencies at national and sub-national levels. Procurement legislation has also generally been amended or updated to include the following measures for greater legibility and transparency: commitments to public announcements of tenders; standard or model contracting agreements; procurement appeal provisions; and objective eligibility requirements and evaluation criteria. In Tanzania, the Public Procurement Act of 2001 has been revised in 2004 and 2011, thus improving the previous legislation by further decentralising procurement functions to procuring entities, clarifying responsibilities for bodies involved in procurement processes, accelerating and harmonising procurement procedures with more recent legislation (such as the PPP Act 2010), and reinforcing monitoring and enforcement of regulations.

30. On the institutional front and as discussed in 3.2 below, public procurement acts frequently establish three types of authorities to oversee and manage the procurement process:

- **Central procurement authorities**, which approve the award of contracts by procurement entities, and channel and re-direct all tendering and bidding with tender administration committees into line ministries or at local levels. In addition to their daily operations, these agencies can undertake performance reviews of procurement entities, sometimes in collaboration with central auditing authorities (such as the annual reviews of the performance of Procurement Management Units by Tanzania’s Controller and Auditor General). Such bodies include Botswana’s Public Procurement
and Asset Disposal Board (PPADB), the Mauritian Central Procurement Board, or Tanzania’s Public Procurement Regulatory Authority (PPRA).

- **Procurement appeal authorities** with complaint and dispute resolution functions (such as: Tanzania’s Public Procurement Appeals Authority, PPAA; Botswana’s Independent Complaints Review Committee, ICRC; or the Independent Review Panel in Mauritius).

- **Privatisation authorities**, to oversee procurement that takes the form of outright or partial divestiture, and to monitor the performance of public entities once they have been privatised (such as the Public Enterprises Evaluation and Privatisation Agency, PEEPA, in Botswana, or the Consolidated Holding Corporation, CHC, in Tanzania). This function is also often carried out by central auditing authorities, which provide annual reports on the performance of privatised as well as state-owned agencies – notably in the infrastructure sector.

31. Together with Ministries of Finance, these bodies are responsible for securing an efficient use of public funds, and ensuring that public procurement is carried out in a fair and transparent manner. In addition these authorities must regularly interact with **infrastructure sub-sector regulators and competition authorities**, so as to ensure that the resulting infrastructure projects are rolled out in a competitive manner – with efficiency gains for end-users and minimum distortions in infrastructure markets (see Section 4).

32. The actions of the above authorities are often guided by **operation manuals**, such as the PPADB’s Manual on Standard Operating Policies and Procedures of Botswana, released in 2008. These manuals and guidelines notably address bid design, in view of minimising opportunities for bid rigging. Particularly when state-owned utilities are involved (whether as bidders or only as a mere clients of the procured infrastructure service – see Section 4), care must be taken to ensure that bidding criteria do not restrict market entry to new operators, hamper competition, or limit the innovation potential (and associated cost reductions) that tenders can bring.

33. **Standard procurement models** can also help in this regard: Mauritius is for example developing Framework Arrangements and Contracts to allow public bodies to procure from one or more suppliers on a fixed-rate basis, or from many suppliers through mini-competition. Such frameworks can simplify the administrative process, reduce the resource intensity of bid and contract preparation, and improve the efficiency of SOE management and service provision. Other attempts to deter malpractice in public procurement include the establishment of ‘black-lists’ of suppliers which are barred from future contracts: in this view, Mauritius has enacted the Procurement Suspension and Debarment Regulations of 2008 and the Procurement Disqualification Regulations of 2009; and Botswana’s PPADB has set up a Suspension and De-listing Committee which is likewise to consider the possibility of procurement ‘black-listing’.

3.1.2. **Legal and institutional framework for PPPs**

34. In complement to broader procurement laws, **PPP laws and Policy Statements** can in turn mirror governmental commitments to increase the role of the private sector in infrastructure investment. Over the past five years, governments have thus issued an array of ‘PPP Policy Statements’ (such as Botswana’s PPP Policy Guidelines 2009, Tanzania’s 2009 National PPP Policy, or Zambia’s 2008 PPP Policy), that are most often given full legal effect through the enactment of dedicated PPP legislations (such as the 2011 Mozambican PPP Law, Tanzania’s 2010 PPP Act and 2011 Regulations, Mauritius’ 2004 PPP Act and 2009 Regulations, etc).

35. **Such PPP laws also regulate more specific elements necessary to ensure the success of PPP contracts.** This includes, importantly, adequate upstream preparation of PPP projects. Indeed, although
private sector participation presents multiple advantages for infrastructure development (including efficiency-driven management capabilities, better allocation of inputs, greater capacity to innovate, and generally better VFM than traditional public procurement), these benefits are not systematic and may well lie out of reach if projects are poorly prepared and selected, prepared and negotiated. Aside from within dedicated PPP laws, the elements that concern project preparation can be embodied in sector-specific laws, in expanded procurement or competition laws, or in a general concession law (PPIAF, 2012). Indeed the enactment of a PPP Act is not clearly identified as an international “best practice”; nonetheless, adopting such a dedicated law can send investors a strong positive signal on public commitment to facilitating PSPI in infrastructure.

36. **Key elements of PPP laws** most frequently include: the definition and scope of a PPP (contractual attributes, size and duration of PPP contracts); the principles by which PPP contracts will be structured, procured, managed, and reported; the modalities by which projects risks will be allocated so that each party bears the risks they are best-placed to manage; and the institutional structure and processes established for managing and overseeing PPPs. Increasingly, as in Mauritius and Botswana, provisions are also made for addressing unsolicited bids for PPP projects. This is an area which deserves due consideration by all SADC countries – especially given that a high share of proposed PSPI projects in the region to date have arisen on an unsolicited basis.

37. While Mauritius, Zambia, Tanzania and Mozambique have all moved toward specific PPP legislation, in Botswana the 2009 PPP Policy and Implementation Framework has not yet been translated into legal provisions. There have been different time-spans for the creation of subsequent implementing PPP Regulations: while PPP regulations followed the adoption of the PPP Act by only one year in Mozambique and Tanzania, Mauritius developed the Regulations over five years. In Zambia the PPP regulations are still pending while the PPP Act was adopted in 2009. Delays in issuing subsequent implementing regulations should be avoided to give PPP laws full efficiency and practical applicability.

38. In order to give optimal results, **PPP legislations must also be consistent with pre-existing and broader-spectrum legislations on investment**, so that PPPs can fulfil their promises in sectors that have great potential for their development. PPP laws should also draw on existing procedures that already apply to concessions. Most important, PPP legislations and regulations must be fully in line with rules for traditional procurement processes to enable public authorities to make rational and informed choices between using PPPs or traditional infrastructure procurements. Governments that have a separate and specific PPP law should indeed consider the degree to which the requirements for traditional procurements forms and PPPs are aligned. In doing so, they would ensure that what is demanded from line departments using these forms of procurement does not create incentives to prefer a form of procurement over the other based on other grounds than VFM, efficiency and effectiveness.

39. More generally, **regulatory inconsistencies and legal loopholes**, which may generate confusion both for public authorities and for private investors, must be avoided at all costs. In Mauritius for instance, the disjointed nature of the legal framework for PPPs and its overlaps with legislation on public procurement has led to calls from policy experts to clarify the framework and suggest a reformulation of primary PPP legislation.

40. A first step for clarifying the legal framework is the **clear definition of PPPs in PPP and procurement legislations**. In Mozambique, the definition of the categories of PPPs falling in the scope of the law is too narrow and may thus exclude potentially effective forms of public procurement, such as Build Operate Own (BOO) arrangements where contractors normally have ownership rights in the project and can thus mortgage assets and secure better financing terms. Tanzania’s PPP Regulations, conversely, define PPPs very broadly, encompassing not only PPPs for infrastructure provision but also purely commercial activities that use public property (such as mineral and gas exploration). Botswana’s 2009 PPP
Policy and Implementation Framework likewise adopts a very wide definition of PPPs, in which immovable infrastructure but also movable assets (such as vehicle fleets) or services (such as social grant administration) are covered.

41. Such broad definitions of the legal forms of PPP agreements may be counter-productive for procurement entities wishing to take the PPP route, given that the structure and upstream preparation of PPP contracts are very different for physical infrastructure as compared to services or movable assets. A wide-scope PPP law creates generic model contracts and tender procedures designed to cover all types of public procurement, regardless of their specificity. Such an approach might actually reduce the suitability of tender procedures and model contract to infrastructure investment contracts, which require contractual models specifically crafted to suit the particularities of PPP arrangements in infrastructure sectors. A PPP law that encompasses an excessively broad range of forms of PPP agreements may also blur boundaries with more traditional procurements forms, thus making the VFM assessment more difficult.

3.2. Enhancing the co-ordination and capacity of agencies responsible for facilitating PSPI

3.2.1. Co-ordination of agencies in the institutional landscape for PSPI

42. As detailed in Box 2 above and Box 3 below, the shift towards PSPI places new demands on government agencies and involves the responsibilities of a multiplicity of bodies, from the Ministry of Finance (which should play a key role as a gatekeeper, ensuring that public procurement projects such as PPPs are affordable and that the overall investment envelope is sustainable), through central procurement and privatisation authorities, to procurement entities and dedicated PPP Units. Line ministries charged with various infrastructure sectors and public works, along with sectoral regulators of utility markets, also come into play. Co-ordination and coherence, as well as clear lines of accountability, across all of these actors is essential in order to efficiently manage the transition towards PSPI. The institutional roles and responsibilities of these agencies must be well defined and delineated. They must be given clear mandates and sufficient resources in order to ensure a prudent and coherent procurement process.

<table>
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<tr>
<th>Box 3. Institutional landscape for managing the public procurement process</th>
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<td>While procurement entities retain overall responsibility for identifying, developing, implementing and monitoring non-traditional procurement projects, PPP Units bring the technical advice and assistance necessary to support this process and ensure the quality and consistency of projects with the PPP policy. Both procurement entities and PPP Units are involved from the outset of project preparation (developing the project plan and timetable, carrying out feasibility studies, preparing detailed design of responsibilities, risk allocation, and payment mechanisms within the PPP contract, defining bid evaluation criteria, and selecting the procurement method – see Box 2 above). Following this initial stage, public authorities together with PPP Units must proceed with the bidding process and negotiate the contract details. Finally, at stages when the project is being implemented, several authorities (from sector regulators to competition authorities and to the concerned procuring entity) must regularly monitor the project performances and take appropriate actions in accordance with the terms of the PPP contract. Therefore while certain agencies (such as procurement authorities, which oversee the tendering process and assess and approve contracts based on government requirements) are only involved in the initial stages of the project, other agencies (such as sectoral regulatory agencies) intervene mostly in an ad-hoc manner once the private party begins operations. Meanwhile PPP Units and procurement entities are thus responsible for preparing and managing the PPP project throughout the life of the contract. While there are several institutional options for implementing a PPP programme besides establishing a PPP Unit, this has been the preferred route for the five SADC countries examined in this report. In line with PPIAF</td>
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7 For instance, PPP development and prioritisation could remain entirely in the hands of line ministries or contracting entities, under the guidance of sector working groups (PPIAF, 2012).
recommendations and as has been successfully done in South Africa, dedicated PPP Units are most often located within Ministries of Finance, which are well-placed to co-ordinate and support efforts of each line ministry. Locating PPP Units with Ministries of Finance is also likely to strengthen the authority and ability of such Units to coordinate with the various government entities involved in developing and implementing PPPs. Ministries of Finance, under the aegis of which budget officials are in charge of controlling the fiscal feasibility of projects, are best-placed to undertake best VFM assessments. In addition, the fact that all projects have to go through the Ministry of Finance for approval of their fiscal implications lowers the risk for PPP Units to be bypassed in procurement processes.

Figure 1: Implication of public agencies in the roll-out of public procurement infrastructure projects

In parallel with the establishment of dedicated PPP units, various other specialised entities are often involved in PPP projects. In Tanzania, a second PPP Unit (the Coordination Unit) has been established in the Tanzania Investment Centre. This Unit is tasked with promotion and attraction of PPP investors, while the PPP Finance Unit ascertains the affordability, fiscal consequences and VFM of proposed PPP projects. In Zambia, meanwhile, the government established a PPP Council and a PPP Technical Committee that work closely with the PPP Unit. Likewise Mauritius counts not only a PPP Unit but also a PPP Committee and a Public Procurement Office (which provides suppliers and bidders with legal guidance and clarifications, including for PPP projects).

The multiplicity of actors within the institutional framework for public procurement can however generate a confusion of accountability, not only in the case of PPPs but for public procurement more broadly. Thus in Mauritius, bid evaluation for major contracts falls under the responsibility of the Central Procurement Board rather than the procuring entities themselves – which in the implementation stage results in public bodies being answerable for awards that they did not make themselves. In Tanzania, the government is considering merging the two existing PPP Units as of 2013, in the interest of greater institutional clarity and effectiveness.

More crucially, a clear functional separation should be ensured among public agencies. Institutions that are involved in project preparation and decision-making should have no control, inspection and investigations functions. Likewise, procurement authorities should refrain from intervening in the project preparation process. The high number of entities with oversight functions for procurement and
PPPs can constrain rather than facilitate the relationship between the public and private partners, generating confusion and misunderstanding on the part of investors.

3.2.2. Capacity of agencies charged with managing PSPI

46. In addition to the co-ordination needs detailed above, the capacity of these public agencies must be sufficient to adequately address bid selection, contract preparation, and project monitoring and roll-out. Public authorities seeking to attract private bidders for projects must demonstrate that these projects are bankable – that, that all feasibility studies (covering strategic, technical, economic, social, environmental, and financial due diligence implications) have been completed with a positive conclusion (AfDB). Very often however, the entities involved in PPP projects lack the capacity both to conduct such detailed studies, and to negotiate sound and equitable infrastructure contracts on an equal basis with the private sector. PPP Units often also suffer from insufficient staffing. In fact, staff members of PPP Units of most SADC countries combine their position at the Unit with full-time jobs in other line ministries.

47. Poor capacity of agencies tasked with project preparation and roll-out is partially responsible for the failure of several attempts at PPPs and divestiture in the past. In Tanzania, for instance, the failure of the railway concession (signed in 2006) is attributed to poor risk-sharing in the contract design, which suggests that public authorities did not have sufficient resources and skills to adequately prepare the project and negotiate the concession contract. Low government support from the project development stage to the implementation period, and poor monitoring and evaluation systems, may also contribute to explaining the unsuccessful experiences of privatisation and PPP in the air transport sector (Air Tanzania Company Limited and Kilimanjaro International Airport). Likewise in Mozambique, inefficiencies in the procurement process and poor capacity of procurement entities (including delays in procurement and payment, inadequate pre-tender investigations resulting in inaccurate tender documentation) have meant that PSPI has seldom delivered the expected cost and efficiency gains.

48. Especially where brown-field investment is concerned, it is instrumental for the public parties to be well-informed and not to exploit information asymmetries. Inaccurately communicating on the existing state of infrastructure network to private bidders otherwise hampers cost recovery and can lock the government into inefficient contracts – for instance the Dar es Salaam PPP experience in the water sector failed in part because the private operator did not have access to sufficient information on the network quality, and therefore underestimated the costs necessary for rehabilitating the infrastructure. Similarly in Mozambique, erroneous pre-construction quantitative and financial estimates on behalf of public authorities have led to miscalculations and increased costs for the private partner.

49. PPP laws and regulations can be perceived as overly complex and burdensome for ill-equipped procurement entities. Again in Tanzania, many procurement entities have preferred to finance projects through credit rather than by PPP since the enactment of the 2010 PPP Act, as they fear that the upstream PPP preparation process (which must transit through both the PPP Co-ordination Unit and the PPP Finance Unit, and involves several feasibility studies) will take too long. There is therefore currently a gap between the provisions made by Tanzania’s 2011 PPP Regulations, and the existing implementation capacity.

50. A promising approach adopted by the Tanzanian government to resolve this problem is to identify a few small-scale and low-risk pilot PPP projects in the country, with the aim of familiarising public officers with the concrete preparation and roll-out of such projects. This endeavour completes the elaboration of PPP Implementation Guidelines, which will aim to make Tanzania’s current PPP legislation more action-oriented and ‘reader-friendly’ for procurement entities. Similarly other countries have accompanied the enactment of procurement and PPP legislation with operational guidelines for PPP
officers and procurement entities (such as Botswana’s PPP Guidelines of 2009 or Mauritius’ PPP Guidance Manual of 2006).

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<th>Making and implementing the choice on the mode of infrastructure delivery: KEY TAKE-AWAYS</th>
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<tr>
<td>1. <strong>Public procurement legislation</strong> must establish clear and consistent rules for transparent bidding and tendering procedures, and must also guide the choice among different forms of public, private, and hybrid provision of infrastructure services. This includes consideration of VFM, financial sustainability, and risk analysis among others.</td>
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<td>2. Governments could benefit from establishing dedicated <strong>PPP laws</strong>, which can help regulate more specific elements necessary to ensure the success of PPP contracts. These legislations must be <strong>consistent with pre-existing and broader-spectrum legislations</strong> on investment, and especially on traditional procurement processes. It is important to <strong>make these laws ‘user-friendly’</strong> and to avoid excessive complexity, which can otherwise deter public entities from adopting the PPP route.</td>
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<tr>
<td>3. As a first step for clarifying the legal framework, PPP and procurement legislations must include a <strong>clear definition of PPPs</strong>. This can help guide procurement agencies and can also serve to reflect the government’s policy stance with respect to PSPI.</td>
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<td>4. The <strong>institutional roles and responsibilities of agencies</strong> responsible for design, negotiation and roll-out of infrastructure procurement (whether using the traditional procurement, the PPP, or the privatisation route) must be well defined and delineated. They must be given clear mandates and sufficient resources in order to ensure a prudent and coherent procurement process. <strong>Multiplication of the number of agencies</strong> should also be avoided so as to avoid blurring lines of accountability.</td>
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<tr>
<td>5. Governments should provide these agencies (including PPP Units) with <strong>sufficient resources</strong> to attract top-level staff with the necessary expertise. In addition to <strong>capacity-building workshops</strong>, beginning with a pipeline of <strong>small-scale, low-risk ‘pilot’ PPPs</strong> can help build the necessary public capacity and experience.</td>
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4. **Creating a level playing field between SOEs and private providers of infrastructure services**

51. Among SADC economies, **SOEs are of crucial importance in the development of infrastructure**. State-owned financial institutions can be responsible for financing and/or underwriting infrastructure projects. SOEs also play a primary role in the provision of infrastructure services – either as monopolistic or oligopolistic utility providers, clients or bidders for infrastructure procurement, or as the public sector counterpart in PPP projects. Both as investors in new infrastructure capacity and as actors of liberalisation processes that aim at attracting private investors, SOEs are a critical component of infrastructure development in Africa.

52. Utility markets in SADC countries are characterized by an **interdependency of SOEs and the private sector, as they are both mutual partners and competitors**. Increasing PSPI therefore requires improving SOE efficiency, which eventually paves the way for PSPI; and opening infrastructure sub-sectors to private participation, while ensuring that the private sector can operate on a level playing field alongside SOEs.

4.1. **Improving SOE governance to pave the way for PSPI**

53. **SOE efficiency and good governance**, which play a crucial role for facilitating PSPI, vary across SADC countries. In Botswana although certain public enterprises have recorded losses (such as Botswana Power Corporation), according to the 2011 Budget, most of them perform satisfactorily from a financial standpoint: the total dividend paid to Government by SOEs in 2010/11 amounted to USD 14.7
million, led by Botswana Telecommunications Corporation. By contrast in Tanzania, verification of the performance of 170 privatized SOEs in 2012 revealed that 41 were making profits and 66 making losses. Such inefficiently-run SOEs impose a drain on public finances – the Tanzanian Government was forced to bail out six SOEs in 2008/09, at a cost of USD 36 million.

54. Financial balance aside, **ineffective SOE management can also result in poor infrastructure maintenance, service quality and network coverage** – which can in turn deter PSPI. In Mozambique for instance, the two unsuccessful PPP experiences in the transport sector (railway concession and road maintenance) have been attributed to poor performances of public co-contractors responsible for the rehabilitation and maintenance works. More public resources should have been dedicated to monitoring the responsibilities of the public parties in the PPP contracts and ensuring that performance targets were met. While SOE management can impact more or less positively fiscal sustainability or service delivery; it can also influence both entry and operations of private investors in utility markets.

55. The functioning and efficiency of SOEs in infrastructure can be enhanced in several ways, including through **more stringent reporting and corporate governance requirements for SOEs**. SOEs should not be exempt from the application of general laws and regulations, including high quality accounting and auditing standards. They should also have flexibility in adjusting their capital structure, and should face competitive conditions regarding access to finance. For instance under the First Schedule of the Financial Reporting Act and the Statutory Bodies Act of Mauritius, SOEs must comply with the same accounting and reporting standards as private companies. In Mauritius as in several other SADC countries, Codes of Corporate Governance moreover include SOE-specific chapters or clauses. By contrast Botswana lacks a set of institutionalised standards of practice for SOEs; nor is uncovering performance and revenue details mandatory for these enterprises. Such provisions are however highly necessary, especially as the governance challenges faced by SOEs are distinct from those faced by private enterprises.8

56. SADC governments could also consider greater **functional separation of infrastructure sub-sectors**. This can help to identify in which areas profits or losses are made, and can therefore shed light on what operations the SOE is best-suited to shoulder, as opposed to the functions that would be best left to private actors. This separation can help SOEs to better focus their staff and resources on delivering higher value-for-money and quality infrastructure services to the general population. Functional separation and the associated efficiency gains can also better prepare SOEs for potential competition once infrastructure sectors are liberalised, and can pave the way for privatisation in functions deemed better-suited for private sector provision. For governments seeking to privatisate an infrastructure SOE, improving the latter’s corporate governance and thus efficiency, can also reduce the need for large-scale restructuring and therefore make the prospect of taking the SOE over more attractive for potential private investors.

4.2. **Opening infrastructure sub-sectors to private participation – the example of the power sector**

57. SADC countries have made several attempts to **reduce the domination of SOEs in oligopolistic utility markets**, notably through: increasing private participation in SOEs via divestitures and/or PPP projects such as management, lease and concession contracts; and opening infrastructure sub-sectors to new operators, especially in the case of power provision. Yet to date few of these attempts have been fully successful, or generated the expected efficiency gains; a few lessons learned from past experiences in the power sector follow.

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58. A first step towards opening infrastructure sub-sectors to private participation consists in reforming sector-specific legislation. For example in the power sector, most SADC countries covered by this study have drafted legislation which opens the power generation to independent power producers (IPPs). Meanwhile power transmission and distribution functions remain under the monopoly of the state-owned entity which purchases the power from the IPPs, under the ‘single-buyer model’. The IPP model was introduced at a very early stage in Mauritius, which passed the Independent Power Producers Act and Central Electricity Board Act in 1964; five IPPs operate in the country since, and a public utility (the Central Electricity Board) purchases 60% of total domestic power requirements from them on a competitive basis.

59. The design of clear and predictable procurement rules or of standard power purchasing agreements (PPAs) is necessary to protect investor as well as consumer interests. In fact, in the absence of competition in the transmission and distribution stages, there is a risk that the monopoly distributor might excessively influence the supply price and thus the risk-return profile of energy infrastructure investment, or otherwise pass an excessive fraction of the energy purchase costs through to its customers. The absence of a standard PPA can indeed discourage IPPs from entering the production segment, as contracts which are negotiated on a case-by-case basis do not provide them with enough information and predictability regarding key elements of market structure. In Mozambique the off-taker agreements set with the public utility (EDM) do not provide a measure of assurance that tariffs will be stable or that IPPs will receive a minimum return on their sales; as a result the country counts only one major IPP although the generation segment was liberalised in 1997. In Tanzania, while there is a standard model for calculating PPAs, this relies solely on the ‘avoided costs methodology’ and may thus deter renewable energy IPPs (which face higher production costs) from entering the grid.

60. To the extent possible, SADC countries could benefit from further liberalisation of the power sector – including opening the power distribution as well as transmission segments. As highlighted Section 5, building on regional co-operation will be important in this regard: while some countries (such as Mauritius and Botswana) have not opened their power distribution sector because of the small size of their domestic markets, cross-border projects could make more space for multiple private operators within distribution and transmission segments.

4.3. Pricing and regulation of utility markets

61. In many SADC countries basic utilities such as water or electricity are intentionally under-priced in the interest of end-user affordability. In Tanzania, prior to increases in electricity tariffs in 2007, the cost of service to the monopoly power utility TANESCO exceeded its revenues by 40%. Meanwhile in Botswana, while the state-owned Botswana Power Corporation is relatively efficient (with distribution losses of less than 10%), tariff rates are maintained below cost recovery levels and BPC therefore covers only 88% of its costs on average. When BPC’s operating costs rose by 40% in 2011, the company registered net losses of USD 16.4 million since tariffs could not be modified – this has increased its dependence on government subsidies. In addition to their fiscal costs, infrastructure pricing policies that deprive SOEs from commercial revenues and rely on subsidies also affect predictability and cost recovery for private investors.

62. While broadening the access of poorer citizens to electricity is a crucial objective to uphold, artificially low tariffs and production subsidies for SOEs are not the only available option for governments and appear not to be the most efficient way to address the power access gap. In fact, they do not automatically generate the expected socially desirable effects. In Tanzania for instance, electricity access remained geographically constrained to areas inhabited by richer segments of the population – as a result the low tariffs, backed with extensive public funding, acted mostly as a regressive subsidy for the rich rather than facilitating access for the poor. In view of these various risks and fiscal costs, production
subsidies could potentially be replaced by consumption subsidies while allowing SOEs to operate on a more commercial basis. This would help level the playing field for private operators, and also allow public utilities to better mobilise adequate resources to sustain existing supply systems or invest in the rehabilitation and expansion of infrastructure.

63. Infrastructure sector regulators play an important role in keeping utility markets competitive (when they have been liberalised), as well as in tariff-setting. The extent to which these regulators can make their decisions independently of direct ministerial or SOE control can strongly influence the quality of SOE operations, and has a considerable impact on the ability and likelihood of private investors to participate in utility markets. To ensure competitive neutrality, government-linked companies should operate, to the largest extent feasible, in the same regulatory environment as private enterprises. The independence of infrastructure regulators is therefore crucial for improving the efficiency of infrastructure sub-sectors.

64. Sector regulators have been set up in many SADC countries, and their independence varies from country to country as well as within different infrastructure sub-sectors within the same country. Typically, the ICT sector benefits recent reforms towards more independent regulation, with a direct link to increased participation by the private sector:

- **In Mauritius**, competition in ICT remained sub-optimal until 2011, partly because of a licensing policy that confined operators to rigid categories of service provision. In response to this, the ICT Act was amended in 2011 and gave greater power to the ICT Regulator (ICTA) to proactively intervene in prices. ICTA is now an independent regulatory agency and can impose specific conditions on the public operator where it identifies risks of abuse of market power. By creating a level playing field for all operators and increasing the predictability of pricing in the sector, the empowerment of ICTA has led to unprecedented growth (of almost 15% annually) in the sector.

- **In Zambia**, while the 1994 Telecommunications Act opened the sector to private capital and created a sector regulator (the Communications Authority of Zambia, CAZ), the latter was overseen by the same ministry as the public utility ZAMTEL, and reportedly provided a regulatory environment that favoured the SOE. As a result private investor interest was low and ZAMTEL remained the main operator until 2009. It was only with the creation of an independent regulatory authority (ZICTA) in 2009 that the investment environment truly became competitive and attractive for private operators: Zambia now counts three ICT operators, and a fourth may enter the market soon.

65. By contrast, regulatory independence has been scarce in the energy and water sectors of many SADC countries:

- **In Zambia** although the cost of producing power is among the lowest in Africa, the tariffs charged to consumers are below full cost-recovery, severely impeding private investment (there is currently only one major IPP in Zambia). While over the past few years the regulator (ERB) has begun to approve tariff increases, the pricing policy remains unpredictable: the ERB is expected to attribute

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10 See: http://jec.mu/Memorandum%20on%20Budget%202012.pdf
12 See: http://www.globaltimes.cn/content/738930.shtml
tariff increases to the state-owned company ZESCO based on its performance, as tariff increases have not yet been accompanied with performance improvements.

- **In Mauritius** the Central Electricity Board (CEB, a single-buyer SOE with monopoly over energy transmission and distribution, and which reports to the Ministry of Energy and Public Utilities) is also the primary body responsible for regulation of the electricity sector, creating a possible conflict of interest for price-setting and market power assessments. Any change in its tariff structure needs formal approval of the Government.

- **In Tanzania** while electricity tariffs have traditionally been set by the regulator EWURA, the public utility TANESCO had significant clout when applying for tariff increases: in 2007 TANESCO applied to EWURA for a 40% tariff, following which TANESCO’s tariffs have risen by an estimated 70% over 2008-2012. Tanzania’s electricity prices now far outstrip those of neighbouring countries, but have not been accompanied by significant improvements in service delivery. In mid-January 2012 TANESCO once again requested a tariff increase (of 155%) on the grounds that operational costs had risen due to its efforts to address power shortages. EWURA and the Government conceded to an increase of 40.29%, sparking considerable frustration among consumers and producers.

66. In a context of increasing energy capacity gaps, and recognizing the role that independent regulation can play for improving efficiency and attracting private participation in energy markets, several of these countries are now moving towards the establishment of better empowered electricity and water regulators. Mauritius is considering the creation of an independent Utility Regulatory Agency which would take over the CEB’s regulatory role, and since 2012 Botswana has established a taskforce to explore opportunities for creating the Botswana Energy and Water Regulator (BEWR). Meanwhile, in Tanzania the government is seeking to better empower the autonomy of EWURA from TANESCO’s influence, and rather than relying on TANESCO’s cost estimates EWURA is currently developing its own methodology for tariff-setting in distribution, generation and transmission.

4.4. **Co-ordination between infrastructure regulators and competition authorities**

67. In enhancing the capacity and independence of sector regulators, it is important for governments to keep in mind the broader institutional framework of infrastructure regulation and governance. This includes co-ordinating the activities and authority of sector regulators with those of other authorities, which may also have oversight on market structure and pricing policies – such as competition authorities. In the case of privatisation or unbundling of vertically integrated SOEs, the competition authority notably has a role in creating a level playing field between SOEs and private actors (by denouncing abuse of dominant market position by the SOE, but also disproportionate subsidisation by Government) and ensuring that the process is adequately carried out (and that private bidders are not, for instance, offered market exclusivity clauses). Competition authorities require adequate political support and independence to exercise effectively, in particular when they must challenge vested interests in utility markets. Mauritius is a strong performer in this regard, as two competition cases launched since 2009 have involved as the main parties state-owned infrastructure providers (Air Mauritius and Mauritius Telecom).

68. **Clear roles and responsibilities shoudered by both the sector regulator and the competition authority therefore need to be defined.** For example Section 66 of the Mauritius Competition Act provides for the Competition Commission of Mauritius (CCM) to establish Memoranda of Understanding with infrastructure sector regulators; this can allow to better govern their respective responsibilities, and to engage in practical co-operation (including the use of specific regulator expertise in CCM investigations). As concerns enterprises that are subject to sectoral regulations (mostly in the infrastructure sectors), the CCM’s Guidelines on General Provisions emphasise that actions taken by these enterprises are not exempt
from competition considerations – even when those actions are consistent with sector regulators’ directions. That is, if enterprises comply with regulatory decisions in a manner that distorts competition while there were more competitive alternatives, the CCM could find the behaviour to constitute a restrictive practice and could impose remedies or fines. CCM has also signed MOUs with the Independent Commission against Corruption (ICAC) and the Public Procurement Office (PPO), which provide investors with further guarantee that their participation in domestic utility markets will follow a competitive and transparent process.

Creating a level playing field between SOEs and private providers: KEY TAKE-AWAYS

1. In the interest of reducing inefficiencies in infrastructure provision and of attracting more private actors to participate in infrastructure markets, the governance and functioning of infrastructure SOEs should be enhanced. This can include stronger rules for corporate governance and financial reporting by SOEs, as well as engaging in functional separation of infrastructure sub-sectors (notably in energy and water).

2. A first step towards opening infrastructure sub-sectors to private participation consists in reforming sector-specific legislation (for instance making more space for independent power providers in the energy sector).

3. Governments opting for the single-buyer model in power markets must ensure that this follows clear and predictable procurement rules or standard power purchasing agreements (PPAs). Beyond the single-buyer model, governments should also consider opening the power distribution as well as transmission segments to private actors – a move which can be facilitated through the regional integration of national power grids.

4. Especially in the power and water sectors, production subsidies for SOEs could potentially be replaced by consumption subsidies. This would continue to guarantee end-user affordability, while allowing SOEs to operate on a more commercial basis and leveling the playing field for private operators.

5. Based on successful examples of independent regulation in SADC ICT sectors, governments should accelerate the move towards establishing better empowered electricity and water regulators. These regulators should notably have the capacity for calculating and setting tariffs in an independent manner.

6. Infrastructure sector regulators should also have sufficient power and capacity to regulate the structure of infrastructure markets – and notably to highlight and mitigate risks of dominant abuse of monopoly power by any single actor. In this regard sector regulators should co-operate with Competition Authorities in a regular and constructive manner, including through a clear delineation of responsibilities.

5. Regional co-operation to overcome demand challenges for infrastructure services

69. Infrastructure development in Sub-Saharan Africa is commonly impeded by the shallowness of utility markets, which provide few profitable investment opportunities and thus reduce opportunities for private sector participation. In the power and water sectors, this is largely due to grid development issues, coupled with low solvent demand. In addition, several countries such as Lesotho, Swaziland, Seychelles, Botswana, Mauritius or Namibia have small populations of less than 3 million people. Constrained domestic market size makes it essential for such countries to engage in co-operation on cross-border investment projects – absent which, markets will remain too small to attract a large number of IPPs, and liberalisation efforts may not succeed in enhancing PSPI. Regional projects enable cost efficiency and economies of scale to be reached, and create more space and business opportunities for operators. Meanwhile outside of power and water projects, co-ordinated transport projects can secure efficient links across different modes of transport, and reduce the export costs across all SADC countries.

70. In recognition of these factors, SADC Member States are placing increasing priority on regional co-operation on infrastructure projects – as reflected in the elaboration of the SADC Regional Infrastructure Development Master Plan. Section 5.1 below gives a brief overview of key opportunities
for regional co-operation on infrastructure, in particular as concerns facilitating private participation in these projects. Section 5.2 addresses the implications that such projects have in terms of regulatory harmonisation and financing arrangements — similarly to projects at national level, cross-border projects require capable and sufficiently funded project management structures, which can address the economic and financial aspects of all upstream and implementation phases of the project. The latter considerations in fact often gain in complexity when more than one country is involved.

5.1. Highlighting selected opportunities for regional infrastructure integration

71. One of the main regional infrastructure opportunities in the SADC lies in the transport sector. In landlocked countries, such as Zambia and Botswana, the development of transport infrastructure is particularly crucial for the facilitation of trade. Benefiting from efficient and reliable transportation systems, especially rail and road corridors linking the countries to sea ports, would significantly reduce the price of imports and would in turn increase the competitiveness of exports. Efficient transportation networks would allow Zambia and Botswana to strengthen their position as regional transport hubs. Zambia, which is already a central hub of the North-South Corridor, could for example become the cheapest route of the East-West corridor if it were equipped with more inland and dry ports, as well as air cargo hubs.

72. Coastal countries, such as Tanzania and Mozambique, also have strong potential for regional transport infrastructure development. Tanzania, endowed with 800km of Indian Ocean coastline and surrounded by six fast-growing hinterland neighbours, is well-located to address trade needs in the region and could serve as an entrepôt for its landlocked neighbours (Burundi, Rwanda, Uganda and Zambia). Indeed one of the projects of the SADC RIDMP will tap into this locational advantage: the Mtwara Corridor is to be jointly developed by Tanzania, Zambia, Malawi and Mozambique in view of attracting private investment the resource rich sub-region, and of establishing efficient transport links to Southern Tanzania’s Mtwara Port (AfDB). Meanwhile Mauritius, which is situated at crossroads between Asia and Africa, has a strong potential to transform its capital into a regional shipping hub.

73. Mozambique is another important regional nodal point, as it sits along three transport corridors linked to neighbouring countries. In addition, the construction of two submarine ICT cables (Seacom and EASSy) offers opportunities to create domestic backbone network linking to regional cables. The capital needed for such infrastructure development projects could come from mining companies investing in the country (not only in aluminium but also in the rapidly expanding coal sector). Crucially, this will require a guiding framework to co-ordinate infrastructure investments across private ‘mega-project’ investors. A related challenge – shared with other mineral-rich countries such as Botswana and increasingly Tanzania – will be to make mining companies’ infrastructure investments (power plants, transport and storage infrastructure) benefit local populations and create knock-on effects on non-mining sectors.

74. The power sector also holds considerable opportunities for infrastructure development. With an increasing power demand, a primary challenge for the SADC region is the expansion of power generation and transmission capacity in order to improve security and reliability of supply and cater to future economic and social growth. It is estimated that the region may be losing up to 4% of GDP annually as a result of unmet power demand reducing economic investment, productivity and employment (SAPP pool Plan, 200913). Large power projects that are not economically viable at individual country level could become highly valuable at a regional scale. A regional approach to power development through closer

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13 The SAPP Pool Plan 2009 has been commissioned by the SAPP Coordination center and prepared by Nexant (an American consulting firm) with World Bank support. The Plan constitutes a revision of the original integrated generation and transmission expansion plan commissioned by the SAPP Planning Sub-Committee in 2001 and prepared by the Purdue University with USAID support.
integration of Southern Africa’s power pools therefore appears to be a critical path towards meeting the energy needs of the region.

75. In this context, the **impediments faced at country level could be overcome by interconnecting national grids**. This would allow countries with large energy stocks to tap into their potential and to export energy surpluses to neighbouring countries facing supply deficits. It would also enable these countries to better address electricity access challenges for their own populations at home – indeed due to low profitability of expanding the network to cover the domestic market alone, to date countries with high energy potential have under-invested to the point that even domestic consumers lack reliable energy access: in 2009, the percentage of the population with access to electricity in Zambia, Tanzania, and Mozambique was respectively 12%, 14% and 19% against 31% on average in Sub-Saharan Africa (World Development Indicators, 2013). These access rates contrast with the abundant hydropower resources available in these three countries. By exploiting its 6000MW of untapped hydropower generation capacity, Zambia could not only satisfy its domestic demand but also become a major power exporter to the Eastern and Southern African regions. Similarly, Tanzania could tap into its hydropower and export electricity across Southern Africa. Mozambique also has vast hydropower potential, estimated at 12,500MW a year; the country already ranks among the top six power exporters in the continent (Eberhard et al., 2011), and presents even higher investment opportunities.

5.2. **Tackling co-ordination and financing risks in regional infrastructure projects**

76. In spite of this promising potential, it is vital not to under-estimate the complications that cross-border projects can pose due to overlapping authority and sovereignty issues. Indeed the interplay of challenges faced by private investors is exacerbated at regional level. The preceding sections of this paper shed light on how regulatory bottlenecks can be addressed by **harmonising countries’ domestic legal and regulatory frameworks for PSPI**. Countries can for instance make progress towards common criteria for bid selection and for evaluation of value-for-money and PPP viability. Joint projects could also be facilitated via shared standards for oversight and transparency of the procurement process.

77. To avoid ‘free-rider’ risks during project implementation, it is moreover crucial for the governments of all countries involved to **commit ex-ante to a sufficient allocation of budgetary resources, and to agree on shared development priorities** that should be upheld throughout the course of the project. For instance the Shire Zambezi Waterway Project between Malawi, Zambia and Mozambique (for which the feasibility study is currently under completion) has run into controversy because of conflicting government objectives: although the project is more of a development priority for Malawi, most of the waterway concerned runs through Mozambique. Conversely the Ruzizi III Hydro Power Project involving the DRC, Rwanda and Burundi provides an example of strong country cooperation and risk-sharing in the upstream preparation phase (see Box 3). Country collaboration in this regard can be further supported by inter-country Memoranda of Agreement, as well as by mechanisms for regular dialogue between the public parties involved (AfDB).

78. Nonetheless more micro-level issues that **affect cost-recovery and bankability in infrastructure contracts must also be tackled**. At the viability study stage, public authorities must jointly investigate the costs and benefits of the project on all countries concerned – including by assessing: the extent of inter-country and sub-regional cooperation to be derived; the extent and number of sub-regional beneficiaries; and the potential to maximise economies of scale and reduce unit costs of services to end-users (AfDB). More downstream concerns must also be considered – for example facilitating cross-border power purchase agreements (PPA) requires the alignment of national pricing structures (as illustrated by the case of the Mmamabula project between South Africa and Botswana, see Box 3).
Moreover once the project is operational, co-operation across sector regulators and between competition authorities becomes necessary in order to ensure that the playing field for the private investor remains level in both countries. In this respect it is also important for countries to agree on common criteria for monitoring project implementation. Likewise countries should agree ex-ante on the means of recourse should the private partner fall short of its obligations – particular attention during drafting of the contract should thus be placed on clauses for dispute resolution and possible re-negotiation.
In addition to regulatory co-ordination and careful upstream preparation of joint infrastructure projects, securing PSPI in these projects will also require an enabling environment for project financing. Indeed while PSPI does rely to some extent on financing by the private investor, public parties also have a role to play in sharing the financial costs of the projects. Yet with the exception of South Africa, SADC capital markets remain illiquid and shallow. For countries with no currency instruments (such as Mauritius, among others), public debt is the only way to finance the public share of infrastructure projects. But although the domestic debt market has been growing fast in Sub-Saharan Africa during the past decade (domestic debt as a share of GDP doubled over 2001-2008, from an average of 11% to about 22.4%), among SADC countries this share has only regularly exceeded 30% in the Seychelles and in South Africa. The development of bond markets thus remains very incipient, with most government securities being very short-term, with low turnover, and with very little activity in the secondary market. Sustainably financing large-scale infrastructure projects will therefore require consolidation of financial markets in the region.

Indeed, in response to the challenge of low national scale, several African countries are attempting to tackle financial development through regional integration. Liberalization of inward portfolio flows since the early 1990s and increased interest in regionalism has increased the number of cross-border listings in these countries. The COSSE (Committee of SADC Stock Exchanges) has attempted to forge an integrated network of exchanges based on harmonising listing requirements, and since 2000 all SADC exchanges had aligned their listing requirement on those of the Johannesburg Stock Exchange (JSE). Today over 70% of the Namibia Stock Exchange’s listed equities are in fact dual listed on the JSE. Regional integration of markets is expected to diversify risk, make the exchanges more competitive and efficient, and to pool resources, which can increase liquidity and in turn make exchanges more attractive for international investors and for infrastructure and private sector development.

Alongside domestic and regional capital markets, a wide variety of financing instruments (beyond traditional grants and loans) are being made available for infrastructure projects in Africa on behalf of development partners and DFIs. Such instruments include: investment funds; blended grants (which combine concessionary financing with debt finance from International Financial Institutions or market-based sources); risk mitigation instruments (including credit guarantees and partial risk guarantees); and export credit agency instruments (which can provide export credits for their home companies overseas, and can also provide insurance and risk guarantees for investments abroad). All of these instruments enhance the volume of resources available for infrastructure projects and thereby help to mobilise private investment.

To further leverage the role that such financing can play, it would be important for development partners and DFIs to further co-ordinate and align the financing options that they make available for infrastructure projects in the region. While certain DFIs (notably the African Development Bank) do propose infrastructure financing loans in local currency, SADC countries will in turn need to develop prudent strategies to mitigate the foreign exchange risks associated with such financing – especially in a context of relatively volatile global capital markets.
Regional co-operation to overcome demand challenges for infrastructure services: KEY TAKE-AWAYS

1. Regional co-operation on infrastructure development holds many opportunities for SADC countries, in the interest both of end-user access and of private sector attraction. Regional projects enable cost efficiency and economies of scale to be reached, and create more space and business opportunities for operators. Regional infrastructure will also be crucial for greater export competitiveness of the SADC region.

2. To make the investment landscape more legible for private investors in cross-border projects, countries will need to harmonise their domestic legal and regulatory frameworks - for instance by adopting common criteria for bid selection and for evaluation of VFM, aligning their national standards for oversight and transparency of the procurement process.

3. On the institutional front, mechanisms for regular communication and co-operation across all involved agencies (including procurement entities and authorities, PPP Units, as well as sector regulators and competition authorities) will need to be established. This can help overcome co-ordination challenges when more than one country is involved in the infrastructure project.

4. To avoid ‘free-rider’ risks during project implementation, governments of all countries involved should commit ex-ante to a sufficient allocation of budgetary resources, and agree on shared development priorities (for example within Memoranda of Understanding, and through established procedures for cross-country dialogue).

5. Governments must also jointly address ex-ante the elements that affect cost-recovery and bankability in infrastructure contracts. Among other factors, this may require: evaluating the costs and benefits for all countries concerned (and using common metrics) at the viability study stage; aligning national pricing structures (especially for power purchase agreements, but also applicable in the case of cross-border toll roads); and agreement on criteria for monitoring project implementation (including means of dispute resolution or contact re-negotiation, should the case arise).

6. SADC governments will also need to enhance the available options for project financing. In the long-term, this can involve greater regional integration of domestic capital markets, to address challenges of small national scale. In the shorter term, governments should raise their awareness of available financing instruments (beyond traditional grants and loans) that are offered by development partners and DFIs – so as to tap into these most effectively. In turn, development partners and DFIs should further co-ordinate and align these financing options among each-other, in line with the infrastructure development priorities of the SADC region.
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