Chapter 4

Infrastructure investment policy in Mauritius

The strategic importance of infrastructure development for the country's economic competitiveness is well-understood in Mauritius. The crucial role that private investment (and especially FDI) can play in expanding and upgrading infrastructure networks is also emphasised. Nonetheless, it remains necessary to create a more level playing field between public and private providers of infrastructure services. The Mauritian framework for corporate governance of State-Owned Enterprises is well advanced, which can help in this regard by improving service quality and network coverage, and making more space for private investment alongside public operators. The public procurement framework is transparent and effective, but the legislation for Public Private Partnerships in infrastructure could be further clarified. Meanwhile, the role of the competition authority in monitoring infrastructure markets is well-established; on the downside however, the absence of an independent regulator in the energy and water sectors risks reducing the predictability of pricing and cost-recovery structures for investors.

4.1. National strategy for infrastructure development

Sound infrastructure development policies ensure that scarce resources are channelled to the most promising projects and address bottlenecks limiting private investment. The **strategic importance of infrastructure development for the country's economic competitiveness** is well-understood in Mauritius. The government has invested a total of MUR 62 billion (USD 2 billion) in public infrastructure over 2005-12, a very high amount given the size of the economy. In December 2008, the Additional Stimulus Package provided by government (which complemented the prior package aimed at boosting Mauritius's resilience to the economic crisis) had a primary focus on infrastructure and was destined to: fast-track and front-load public infrastructure, by selecting target projects in roads, in mini-hydro and in local infrastructure; facilitate new investments in public infrastructure, with an emphasis on the road network; support infrastructure development in local authorities; accelerate private sector investment; and further improve business facilitation. Increased government spending on infrastructure also features as one of the four pillars of the Mauritius National Resilience plan 2012-15, aimed at assisting enterprises in facing the recent economic crises. To finance its infrastructure priorities over 2014-18, an amount of MUR 155 billion (USD 5 billion) is earmarked for infrastructure developments, including USD 1.3 billion in the road sector, 0.8 billion in water and 0.5 billion in the power sector.

The **National Development Strategy**, a twenty-year vision embarked upon in 2005 as per the Planning and Development Act, provides a framework for all public sector investment programmes – including for transport, water and energy utilities. Established since 2008 and merged with this long-term vision (as well as with the forthcoming Economic and Social Transformation Plan, ESTP), the **Public Sector Investment Programme** (PSIP) is intended to provide a useful guide to policymakers, development partners, line ministries and public enterprises, and private partners for informed decisions on those investment projects that can be funded partly or wholly through public funds, foreign loans or grants, and private capital. The PSIP serves as a basis for the preparation of the three-year rolling Performance Based Budgeting (PBB) for government agencies. In addition, to identifying possible areas for private domestic and international investment, it can identify policy changes required for encouraging inflows into these areas. Beyond keeping track of public spending, the PSIP therefore ensures the coherence of long-term infrastructure development plans in Mauritius.

Today, government maintains ambitious plans for infrastructure investment; nonetheless, it recognises in the government Programme 2012-15 **it will be necessary to aggressively seek FDI inflows to finance these projects** if Mauritius is to meet these objectives while maintaining control of public debt. By 2015, 10% of the financing of major public infrastructure in the PSIP will be through FDI flows. This highlights the crucial necessity of ensuring that the enabling environment for private participation in infrastructure is soundly established in the country.

In order to attract the desired investment to the country, it will be necessary to make infrastructure markets more attractive for private actors. In particular, it is imperative to **create a more level playing field between public and private providers of infrastructure services** – that is, to make more room for the private sector to participate on an equal footing with state-owned enterprises (SOEs). Indeed, SOEs dominate most infrastructure markets in Mauritius (including in electricity, water, waste water, postal services, and television broadcasting), and the government also has controlling shares in the State Bank of Mauritius, Air Mauritius, and Mauritius Telecom – for which the Chairperson of the Board of Directors is generally nominated by the government, and several Board seats are allocated to senior government officials. As addressed below, levelling the playing field will require actions to: improve the corporate governance and efficiency of SOEs (Section 4.3); unbundle infrastructure networks; and regulate utility markets (especially through sound competition and pricing policies – Sections 4.7 and 4.8).

In addition, to levelling the playing field for infrastructure investment, **main infrastructure challenges for Mauritius** today include: increasing traffic congestion in Mauritius; a strong need for water supply investments (for which Mauritius is seeking advice from Singapore); developing the potential of Port Louis as a key shipping hub, which will notably be important for positioning the Mauritius Freeport as an attractive hub for investment and re-export; and tackling over 80% external energy reliance. The percentage of the country's total import bill taken up by import of energy sources has indeed risen from just under 10% to over 20% between 2002 and 2011 – resulting in energy import dependency of about 83.8% in 2011. The latter imperative is combined with the recognised need to invest in "green" – rather than cheaper "brown" – energy infrastructure, and is reflected by the emphasis on green growth embodied in the Mauritius Ile Durable (MID) initiative and by recent efforts to improve energy management on both demand and supply side (notably through the elaboration of a Long Term Energy Strategy and the establishment in 2011 of the Energy Efficiency Management Office, EEMO, under the aegis of the Ministry of Energy and Public Utilities).

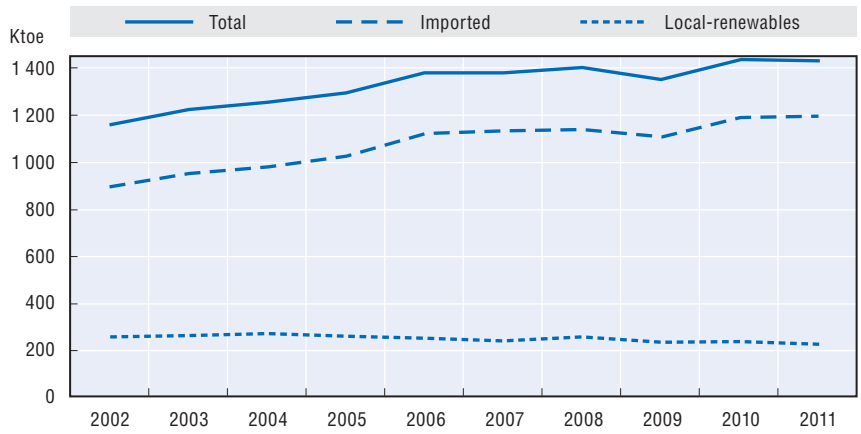
4.2. Overview of status and development strategies for key infrastructure sectors

The Public Infrastructure Division of the Ministry of Public Infrastructure, National Development Unit, Land Transport and Shipping is responsible for the implementation of road, bridge and government building infrastructural projects in the country. Meanwhile energy and water utilities are overseen by the Ministry of Energy and Public Utilities (MEPU), which is responsible for formulating policies in the energy, water and waste water sectors and for establishing a responsive legal framework to govern the development of these sectors. MEPU has under its responsibility the Central Water Authority (CWA), the Central Electricity Board (CEB, the regulator and monopoly provider for the electricity sector), the Wastewater Management Authority, the Water Resources Unit, EEMO, and the Radiation Protection Authority. This section considers the energy, water, ICT and transport sectors in turn, in terms of the reach and access of their networks, as well as the scope for private sector participation in utility provision.

Status of network and of private sector participation in the energy sector

Mauritius has no known oil, natural gas or coal reserves, and therefore depends on **imported petroleum products** to meet most of its energy requirements (Figure 4.1). Local and renewable energy sources are biomass (consisting mainly of bagasse, a by-product of the sugar industry), solar (with a potential average annual solar radiation value of some 6 kWh/m^2/day) and wind energy (with annual average speed of 8.1 m/s at 30 m above ground level in some areas). Meanwhile, hydropower plants have a combined installed

Figure 4.1. **Imports vs. local energy sources in Mauritius, 2002-11**



Source: "Energy and Water Statistics 2011", *Statistics Mauritius*.

capacity of 59 MW, virtually the island's entire hydro-potential. Hydropower production thus stands at 103 GWh, one of the lowest capacities of Southern African countries. Since December 2011, the government is additionally investigating geothermal potential in the country, through a consultancy contract for a preliminary study with the Italian company ELC Electroconsult S.p.A. As of 2010, entire installed thermal capacity reached 679 MW, and related production stood at 2 586 GWh. These statistics compare to a total energy consumption of 2 555 million kWh, and therefore fall far short of domestic demand. Overall, final energy consumption has increased by over 195% over 1990-2011.

Nevertheless, thanks to imported energy sources, Mauritius has the highest **electricity access rate** in Africa (at 99.4% in 2010). While the system does have occasional outages, these are rare and power supply is far more reliable than in most African countries. Widespread energy access is a government priority, as is reflected in stepped tariff-setting (see below) and also in schemes intended to facilitate connections for remote or vulnerable households. For instance, as of 2011 CEB provides network extension and electric pole displacement grants to low-income households wishing to connect to the network, but which either live in remote areas or need to move electricity poles which obstruct construction of their homes. These grants are available for three different monthly income ranges (from under MUR 8 500, which receive an MUR 65 000 connection grant, to MUR 12 501-17 500, which receive an MUR 35 000 grant).

By 2009, Mauritius produced about 22% of its electricity from **renewable resources** (mainly hydro and bagasse), and thus features among one of the world leaders in renewable energy use. In 2009, Mauritius accordingly became the 137th member of the International Renewable Energy Agency (IRENA). Despite this rise in renewable energy use, Mauritius nonetheless has to face considerable challenges in energy management, including on the demand side: intensity of energy use in Mauritius in 2008 was 0.54 toe per USD 1000 of GDP, compared to 0.19 toe in OECD countries or 0.17 toe in the EU15. Outside of transport, the highest energy consumption comes from the manufacturing sector (especially the textile industry, with over 40% of total energy consumption in 2010) and from the food industry (over 20% in 2010). Moreover, the share of bagasse and hydro in the primary energy supply has been dropping, from about 30% in 1996 to roughly 22% today; by contrast the share of coal in electricity production has strongly risen, and stands at over 50% in 2012. Cognisant of this dangerous trend, government has developed a **wide range of initiatives to increase renewable energy investment** as well as better manage energy on the demand side (see Box 4.1); it has most recently set up a National Energy Commission and embarked on an initiative for sustainable public procurement.

Box 4.1. **The drive towards renewable energy and energy efficiency in Mauritius**

There are many initiatives for improving energy management on both supply and demand-sides in Mauritius. At the forefront of these is the **Maurice Ile Durable (MID)** endeavour, announced by following a spike in petrol prices in 2008 and the resulting surge in the share of petroleum in the total import bill (from 12 to 18%).

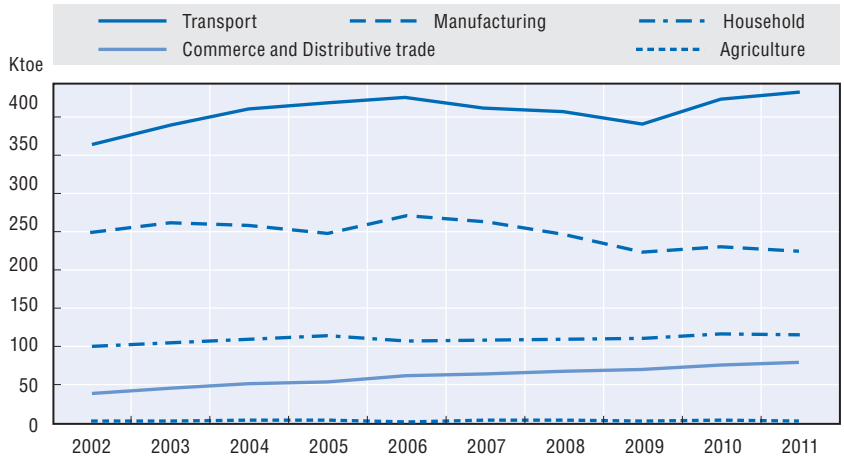
- The main thrust of the **MID vision** is to make Mauritius less dependent on fossil fuels and to improve energy security, through increased utilisation of renewable energy and a more efficient use of energy in general. A ten-year policy, Action Plan and Strategy for the MID were endorsed by government in June 2013, to accelerate roll-out of the Vision.[1]
- Alongside, the **Maurice Ile Durable Fund** was created in 2008 and initially placed under the aegis of the Ministry of Public Utilities, MEPU. Its finances are derived from an MID levy of MUR 15 cents all petroleum products, LPG and coal. The Fund supports programmes for reducing fossil fuel consumption, exploring potential sources of natural energy, preserving the environment and encouraging energy efficiency innovation. It has also provided several infrastructure-related grants, including for feasibility studies of wind and hydro power projects and for waste-to-energy projects. In view of granting the MID endeavour further prominence, since its creation the management of the MID Fund has first been moved to the Ministry of Environment and next, in 2013, to the Prime Minister's Office.

Meanwhile, on the demand-side, the **Energy Efficiency Act of 2011** established the **Energy Efficiency Management Office** (EEMO). EEMO sets targets for reduction of energy consumption across transport, buildings, and manufacturing and industry by 2020.[2] EEMO has been tasked with: developing pilot projects for efficient energy use; monitoring and collecting data on energy efficiency and consumption; and setting standards for energy efficiency and conservation. EEMO is also expected to develop and implement an **Energy Efficiency Action Plan**, which will serve as a roadmap for EEMO in charting out its activities for the initial period of two years. The thrust areas identified for implementation of the act include establishment and strengthening of EEMO, standards and labelling, demand side management, building energy efficiency, and awareness creation. The strategy for promoting energy efficiency in the initial years will rely on self-regulation mechanisms and the use of market forces.

1. Dinally, E. (2012), *Plans stratégiques – Nouvelle impulsion à Maurice, île durable*, DefiMediaGroup, 28 July, available at : *www.defimedia.info/defi-plus/dp-enquete/item/16318-plans-strat%C3%A9giques-%E2%80%93-nouvelle-impulsion-%C3%A0-maurice-%C3%AEle-durable.html*.
2. Elahee, K. (2011), "Long Term Vision: Energy – Proposals for the 2012 Budget", *Le Mauricien*, 6 October, available at: *www.lemauricien.com/article/long-term-vision-energy-%E2%80%93-proposals-2012-budget*.

As part of its **Long Term Energy Strategy**, government also has a well-defined electricity generation expansion plan for the next decade, with clear indicators for commissioning the necessary power plants. The strategy, first developed in 2007, revised in 2009 and most recently approved for the 2012-25, provides a blueprint for the development of the energy sector. It also recognises that further development of the country's key economic pillars, in particular the ICT and tourism sectors, will require a constant and high quality supply of electricity. The strategy thus lays emphasis on: the development of renewable energy (with an aim to reach 35% renewable in the national energy mix by 2025, especially through acceleration of wind-power development and bolstering the bagasse sector); reduction of the country's dependence on imported fossil fuel; and the promotion of energy efficiency in line with the Maurice Île Durable vision (detailed in Box 4.1).

Figure 4.2. **Energy consumption by sector, 2002-11**



Source: "Energy and Water Statistics 2011", *Statistics Mauritius*.

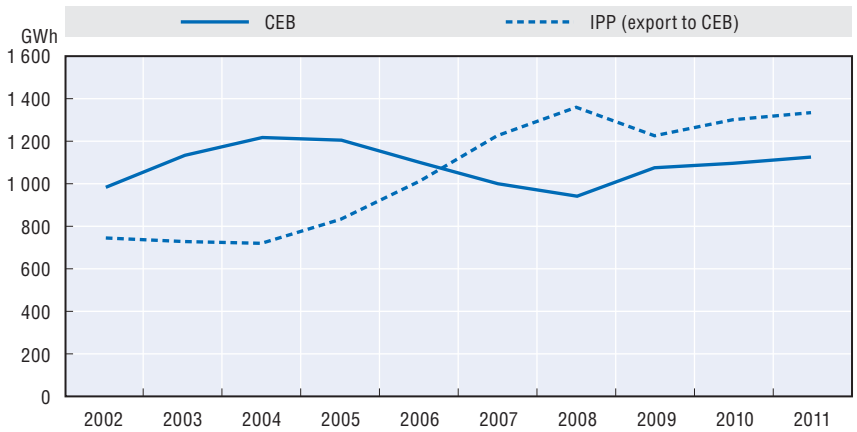
The **legislative framework for the electricity sector** in Mauritius is provided by: the Electricity Act of 1939 (amended in 1991); the Electricity Regulations of 1939; and the Central Electricity Board (CEB) Act of 1964. More recent legislation has included the Environment Protection Act of 2002 and the Energy Efficiency Act of 2011. As of 1964, the CEB, wholly government-owned and reporting to MEPU, is the primary body responsible for regulation and pricing of the electricity sector. It also holds a monopoly in distribution and transmission of electricity, under the "single-buyer model" of electricity provision.

Despite the market dominance of the CEB, the above legislation has permitted progressive opening of the production segment of the energy market to private operators. **Independent power production** has indeed long been a

feature of the power sector in Mauritius. As early as 1991, the Bagasse Energy Development Programme enabled sugar factories to obtain the steam and electricity required for its operation from power plants, in exchange for free access to the bagasse produced after the milling of canes and condensed water from the sugar factory. Under the current single-buyer model, CEB continues to purchase 60% of the country's total power requirements from Independent Power Providers (IPPs). CEB has long-term power purchase agreements (PPAs) with five main IPPs which provide electricity year-round using a combination of coal during the intercrop season, and bagasse during the crop season. This is complemented by power purchase agreements with three continuous power producers (CPPs) which produce electricity from bagasse during the crop season only. CEB produces the remaining 40% of electricity itself, from its four thermal power stations and eight hydroelectric plants.

As Figure 4.3 illustrates, the share of IPP generation in total CEB electricity has therefore surpassed CEB generation since 2006. There are no production subsidies for IPPs, and electricity is purchased from them on a competitive basis. However **no standard PPA** is defined within the 2005 Electricity Act. As there are no common rules for interconnection with generation (whether renewable or not) by investors, all projects must be approved one by one. This may become increasingly problematic given the need for the existing electricity network to rapidly increase capacity (indeed the power system was stretched to a maximum in 2012 during peak days). Mauritius could therefore benefit from developing some standard rules for interconnection and for planning/environmental approval of IPP connections.

Figure 4.3. **Shares of electricity generation by CEB and IPPs in Mauritius, 2011**



Source: Energy and Water Statistics 2011, p. 14.

Standard PPAs can moreover **increase the predictability of pricing** and cost-recovery structures for investors. In their absence, IPPs may be wary of entering the production segment, as contracts which are negotiated on a case-by-case basis may not provide enough information and guarantees regarding key elements of market structure. Alongside, standard PPAs can also **protect consumer interests**. In the absence of competition in the transmission and distribution stages, there is indeed a risk that the monopoly distributor might excessively influence the supply price and thus modify the risk-return profile of energy infrastructure investment, or otherwise pass an excessive fraction of the energy purchase costs through to its customers. This is particularly the case when electricity markets do not have independent regulators – as in Mauritius, where CEB assumes the regulatory role to date (although a separate regulator, the URA, may be established in the course of 2013 – see Section 4.4).

The Long-Term Energy Strategy reaffirms the framework of a single buyer model, arguing that, "given the small size of the electricity market, complete unbundling of the power system is not envisaged at this stage". Under the strategy and within this framework, government is also to design appropriate schemes to allow for the **progressive market penetration of photovoltaic systems** (especially given the dropping price of PV modules). These schemes could include investment subsidies, whereby part of the cost of installation of PV systems could be refunded, as well as Feed-in Tariffs/net metering, whereby the CEB would purchase PV electricity from the producer at a guaranteed rate.

Government has also launched the **Small Scale Distributed Generation programme**, which since 2010 allows small-scale private power producers to produce electricity from renewable sources (mostly solar, wind and water) for their own needs, for a total capacity of 4.7 MW and with possible re-sale of excess supply to the CEB. This scheme may however need to be better regulated: while there were about 130 of such IPPs in Mauritius by April 2013 (cumulating in a generation capacity of over 1 000 kWh), several of these producers had connected to the CEB grid without going through the procedures specifically put in place for that type of producer – an illegal practice which is liable to prosecution under the Electricity Act.

Status of network and of private sector participation in the water sector

The water sector in Mauritius is **overseen by three bodies operating under MEPU**: the Central Water Authority (CWA, established under the provisions of the Central Water Authority Act No. 20 of 1971 – last amended in 2000); the Wastewater Management Authority (WMA); and the Water Resources Unit (WRU, which since 1993 has been responsible for the assessment, development, management and conservation of water resources, including the allocation of water rights). Since the creation of WRU, the CWA is now mainly responsible

for the treatment and distribution of potable water for domestic, commercial and industrial usage.

The proportion of total water production reliant on ground-water abstraction versus surface water varies widely by region in Mauritius (for instance the East District Supply system relies on 72% groundwater, and the upper Mare aux Vacoas system relying on 70% surface water). By 2011, 99.8% of the population had **access to improved water**; meanwhile, in 2012, 89% of the total population had access to improved sanitation. Domestic households consume the majority of water sold (77% in 2012), distantly followed by commercial activities (13%), government, agricultural and industrial sectors, and religious and charitable institutions (10%). In 2012, in total across all sectors, 220 litres of potable water were consumed per capita per day.

Although efforts have been made to encourage more **private participation in the water sector**, response has been limited so far. Following an unsuccessful attempt to establish a management contract with a consortium Vivendi/Suez Lyonnaise des Eaux in 2000, the Government of Mauritius decided to conduct a wide-ranging analysis of the various options for water and wastewater services, together with PPIAF, to identify the best long-term option for private sector participation (see Section 4.5). Although private or PPP water provision is yet to come, in 2008 a seven-year management contract for the operations and maintenance of a 70 000 m^3/d wastewater treatment plant was awarded to Germany's leading service provider for wastewater disposal systems.

Currently, major reforms are being undertaken in the water sector: a **Master Plan on Water Resources**, sponsored by the WRU, was elaborated over 2010-12 and finalised at the end of March 2013. The plan provides a roadmap for the integration and management of water resources for the time horizons 2025 and 2050, covering all water usages. The latter calls for the expansion of existing dams, water extraction from rivers, construction of 52 additional drilling and reuse of wastewater for irrigation. After implementation, these projects are expected mobilise an additional volume of 232 mm^3 of water, at a cost of MUR 14 billion (half a billion USD).

An assessment of water needs for the coming years has been carried out in preparation for this plan, identifying the various options (including demand and supply management) for satisfying the growing water demand. It also provides some adaptation measures in the wake of climate change, so as to build up resilience in terms of water requirements and meet the future challenges in the sector. The legal framework governing the water sector is also reviewed and new legislation is recommended, together with a programme for reform of water rights. A timeframe has been identified for all of these strategic measures, coupled with their related investment requirements. As announced in the 2012 Budget, experts from Singapore are also currently reviewing the

functioning of the parastatals in the water and waste water sectors to improve delivery of services. It is therefore expected that substantial reforms and investment will follow in the water sector.

Status of network and of private sector participation in the transport sector

While there is no railway network in Mauritius, the **road network** is well-developed. Total classified road network length stood at 2 028 kilometres by 2009, of which 98% was paved. These are very high rates, and expansion of the network is therefore not a central challenge for the country. Rather road congestion (especially in Port Louis) is frequently cited as one of the main road infrastructure challenges for the island. Beginning in 2007-08 government has embarked on a comprehensive **Road Decongestion Programme** which is already delivering time and cost savings; several major projects to ease road traffic are currently being implemented. For 2012-13, government has almost doubled its budgetary allocation to the road sector, planning for an allocation of some MUR 4.3 billion (USD 138 million); this is set to rise yet further to MUR 11 billion (USD 354 million) in 2014.

While this decongestion programme has occasioned a noticeable increase in loans to State-Owned Enterprises over 2012, as stated in the Government Programme 2012-15 financing the programme will also require taking advantage of substantial private sector financing and expertise. Over 2012-15, investment in the road sector will therefore be boosted by the **introduction of PPP schemes**, the first of which cover the construction of the Harbour Bridge, the Port Louis Ring Road (Phase 2) and the A1-M1 bridge. These projects will involve private investments to a tune of above MUR 20 billion. Another transport infrastructure project with significant potential for people and business is the creation of a major nationwide Mass Transit System. Construction work on the Light Rail Transit is expected to start in late 2014 and the aim is to eventually connect the whole island.

Besides the decongestion programme, major improvements are continuously being brought to existing road infrastructure while new roads are being constructed to reduce travelling time and provide comfort to users. The safety dimension is also taken on board by the provision of footpaths, drains, footbridges and parking facilities in other regions of the country. The objective of the Roads Section of the Ministry of Public Infrastructure is to consistently improve the design, construction and maintenance of roads and bridges, with the aim to reduce traffic congestion, vehicle operating costs, ensure road safety and provide for better and more efficient communication and access. Roads have benefited from targeted government efforts, having been the focus of the infrastructure spending within the December 2008 Additional Stimulus Package for shoring up economic performance: out of an

additional MUR 2.6 billion (USD 82 million) provided for public infrastructure, 1.8 billion (USD 57 million) were destined to the road network, in addition to what had already been provided for in the 2008-09 budget.

The 2009-25 Long-Term Energy Strategy moreover commits to setting up a new **Land Transport Authority** with the mandate to plan, implement and manage the nation's land transport with improved co-ordination and efficiency. The Mauritius Land Transport Authority was set up in 2009 to take over the activities of the Road Development Authority, the National Transport Authority and the Traffic Management and Road Safety Unit so as to reduce duplication and bureaucracy. The Authority is called upon to improve cost efficiency, through capacity building, especially transport management and professional skills and competencies. With World Bank institutional and financial support, operations of the Land Transport Authority are notably gaining speed in the implementation of an extensive road maintenance programme.

As for **marine and air transport**, as an island state at a nodal point between Africa and Asia depends heavily on its port and airport to facilitate the movement of people, goods, and services. Air access is particularly crucial for the tourism economy, and the Port Louis harbour could become a regional maritime hub if its capacity were significantly enhanced – with significant benefits in terms of export competitiveness and of the attractiveness and growth of Mauritius Freeport. Annual air traffic in Mauritius has risen from 1.8 million passengers to 2.5 million in 2010; this exceeds rates for most African countries, but remains under the traffic of other high-tourism and business destinations (such as Kenya, with 7.5 million commercial air passengers in 2010). Meanwhile cargo traffic has shown no consistent increase: after a rise from 45 000 to 57 000 tonnes over 2002-08, by 2010, commercial air freight traffic had dropped back to 48 000 tonnes. Port cargo traffic is by contrast much higher, having risen from 5.6 million tonnes to 6.23 million tonnes over 2002-10.

Under the Government Programme 2012-15, government will continue to invest in the **expansion and modernisation of the port and the airport** with a view to extending their regional span. It will notably accelerate the implementation of the Master Plan for modernisation and development of the port, and the extension and strengthening of the MCT Quay at Port Louis Harbour will be completed in 2015. Government is also in the process of securing a strategic partner for the Cargo Handling Corporation Ltd., in order to increasing the port's container traffic capacity. In the air traffic sector, over 2012-15 Air Mauritius will continue efforts to expand its capacity towards growth economies and will finalise its proposals for a strategic partner to help achieve greater global connectivity and efficiency. Upgrading of air transport links will be especially important for the realisation of the Africa Strategy, as convenient and rapid air connections between Mauritius and the rest of the continent are particularly limited to date.

Status of network and of private sector participation in the ICT sector

Mauritius is the first country in Africa to introduce **Public Key Infrastructure** (PKI) through its ICT Authority; this security architecture provides an increased level of confidence for exchanging information, and will enable secure electronic transactions both within Ministries and Departments, and by citizens and businesses. This is a strategic step forward for enhancing the comparative advantage of Mauritius as a regional hub for BPO and financial services, and builds on a **modern telecommunications infrastructure**.

Since 2005, Mauritius is thus connected to the SAFE/SAT3/WASC **submarine fibre optic cable** system which provides high bandwidth international connectivity. The South Africa Far East (SAFE) cable network links Mauritius to Europe via South Africa and to Asia via India and Malaysia. Due to this enhanced connectivity, connectivity costs between Mauritius and Europe decreased by up to 52% over 2005-06, and the costs of local calls dropped by up to 27%. In 2006, Mauritius also became part of the Eastern Africa Submarine System (EASSy) project, and is leading an inter-island connectivity project within the Indian Ocean Commission (IOC) which may connect to the EASSy cable. A new submarine fibre optic cable, LION 2, is also operational since January 2012. Over 2002-10, the number of internet users more than doubled, from 141 800 to 316 800. By 2010, there were thus 305 internet users per every 1 000 persons in Mauritius, the second-highest rate in the COMESA region after the Seychelles.

As for **telecommunications**, there are currently two fixed-line operators in Mauritius – Mauritius Telecom (about 95% of the market share, with around 360 000 lines) and Mahanagar Telephone – and three mobile operators, Emtel, Orange Mauritius and MTML. The number of mobile phone subscriptions has risen from 347 500 to 1.2 million over 2002-10, a 243% increase which puts Mauritius in third place among COMESA countries for the number of subscriptions for every thousand persons (at 928 in 2010). Meanwhile unlike several African countries where fixed line subscriptions have dropped in recent years (having been overtaken by the booming mobile sector), there were still 405 200 fixed line subscriptions in Mauritius by 2010 (up by 24% since 2002).

According to the 2013 Global Information Technology Report of the World Economic Forum, Mauritius is by far a regional leader in terms of: the strength of its policy and regulatory framework for ICT investment (36th place worldwide); and the **strong government vision to build and deploy ICT as a strategic priority area for economic development** (48th position). Indeed ICT is very high on the government agenda, as a strategic sector for employment creation and regional export of services. By end 2011, the entire ICT sector contribution to GDP stood at 6%. Government also holds that the ICT/BPO sector has enormous potential for investment and higher quality FDI and

most importantly for creating higher paid jobs for youths. In this context it will support the establishment of an ICT academy over 2012-15, and initiatives targeted at better aligning labour supply with labour demand in ICT are currently underway (see Chapter 5).

The **Ministry of Information and Communication Technology** is responsible for the elaboration of policies to circumvent challenges facing ICT businesses as a whole. The Telecommunications Sector has been fully liberalised for more than a decade in Mauritius. The ICT Act of 2001 began the **liberalisation process for the telecommunications subsector** by removing exclusivity rights of Mauritius Telecom over fixed telecom services. Mauritius Telecom was privatised after selling 40% of its shares to France Telecom in 2000; Government of Mauritius, the State Bank of Mauritius, the National Pensions Fund and employees of Mauritius Telecom hold the remaining 60% of shares. This was followed by a new ICT Act in 2011, which further liberalises the sector (as detailed in Section 4.7).

In 2007, government adopted the **National ICT Strategic Plan** (NICTSP 2007-11) which set several ambitious targets to be jointly achieved by public and private sectors, including: increasing the contribution of Global Business ICT export services from 1% of GDP to 7%; increasing employment in the sector from about 10 000 to at least 29 000 by 2011; and doubling the number of foreign investors in the sector. The latter objective was obtained, as foreign investors in the sector rose from 150 in end 2006 to 300 by 2010. These objectives are prolonged in the NICTSP 2011-14, which attempts to tackle of some of the mismatch between objectives of the previous NICTSP and available resources.

ICT sector development has thus largely focused on **export-based services** to date, and several foreign ICT companies (such as Microsoft and Accenture) have development centres in the island. However it is important to balance this strategic orientation with a policy of easy and affordable ICT access for the domestic population as well. Indeed internet costs remain rather high in Mauritius (as has notably been highlighted by private investors in Mauritius Freeport), and can be particularly prohibitive for households and smaller companies. The WEF Global Information Technology Report downgraded the international ranking of Mauritius by two notches (to 55th place) in 2013, for poor progress in the **quality and accessibility of its ICT infrastructure**. The deterioration in particular concerns the impact of technology on the economy and society: although ICT is used extensively for business transactions (where Mauritius ranks 48th), the accessibility and usage for individuals remains far behind (at 92nd place). The social "spill-over" impacts of ICT are thus judged to be modest compared to other countries. Moreover, although Mauritius is the African leader in terms of ICT connectivity, at the global level it still performs below the levels of connectivity found in Southeast Asia or Latin

America – accordingly the 2013 Global Enabling Trade Report, which on this measure ranks Mauritius only 79th out of 132 countries covered.

These challenges are taken on board by the **National Broadband Policy** 2012-20 (NBP 2012) and by the **"Connectivity" chapter of the Government Programme 2012-15**. In the latter, the government commits to achieving broadband connectivity island-wide and providing every household with at least 1 MB per second by 2015. In the interest of wider affordability and in view of strengthening the competitiveness of the ICT/BPO sector, government is also attempting to reduce internet user costs: as of January 2013, it has lowered to price of entry-level broadband from MUR 349 to 200 per month (that is, from approximately USD 11 to 6); and the cost of International Private Leased Circuits has dropped by 30% over the past two years. Government is also undertaking several initiatives (such as incubator schemes) to promote development of the local ICT industry.

4.3. Levelling the playing field between SOEs and private investors in infrastructure

Mauritius has a high number of parastatal enterprises, especially in the infrastructure and utility sectors. This includes: Central Electricity Board (CEB); Central Water Authority (CWA); Construction Industry Development Board (CIDB); Information and Communication Technologies Authority (ICTA); Mauritius Broadcasting Corporation (MBC); Road Development Authority; and the Wastewater Management Authority (WMA).

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 most African countries. In Mauritius and elsewhere in the region, utility markets are characterised by an **interdependency of SOEs and the private sector**, as they are both mutual partners and competitors. While the existence of "natural monopolies" in itself is not necessarily problematic or unusual in infrastructure sub-sectors (as the extremely high fixed costs for operation and maintenance of infrastructure networks are difficult to shoulder for all but large enterprises), these monopolistic state-owned firms frequently pose risks of inefficient management and under-investment. Increasing private participation in infrastructure requires both: improving SOE efficiency, which eventually paves the way for successful private participation (addressed in this section); and opening infrastructure sub-sectors to private participation actors on a competitive basis *vis-à-vis* SOEs (addressed in Sections 4.4 to 4.6).

Reducing the fiscal burden of SOEs in Mauritius

Inefficiently-run SOEs can impose a drain on public finances, especially when these enterprises depend on production subsidies from government

rather than operating on a cost recovery basis (see Section 4.7 on pricing). SOEs should rather have flexibility in adjusting their capital structure, and should face competitive conditions regarding access to finance. Although in many developing and emerging countries subsidies are provided to state-owned utility providers in the interest of end-user affordability, there are moreover several alternatives means of broadening the access of poorer citizens to basic services such as water and electricity. In fact artificially low tariffs and production subsidies do not automatically generate the expected socially desirable effects, especially when water or electricity access remain geographically constrained to areas inhabited by richer segments of the population (in which case the low tariffs, backed with extensive public funding, can rather act mostly as a regressive subsidy for the rich). In view of these various risks and fiscal costs, production subsidies can potentially be replaced by consumption subsidies while allowing SOEs to operate on a more commercial basis. In addition to helping level the playing field for private operators, such a move can also allow public utilities to better mobilise adequate resources to sustain existing supply systems or invest in the rehabilitation and expansion of infrastructure.

Mauritius is fully aware of the fiscal risk potentially posed by SOEs, as is reflected in national development plans. The ministerial report on Facing the Eurozone Crisis, elaborated in 2010, had noted the importance of parastatals operating on a commercial basis, and required that SOEs finance their own operating costs rather than depending on budgetary transfers. Moreover, the 2010 report noted that government funding for parastatal investment programmes would in coming years be conditioned on parastatals providing a **real return of at least 5% on capital invested**. This requirement is since being put into action under the leadership of the Office of Public Sector Governance (OPSG, see below) which has agreed with the European Union to restructure 11 parastatals over 2012-14. In this light, OPSG will have to propose restructuring plans for SOEs and parastatals, and demonstrate that they can generate this 5% return on capital investment in order to secure Cabinet approval. OPSG has already completed the reforms for three SOEs on this basis: Business Parks of Mauritius Ltd. (BPML); Cyber Properties Investment Ltd. (CPIL); and the National Transport Corporation (NTC).

As part of the Government Programme 2012-15, Government has announced that it will "continue to examine the level of parastatal efficiency and bring expenditure under control", as well as "undertake a major rationalisation of parastatal bodies and SOEs with a view to improving cost-effectiveness, quality of services and optimal use of human resources". This government stance has already begun to bear fruit, and **government transfers to SOEs** (in the form of subsidies) for 2012 undercut the 2011 levels by 1% of GDP. This has improved the government's fiscal stance, and the overall budget

deficit stood at only 2.3% of GDP for 2012. In the place of outright transfers, loans to SOEs (a more fiscally sustainable means of financing, and which exerts more pressures for commercial corporate conduct by SOEs) significantly increased in 2013 – in particular in the context of the road decongestion programme. As announced in the 2013 Budget, these loans are to be accompanied by stronger mechanisms for performance monitoring of SOEs. Indeed, in its 2013 country report the IMF recommends that these loans be tied to strict conditions for improving efficiency and ensuring repayment.

Standards for corporate governance of SOEs

Financial balance aside, ineffective SOE management can also result in poor infrastructure maintenance, service quality and network coverage – which can in turn deter private operators from entering infrastructure markets. For governments seeking to privatise an infrastructure SOE, improving the latter's corporate governance and thus efficiency can indeed reduce the need for large-scale restructuring and therefore make the prospect of taking the SOE over more attractive for potential private investors. Besides performance-tied loans, the functioning and efficiency of SOEs in infrastructure can be enhanced through **more stringent reporting and corporate governance requirements.** The presence of an effective corporate governance system, within an individual company and across an economy as a whole, helps to provide a degree of confidence that is necessary for the proper functioning of a market economy. As a result, the cost of capital is lower and firms are encouraged to use resources more efficiently, thereby underpinning growth.

As highlighted by the OECD Guidelines on Corporate Governance of State-Owned Enterprises, **SOEs face distinct governance challenges from the private sector**. One is that SOEs may suffer just as much from undue hands-on and politically motivated ownership interference, as from totally passive or distant ownership by the state. There may also be a dilution of accountability, since SOEs are often protected from two major pressures for sound management in private sector corporations: takeover and bankruptcy. More fundamentally, corporate governance difficulties derive from the fact that the accountability for the performance of SOEs involves a complex chain of agents (management, board, ownership entities, ministries, the government), without clearly and easily identifiable principals.

This complex web of accountabilities must be clearly structured in order to ensure efficient decisions and good corporate governance. For instance, state ownership of enterprises is exercised in two ways in Mauritius: a number of enterprises (such as the CWA and CEB) are parastatal bodies that are regulated by their own acts of parliament; while other enterprises are owned through public limited liability companies. In certain of these companies, apart from government, there are other SOEs as shareholders and also some

minority non-governmental shareholders. Some SOEs, such as Air Mauritius, are moreover listed on the Stock Exchange of Mauritius. These complex and variable ownership structures make it very necessary to establish a clear corporate governance framework specific to SOEs.

SOEs should not be exempt from the application of general laws and regulations, including **high quality accounting and auditing standards**. Disclosure should include, but not be limited to, material information on: the financial and operating results of the company; company objectives; major share ownership and voting rights; remuneration policy for members of the board and key executives, and information about board members, including their qualifications and the selection process; related party transactions; foreseeable risk factors; issues regarding employees and other stakeholders; and the content of any corporate governance code or policy and the process by which it is implemented. In addition an annual audit should be conducted by an independent, competent and qualified, auditor in order to provide an external and objective assurance of the fairness and accuracy of the company's financial statements.

In Mauritius, the national framework for corporate governance and financial accountability is set out under the **Financial Reporting Act** of 2005, which formalised the institutional relationships among three related authorities: the Financial Reporting Council (FRC, created by the act and tasked with promoting high-quality reporting of financial and non-financial information by public interest entities; as well as with enhancing the credibility of financial reporting and improving the quality of accountancy and audit services); the Mauritius Institute of Professional Accountants (MIPA); and the National Committee on Corporate Governance (NCCG). SOEs, under the **First Schedule of the Financial Reporting Act 2005 and the Statutory Bodies Act 2009**, must comply with the same accounting and reporting standards as private companies: full International Financial Reporting Standards (IFRS), with financial reporting monitored by the FRC. Likewise, Section 1.1 of the **Code of Corporate Governance for Mauritius** (CCGM, elaborated by the NCCG in 2003) states that the code's obligations apply to all designated institutions, which include SOEs, statutory corporations and parastatal bodies. A consolidated version of the Statutory Bodies Act requires SOEs to publish Annual Reports which include audited financial statements and other relevant information as required by the Section 8.4 of the CCGM.

In addition, **Section 2.3.2 of the CCGM defines responsibilities of the board that explicitly apply to SOEs**. It is recommended that the board of each SOE prepare a Corporate Objectives Statement (COS) for the approval of the Minister. A publicly available document, the COS must be expressed in clear terms, with output, financial performance expectations, and time frames which can be measured and monitored. Meanwhile, some very small SOEs

(under Schedule II of the Statutory Bodies Act) benefit from more lax requirements: full IFRS is not required (only adherence to International Public Sector Accounting Standards, IPSAS, or to national, simplified standards issued by the Financial Reporting Council, is necessary), and they have no regulator. Whereas financial statements for private companies are filed with the Financial Services Commission and Registrar of Companies, SOE financial statements and annual reports are presented to the National Assembly by the Minister of the SOE's parent ministry. These reports are then audited by the National Audit Office, and the Public Accounts Committee (PAC) of the National Assembly provides another level of oversight.

Designed as a tool to complement the above Code of corporate governance, in December 2006 a set of "**Guidance Notes for State-Owned Enterprises**" was additionally released by the National Committee on Corporate Governance (NCCG, which operates under MOFED). On a "comply or explain" basis, the Notes attempt to provide solutions to a number of key issues – including accountability, monitoring of board performance, risk management, internal control and internal audit, and communication with stakeholders – so as to create an environment that will empower SOEs to operate in a way that maximises economic value and financial performance. In addition to adapting the main items covered by the CCGM to the SOE case (compliance and enforcement; boards and directors; board committees; risk management, internal control and internal audit; auditing and accounting; relationship with shareholders; and communication and disclosure), Section 7 of the Guidance Notes also introduces requirements for Integrated Sustainability Reporting for SOEs. In a further step towards enhance corporate governance of SOEs, the 2014 Budget moreover announces that statutory requirements will be set for SOEs and Statutory Bodies in the course of the year, to improve the accountability and performance management of these enterprises.

Monitoring SOE compliance with corporate governance standards

SOE compliance with corporate governance standards is being improved, through extension of the mandate of the **Office of Public Sector Governance** (OPSG). Established within the Prime Minister's Office, this office has the responsibility to ensure that SOEs become more cost-effective and outcome-orientated, in line with best practices of governance – in particular those relating to transparency and accountability. Since 2012, the OPSG mandate has been extended to improve governance in SOEs, notably through monitoring the overall performance of public sector enterprises. As such, OPSG assists the work of the Registrar of Companies, which is empowered to prosecute both public and private companies that do not comply with reporting standards. Since 2012, the OPSG is thus responsible for: supporting parastatal bodies, in collaboration with line Ministries, in the preparation of their Performance Improvement

Plans; providing support to public sector enterprises in implementing performance enhancing reforms; and monitoring the pace of the reforms and recommending corrective measures, as appropriate.

In addition, OPSG is empowered to carry out qualitative analysis based on data provided through the **Parastatal Information Management System** (PIMS), launched in March 2012 with World Bank support. While to date, data on parastatal performance has been collected on an *ad hoc* and fragmented basis by sector ministries, PIMS will provide a central and regularly updated information system for: analysing parastatal performance in Mauritius; identifying poor performers; diagnosing causal factors behind poor performance; determining appropriate remedial actions; and monitoring reform progress. Such an information management system can help address an important prerequisite of effective parastatal reform.

The work of OPSG is already reaping rewards. From a survey of 17 SOEs conducted in early 2011, which assesses compliance with the ten key topics addressed in the CCGM, OPSG concludes that the degree of compliance is satisfactory (above 50% for most categories). This marks an improvement on 2009 results, gathered by the NCCG, where SOE compliance with the code stood at only 44% (versus 83% for companies listed on the Stock Exchange of Mauritius, SEM). The disappointing results of the NCCG survey had triggered a request by the government to the World Bank, for a review of the **Reports on Observance of Standards and Codes** (ROSC) on Corporate Governance in 2010-11. Box 4.2 outlines the key findings of the ROSC, together with the plans for reform of the national corporate governance framework that resulted from it.

Box 4.2. **Results of the 2010-11 Report on Observance of Standards and Codes of Mauritius**

The 2010-11 ROSC was conducted by the World Bank at the request of MOFED (following on previous ROSC reports in 2003 and 2009). Preliminary findings indicated that Mauritius has a **strong legal and institutional framework for corporate governance** (including the code, Companies Act, Financial Reporting Act, Bank of Mauritius Guidelines, Listing Rules of Stock Exchange of Mauritius), and that the Code of Corporate Governance has made a significant impact on behaviour. The report concludes that "**Mauritius is an international leader in many respects, especially in the area of board practices and disclosure**. Across most of the aspects of good corporate governance as defined by the OECD Principles, Mauritius is now on par with many market leaders in Asia (such as India, Thailand, and Malaysia)".

As highlighted by the 2011 ROSC report, **certain inconsistencies in the Corporate Governance Code nonetheless still need to be addressed**. This is

Box 4.2. **Results of the 2010-11 Report on Observance of Standards and Codes of Mauritius** *(cont.)*

also in line with survey commissioned by the NCCG in 2009 on the state of compliance with the Code of Corporate Governance (see above), which found that compliance was particularly low for companies listed on the SEM's Development & Enterprise Market (DEM, at 36%), and in SOE's (at 44%).* While in 86% of the companies, information disclosed on financial and company issues were claimed to be accurate, NCCG noted that such disclosures of compliance to the code "were often limited to a box ticking exercise".

In addition, although financial reporting has generally improved in quality over 2003-10, the ROSC report concludes that Mauritius would benefit from a stronger regulatory regime combined with effective monitoring and enforcement mechanisms. Related recommendations included the following:

- Clarifying the "comply or explain" provision within the Code of Corporate Governance, and better anchoring the code in the legal and regulatory framework.
- Revising the Companies Act 2001 and Statutory Bodies Act (1972, last amended in 2011) in view of adopting a three-tier system for reporting, thus allowing for more flexible reporting by small and medium enterprises. Indeed, up until 2011 the Companies Act exempted only micro-enterprises (with turn-over below MUR 50 million) from full-scale international financial reporting standards – thus imposing an unnecessarily heavy reporting burden on the majority of small and medium firms.
- Formalising the FRC collaboration with other regulators, and establishing an enforcement panel as provided for in the Financial Reporting Act.
- Improving disclosure of ownership and control, as well as disclosure of compliance with the code in general.
- Working to continue to align the code with the OECD Principles of Corporate Governance.
- Considering new approaches to improve minority shareholder representation on boards. And
- Reforming the ownership framework and governance of state-owned enterprises.

* Taylor, T. (2011), "Mauritius Modernizing: Corporate Governance – Yesterday, Today and Tomorrow", *Le Mauricien*, 13 September, available at: *www.lemauricien.com/article/mauritius-modernizing-corporate-governance-%E2%80%93-yesterday-today-and-tomorrow*.

Source: NCCG and DCDM Marketing Research (2009), "Survey on the State of Compliance with the Code of Corporate Governance in Mauritius Report", October; and World Bank (2011), *Report on Observance of Standards and Codes for Mauritius*.

A further step toward greater SOE efficiency can be undertaken through **enhanced 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.

4.4. Legal and institutional framework for public procurement in infrastructure

Legal and institutional framework for public procurement

The first attempt to reform the public procurement system in Mauritius was made in 1994, following an allegation of corruption in a major procurement exercise in a parastatal body. Mauritius was among the first countries to adopt the UNCITRAL Model Law on Public Procurement, which prompted the introduction of the Public Procurement Transparency and Equity Act in 1999. Following implementation constraints with this act, the Mauritius **Public Procurement Act 2006-07** was enacted in 2008; this one-year gap before enactment was deliberately designed to allow sufficient time to sensitise all stakeholders on the forthcoming changes.

The Procurement Act (last updated in April 2012) is a hybrid product between the UNCITRAL Model Law and the World Bank Procurement Guidelines, and is compliant with the Government Procurement Agreement of the WTO. It also enshrines the COMESA Procurement Directives developed under the COMESA Procurement Reform Project, launched in 2004. Together with the Public Procurement Regulations of 2008, the Suspension and Debarment Regulations of 2008, and the Disqualification Regulations of 2009, it provides the current framework for public procurement in the country – including for private participation in infrastructure development.

The 2006 Act led to the restructuring of the Central Tender Board (previously established to oversee the bidding process and approve award of major contracts) into the **Central Procurement Board** (CPB). In addition, to bring more clarity, transparency and procedural fairness to the public procurement process, the **Public Procurement Office** (PPO) was set up as a policymaking and oversight institution which can provide suppliers and bidders with legal guidance and clarifications and which monitors the performance and progress of the procurement system. The **Independent Review Panel** (IRP, which hears appeals from aggrieved bidders) was established alongside. Under the PPA 2006,

any bidder or potential bidder can challenge the procurement proceedings of a public body at any stage and request the CEO of the public body to consider his complaint and, where appropriate, take remedial action. Appeals may be brought before the IRP, providing a two-tier system of dispute resolution.

Resolution of procurement disputes

In terms of **procurement disputes**, CPB conducts the bidding process and also approves the award of the contract, while challenge or application for review of CPB decisions is referred to the IRP. However, several reviews of the legal framework for public procurement in Mauritius (by COMESA in 2008 and 2009, and by the World Bank in the context of the Piloting Use of Country Systems) found that in the case of such applications for review, procurement entities could not adequately support the evaluation by the CPB. Moreover, as IRP decisions are not binding on the Public Body (or procuring entity), in several cases IRP decisions were not implemented: over 2008-11, in five cases the initial bidding and award decisions were maintained despite the fact that the IRP had found merit in the applications for review, and in eight cases the public bodies concerned chose not implement the IRP recommendations and proceeded with re-bid exercises.

Due to its limited resources, in a few cases the IRP was moreover unable to come to a decision within the statutory period of 30 days. This was in part caused by the high number of abusive appeals, facilitated by the fact that appealing bidders incurred no liability as appeal fees (of MUR 75 000, or USD 2 300) were entirely refundable. Indeed, up until 2012 almost one-third of awarded contracts above MUR 1 million (USD 32 000) were challenged by unsuccessful bidders. To improve on this situation, since 2013 a time limit has been set on IRP resolution of disputes, and the **fee for appealing** to the IRP has been raised and made non-refundable; this will give the IRP more resources to focus on remaining cases.

In the ICT sector, the 2011-14 NICTSP likewise points to weaknesses of the IRP. Specifically, insufficiently clear procurement rules are identified as a factor contributing to delays in the completion of ICT projects. Although the new procurement process was intended to increase transparency and fairness, and despite the legal requirement that the IRP reach a decision within 30 days, in practice the process has often taken several months. The Ministry of Information and Communication Technology notes that this may have been due to a lack of ICT technical expertise in the composition of the IRP, making case assessment difficult. IRP processes are thus complemented, in the ICT sector, by an ICT Appeals Tribunal (set up under the 2002 ICT Act, in addition to the regulatory authority ICTA). This Tribunal is to hear and dispose of any appeal against a decision of the ICT Authority; any party who is dissatisfied with the decision or findings of the Tribunal may subsequently

appeal to the Supreme Court within a delay of 21 days. Rules of Procedure and Cost Regulations for the Appeal Tribunal were released in 2004.

Legislation for Public Private Partnerships (PPPs)

In May 2003, MOFED issued a Public Private Partnership Policy Statement, which outlined government interest in pursuing the PPP route and announced that in the early stages of PPP government would focus on the following key areas of development: transport; public utilities (energy and water); solid and liquid waste management; health; education and vocational training; and ICT. Following this, the **2004 PPP Act** was elaborated by a taskforce chaired by MOFED and set up jointly with the private sector. Members of this taskforce included, on the public sector side, the Ministry of Public Infrastructure, MEPU, and BOI among others; and private sector representatives such as JEC, the Building and Civil Engineering Contractors Association, the Institution of Engineers, and Mauritius Bankers Association. Such close public-private co-operation in the preparation of the country's PPP framework is highly commendable.

The PPP Act of 2004 makes provisions for soliciting and awarding PPP bids (including feasibility studies, responsibilities of contracting authorities and referral to the Central Tender Board or requests for proposal), and also sets up a **PPP unit** within MOFED. In 2006, this PPP Unit released a **PPP Guidance Manual**, which usefully complements the PPP Act by clearly laying out the operational sequence for PPP projects throughout their lifespan (that is, from pre-feasibility studies through bid evaluation and selection, to project implementation, monitoring and termination). It also notifies policymakers of crucial considerations in making the choice of pursuing the PPP route for infrastructure provision (see below).

The **Finance Act 2008** brought two major amendments to the PPP Act 2004. Firstly, it clarifies the process for managing **unsolicited proposals for PPP projects**. Once a private promoter submits a project concept and the proposed cost of a detailed feasibility study to the contracting authority, and if this technical proposal is accepted, the contracting authority must prepare Request for Proposal (RFP) documents which must be approved by the CPB before bids are invited. Mention will be made in the RFP documents to the effect that: the PPP project has emanated from an original proponent; the original proponent will be awarded the project if his price is within 10% of the price of the preferred bidder; and if the original proponent is not awarded the contract, the contracting authority will compensate the proponent for the approved cost of the feasibility study. This is an important move, as dealing with unsolicited bids are a challenge regularly faced across African countries seeking to expand infrastructure networks using the PPP route.

The second amendment to the PPP Act brought by the Finance Act sets up a **PPP committee** which is responsible for all matters relating to PPP. The committee is tasked with: assessing feasibility studies and giving its recommendations to the relevant contracting authorities; developing best practice guidelines in relation to all aspects of PPPs; formulating policy in relation to PPP projects; and developing PPP awareness in the country. The committee is assisted by the PPP Unit. Alongside these bodies and as states in the Investment Promotion Act, the BOI may also act as a co-ordinator and facilitator between the PPP unit and the private sector for the assessment of a PPP project, its implementation, development and monitoring.

Weaknesses of the existing procurement and PPP legislation: A lack of coherence

In order to further strengthen the existing legal framework for PPPs as well as the project pipeline, government commissioned the Institute for Public-Private Partnerships (IP3) to analyse and review the existing legal framework. The 2010 report of the IP3 concluded that in spite of considerable efforts, the level and pace of PPP project construction and operation had been less than expected and remained below the level required to fulfil the need in Mauritius for improved, expanded, and more competitive infrastructure. Private sector leaders in Mauritius' financial institutions, property development, industrial, and sugar industries for instance reported that they lacked confidence in the government's framework for PPPs and were therefore unwilling to propose new PPPs.

IP3 particularly pointed to a need to address a list of specific differences in understanding what PPP is, how quickly projects can be delivered, and why PPPs can play a beneficial role. The Institute recommends a strengthened PPP Policy Statement which would eliminate confusion and misunderstandings that existing between government bodies (including the PPP Unit, the PPO, the PPP Committee, MOFEE, PPC, line ministries, and contracting authorities – see next section) over the definition of PPPs. Moreover an updated and strengthened PPP policy statement would provide a common understanding between both government and the private sector in Mauritius on the purpose of PPPs, and the principles for their preparation and implementation. The current lack of clarity across relevant legislation, and blurred responsibilities in the PPP institutional framework, have reportedly blocked progress on major PPP projects in the past (such as the Bigara Wind Farm).

Similar conclusions were reached by the Public-Private Infrastructure Advisory Facility (PPIAF) in a separate assessment of the institutional and legal framework for PPPs in Mauritius (conducted in view of assessing the financial and commercial viability of a list of potential PPP projects, and of supporting the PPP unit in the development and management of PPP transactions). The study found significant **confusion within government entities and local**

private sector about the goals, roles, and overall process for the development of PPPs, which led to major constraints to the implementation of PPP projects in the island. Two options were recommended to improve the PPP framework: designing and passing a new PPP act, or issuing ministerial amendments to the 2004 PPP Act. The report also recommended the development of a general legal framework including clear and consolidated regulations, procedures, and guidelines for implementing PPP projects.

Coherence of the PPP legal framework could be usefully enhanced. The PPP Act and its amendments overlap with legislation on public financial management and public procurement (notably the Public Procurement Act 2006 and Public Procurement Regulations 2008). IP3 suggests that reformulation of PPP primary legislation could: clarify this framework; increase certainty on behalf of both investors and contracting authorities in the public sector; and better address the roles and responsibilities of different parts of government in PPP matters. Likewise, alignment of the PPP Act with the broader procurement framework could also be improved: a 2011 PPO study finds that public procurement procedures in Mauritius satisfy only 14 out of 17 mandatory requirements against the OECD/DAC Assessment Methodology Tool, in part due to a confusion of accountability (whereby bid evaluation for major contracts fall under the responsibility of the CPB rather than the procuring entities themselves). As a result, public bodies are answerable for awards not made by them in the implementation stage.

Recent revisions of the public procurement framework

By 2012, public procurement in Mauritius accounted for about MUR 29 billion (USD 1 016 billion) annually, or approximately 10% of GDP. As noted in the Government Programme 2012-15, given that the country's public infrastructure plan will require fast and efficient implementation, the public procurement process is being reviewed in order to accelerate decision-making while ensuring accountability. This builds on the recommendations (and ensuing white paper) made by a review committee on the legal framework for procurement, appointed by Government in 2011 in reaction to unsatisfactory assessments of the framework by COMESA, the PPPO and the World Bank.

Besides legislative reforms, actions are also underway to implement an **E-Procurement** system. As a first step towards this, as of 2010 Mauritius has launched a public procurement portal, a dedicated website for public procurement on which all public bodies can post information such as: invitation for bids along with their closing dates (thus making bidding accessible and transparent for the public); latest annual procurement plans (by ministry, department, local authority and parastatal of choice); summaries of bid evaluation reports; and notices of procurement awards. Suppliers, contractors and consultants are thus able to view current and future bidding

opportunities, evaluation reports and awards recently made, and download bidding documents where permitted.

Government is also developing a **Framework Agreement and Framework Contract** for standardising both work and utility contracting. According to the PPO, framework arrangements can allow for public bodies to procure from one or more suppliers on a fixed rate basis, or from many suppliers through mini-competition. This should enable public bodies to choose from different models of framework arrangements that provide the possibility for longer contract periods, but without necessarily locking the procurement entity into a long-term arrangement with one or a pre-selected number of suppliers. Standard bidding documents to serve as templates for the framework agreement and contract will be issued as pilots in this regard, and the PPO will accompany the lead public bodies in the preparation of the pilot projects so as to fine-tune the procedures and documents required for the implementation of framework arrangements. Once a central procuring body is in place, it is expected that some 40-50% of public procurement processes would be undertaken under framework arrangements within a three-year period. This is an important step forward which deserves strong political momentum – as such standard procurement frameworks can not only simplify the administrative process and reduce the resource intensity of bid and contract preparation, but also improve the efficiency of SOE management and service provision.

To ensure the timely and effective implementation of the government programme and of major projects, government has also committed to setting up a Project Management and Delivery Unit under the Prime Minister's Office. This unit, appointed in April 2012, will monitor and supervise the implementation of all public sector projects within agreed deadlines and in accordance with best international practices.

In addition to increasing the accountability and speed of procurement processes, ongoing reforms to the public procurement framework also include expanding opportunities for citizen contracting – and especially creating more space for SMEs to bid in procurement projects. As of 2013, SMEs bidding for contracts of under MUR 5 million (USD 160 000) no longer need to submit performance bonds and advance payment guarantees. An amendment to the act may also provide for at least two SMEs in the shortlists of restricted bidding (for procurement of up to USD 160 000), and for at least one SME in the restricted bid shortlists for low-value procurement (of up to USD 16 000).

In addition, although open advertised bidding is the default procurement method, a 2009 amendment of the PPA states that "the PPO may, in the case of procurement through open international bidding, issue instructions relating to the criteria and the applicable percentage preference for domestic or regional goods, services or contractors" [Section 5(1)] Likewise, a 2008 amendment of the

PPA states that "where applicable, the financial evaluation stage shall involve the application of price preference in favour of domestically manufactured goods and domestic and foreign contractors, and a regional price preference where the regional preference is applicable". The conditions of applicability are not made clear in the document; however under 35(2) "any applicable preference shall be stated in the bidding document and shall be in accordance with directives issued by the PPO". In 2013, the PPA has been amended once more, to grant a 15% **preference margin** to companies employing at least 80% local manpower when competing for public works contracts.

4.5. Managing the choice between public and private forms of infrastructure provision

There is a **full spectrum of options** available to governments wishing to develop infrastructure projects, with different levels of involvement by the private sector: from full SOE provision, through traditional procurement (where the government acquires infrastructure assets which are constructed by private companies, to whom the construction is awarded through tender and where the asset is operated by the government once the construction is finished), through PPPs (where both the construction and the operation of the asset are transferred to the private actor, with different levels of risk-sharing between public and private parties), and finally to full divestiture and privatisation of SOEs. Private sector participation in infrastructure thus takes various forms, including public procurement, which itself encompasses PPPs (see Figure 4.4).

Figure 4.4. **Spectrum of private sector participation in infrastructure provision**

<table>
<tr><td colspan="5">Low → Extent of private sector participation → High
→ Increasing share of risk shouldered by private partner →</td></tr>
<tr><td>Work and service contract</td><td>Management and maintenance contracts</td><td>Operation and maintenance concessions</td><td>Build operate transfer concessions</td><td>Full privatisation</td></tr>
<tr><td>Traditional public procurement and SOE provision</td><td colspan="3">Public private partnerships</td><td>Open competition by private operators across infrastructure market</td></tr>
</table>

Source: Author calculations, adapted from: Straub, S. (2009), "Governance in Water Supply", *Thematic paper* for the Global Development Network project.

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. As these various options and risk-sharing arrangements all have their own costs and benefits, it is crucial to ensure that the choice among them will arrive at **the most cost-effective option** of infrastructure provisions that provides the most value-for-money for end-users. This choice can be facilitated by transparent public procurement frameworks, and should be based on assessing the comparative advantage of each potential actor in providing the service. In countries such as Mauritius, where parastatals dominate infrastructure markets, this will notably require careful evaluation of SOE effectiveness and efficiency – for which the financial and corporate reporting standards mentioned above provide valuable inputs.

Clear guidelines for the financial management and procurement of infrastructure projects

Mauritius has a clear **framework for planning public infrastructure spending**, accompanied by a structured body of legislations for public procurement. Each ministry or department in the Mauritian government must elaborate a strategic plan in the context of the country's ten-year Economic and Social Transformation Plan (ESTP), so as to provide an overview of the major infrastructure projects that are forthcoming. All projects having a project value of more than MUR 25 million need to be submitted to the Project Plan Committee for approval. The committee brings together several ministries (public infrastructure, finance, public utilities, environment protection and management, local administration and land use planning) under the aegis of the ministry responsible for public infrastructure. Only approved projects are recommended for inclusion in the Public Sector Investment Programme (PSIP). In this way the committee aims to ensure that projects recommended for inclusion in the public sector investment plan fit with the infrastructure development strategy of government.

Once included in the PSIP, these infrastructure projects are planned and implemented as per the guidelines set in the **Investment Project Process Manual** (IPPM). The latter is issued in accordance with Section 22A of the Finance and Audit Act 2008 and is aimed at:

- organising the investment project process;
- developing a single window system for project approval;
- establishing best practices in budget expenditure in respect of investment projects based on programme-based-budgeting principles; and
- developing a well-defined long-term pipeline of projects.

Every public officer is to comply with the instructions specified in the IPPM, and can otherwise be referred to the appropriate service commission for

disciplinary action by the responsible. Provisions have also been made in the Financial Management Manual for disbursement of public monies on infrastructure, and disciplinary actions may likewise be taken against responsible officers in non-compliance of the manual's guidelines and instructions.

For the forthcoming PBB exercise (2013-15, which reached parliamentary stage in November 2012), **performance requirements on public spending** are moreover made more stringent in view of risks posed on government revenues by the economic situation in Europe. Accounting Officers are now required to ensure that all ministries and departments input forecasts of monthly expenditures and investment projects in the Treasury Accounting System (TAS). Meanwhile, the Budget Strategy and Management Directorate (BSMD) of MOFED monitors actual flows and current budget execution through the TAS. Every quarter ministries and departments must also submit a completed PBB Monitoring Template, covering: service standards; yearly targets, achieved and projected performance and milestones; main bottlenecks encountered; corrective measures taken; and per cent achievement of performance indicators. Accounting officers within each government agency are requested to put in place appropriate monitoring mechanisms to back these performance indicators. This strong framework for guiding and monitoring public investment projects, including in infrastructure sub-sectors, are complemented by a body of public procurement and PPP legislation which is currently being revised and improved (see below).

The 2006 Public Procurement Act also provides for **evaluation of procurement**, notably by the Procurement Policy Office. In 2009, the Public Procurement Office (PPO, see below) together with ICAC (the Independent Commission against Corruption) developed a Code of Conduct for Public Officials involved in Procurement, which notably attempts to tackle the new avenues for corruption potentially opened by recent trends in procurement processes (including decentralisation and e-procurement). The code covers accountability, transparency in decision-making, equitable and fair treatment, conflict of interest, and confidential use of proprietary information. The code notably commits public officials to "ensure that process, qualification and evaluation criteria are determined in such a way as to enable firms to enable firms of all sizes to compete fairly and equitably", and to encourage competitive bidding in the interest of value for money. The PPO also reviews decisions taken by the Independent Review Panel (IRP) as related to public procurement appeals.

Guidance for public versus private provision is available in the 2006 PPP Guidance Manual

Choosing between private and public provision of an infrastructure service is a topic that has considerably gained in significance since the

enactment of the 2004 PPP Act. While the act itself does not provide any concrete advice for making this choice (focusing more on the technical requirements of open and transparent bidding by contracting authorities), the **2006 PPP Guidance Manual** released by the PPP unit provides very comprehensive guidelines in this regard. In particular the Manual lists several crucial considerations in PPP projects, including value-for-money, appropriate risk allocation, market sounding, and calculation of affordability.

Going one step further, the manual provides specific and reader-friendly calculation guidance for each of these considerations; for instance how to compute a **Public Sector Comparator** (PSC), which estimates the hypothetical risk-adjusted cost if a project were to be financed, owned and implemented by government. An **affordability test**, which assesses the impact of such a project on public finances, can be computed by adjusting the PSC for risks and cost of capital. Similarly, the manual illustrates how to calculate market capacity for private provision (market sounding, which includes the strength of the private sector market for the project, the private sector's scope for achieving economies of scale, and its relevant expertise), as well as potential for risk transfer within the PPP. All of these calculations are crucial in order to make an informed choice between public and private provision, and to maximise the chances that the selected model of infrastructure provision will provide the most value-for-money for end-users.

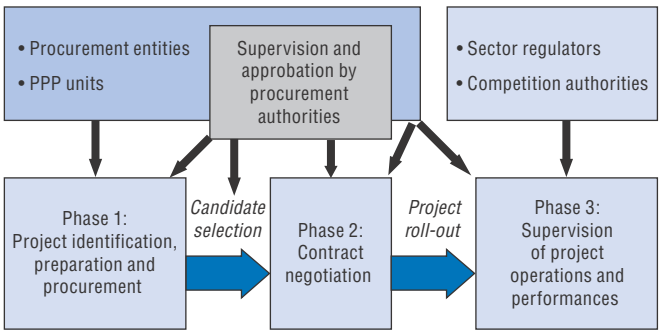
The choice between mode of provision, and the review of alternative modes of delivery and of the impact across the full system of infrastructure provision, also requires a strong **data-collection capacity** in order to assess the infrastructure needs and shortfalls of the country. Mauritius has a sound and regularly updated framework for this, co-ordinated by Statistics Mauritius which gathers all economic and social indicators for the country on an annual basis. The Economic and Social Indicators on Energy and Water Statistics, last released in 2011, are thus compiled in close collaboration with CEB, CWA, the petroleum companies, IPPs and the meteorological services – these statistics include not only energy generation, requirements and imports, but also energy consumption by industrial sector. Water storage and production figures are also included in these reports. Meanwhile, data pertaining to the telecommunications sector is compiled by the ICTA and can also be accessed on the ICT Indicators Portal managed by the NCB.

4.6. Public sector capacity for facilitating private participation in infrastructure projects

Traditional public procurement involves the **responsibilities of a multiplicity of bodies**, a situation which is rendered even more complex once a country aims to shift towards greater private sector participation in

procurement contracts. This places new demands on government agencies, from the finance ministry (which should play a key role as a gatekeeper, ensuring that public procurement projects 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 (see Figure 4.5). Co-ordination and coherence, as well as clear lines of accountability, across all of these actors are essential. 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.

Figure 4.5. **Implication of public agencies in the roll-out of public procurement infrastructure projects**



Source: Author calculations.

Capacity building for procurement, including PPPs

Project preparation, negotiation and implementation are thus 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. While procurement entities retain overall responsibility for identifying, developing, implementing and monitoring non-traditional procurement and PPP projects, PPP units therefore 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).

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 – see Sections 4.7 and 4.8) must regularly monitor the project performance and take appropriate actions in accordance with the terms of the PPP contract.

The 2010 report on Facing the Eurozone Crisis points to an "**acute problem of capacity in the implementation of public infrastructure**", which can severely delay the island's preparedness to face new challenges and seize the opportunities. This capacity problem has indeed repeatedly surfaced both in the realms of public procurement and PPPs, and is also highlighted in a 2011 study conducted by the PPO on the causes behind appeals placed on CPB decisions (see below). It is of crucial importance that public authorities are well-equipped to assess infrastructure needs, and to negotiate sound and equitable infrastructure contracts on an equal basis with their private counterparts. Contracting authorities must also be well-equipped to assess which types of infrastructure are more or less well-suited to different formats of PPP contracting. Sound management and upstream project preparation is necessary in order to mitigate the risks that come with PPP projects.

The PPO attributes the majority of procurement cases referred to the IRP over 2008-11 (and for which appeal was successful) to **faulty evaluation on behalf of bid evaluators** appointed by the public body. Over the period, 37 contracts were incorrectly evaluated. 51% of these cases pertained to the goods sector, followed by 24% in procurement of services; works and consultancy were less prone to evaluative error. Most common faults included bidding documents not spelling out the bid evaluation criteria (or non-application of full award criteria), as well awards made to "non-responsive bidders" that were not eligible under the qualification criteria. In all these cases, where incorrect evaluation was identified, the IRP therefore ruled in favour of the applicant. Only a minority of appeal cases were justified based on legal or institutional impediments which led to the procurement decision not being implemented.

This points to insufficient capacity on behalf of public officials, and especially for evaluating bids according to qualification and award criteria. PPO suggests that the number of appeals brought before the IRP since it has been operational (21 cases in 2008, 30 cases in 2009, and a drop to only nine cases in 2011) is nonetheless an encouraging indication of a fall in dissatisfaction among bidders and of **improving bidder awareness of correct procurement and bidding procedures**. Of these cases, 11 were resolved in favour of the applicant in 2008, ten in 2009, and five in 2011. These trends also denote better understanding by bidders of the tender process – bidders are

more knowledgeable and henceforth challenge awards with more certainty, displaying enhanced bidder confidence in the public procurement system. The small percentage of the total value of contract awards that were subject to applications for review in 2011 thus suggests that both bidders and public officials are adapting to the new procurement system in place since 2008. This follows capacity-building activities undertaken by the PPO since 2010 among public bodies.

The 2006 guidance manual released by the PPP unit recognises that, "since PPP represents a new paradigm for government, capacity building will be imperative for all stakeholders in the PPP process", and that the success of the PPP programme will depend largely on the development of appropriate skills within the public and private sector. The unit recommends that this be achieved through the dissemination of PPP information via newsletters and the PPP website, and the organisation of regular workshops. The manual itself also aims to cater to this capacity need, by providing guiding information designed to assist government to identify and implement PPP projects and to structure sound deals with private partners for improved public service delivery. Preparation of the manual built on PPP best practices in other countries (including South Africa, Ireland and Australia). As noted by IP3, further PPP training in Mauritius will need to be focused on supporting the preparation and completion of specific PPP projects, rather than on increasing general awareness of PPP concepts.

4.7. Regulation and pricing of infrastructure markets to meet end-user needs

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.

Regulation and pricing of the ICT sector

The telecommunications sector has been fully liberalised for more than a decade in Mauritius, a process supported by a comprehensive legal framework. **Sections 28 and 29 of the ICT Act 2001** provide for interconnection and access agreements, and Section 30 empowers the regulator ICTA to hold public consultations and carry out market analysis, in order to: identify information

and communication service markets or market segments; designate every ICT service market and market segment for which tariffs must be approved by ICTA before the service is offered to the public; and determine whether any public operator has significant market power in those information and communication service markets or market segments. In addition prior to the commercial launch of its services, every public operator is to disclose to the Authority the relevant market or market segment in which it intends to operate. Market power in both the primary market and in secondary/related market segments which may further strengthen the market power of the public operator are considered.

Nonetheless, the **National ICT Strategic Plan** (NICTSP 2011-14) notes that competition remained sub-optimal in Mauritius's ICT sector over 2007-11: despite the horizontal licensing structure, the market remained structured around vertically integrated operators. Although the licensing framework was intended to be technologically neutral in order to encourage innovative technology and services, the NICTSP notes, operators were confined to rigid categories in terms of service provision. Moreover, although ICTA had proposed a more flexible horizontal licensing structure – to take advantage of the trends towards convergence of technologies and the introduction of innovative services like triple play and mobile television – by 2011, this had yet to be put into practice.

Partially in response to this analysis, **the ICT Act has been amended in November 2011**. The amendment gives greater power to ICTA to proactively intervene in prices – particularly as regards operators holding significant market power. ICTA is henceforth tasked with the following objectives: creating a level playing field for all operators in the interest of consumers; licensing and regulating ICT services; regulating the cost-affordability and accessibility of ICT services (including telecommunication) nationwide, and ensuring that services are supplied as efficiently and economically as practicable and at performance standards; encouraging the optimum use of ICT in business, industry and infrastructure; and promoting the efficiency and international competitiveness of Mauritius in the ICT sector.

While previously ICTA had no responsive powers in the event of detecting market power, Section 30A of the 2011 amendment allows the authority **may impose specific conditions on the public operator** in such a case. Meanwhile, Section 31 of the act (also added in 2011) sets out provisions for electricity tariffs: proposed tariffs must be submitted to ICTA by every public operator (including a breakdown of costs), and must follow ICTA calculation guidelines. ICTA has 15 days in which to approve proposed tariff alternations for regular providers, and 30 days for providers detaining significant market power. The recent amendments to the ICT Act thus enable ICTA to intervene more effectively to ensure competition and competitive pricing of services. Mauritius is also further opening connectivity to give long distance telecom

operators the right of access to connect to international gateways via the country's two landing stations. This will enhance competition, allowing businesses to connect to multiple service providers.

The ICT sector is now also subject to the operations of the **Competition Commission of Mauritius**, CCM. In fact the state-owned Mauritius Telecom is since February 2011 engaged in a CCM investigation over the "Bundled Internet Access" that it offers clients in its MyT package (see below). JEC notes that the 2012 empowerment of ICTA has given more predictability to ICT players and led to unprecedented growth (of almost 15% annually) in the sector. ICTA is moreover very transparent on its procedures: its website for instance makes available all public consultation papers which are produced in advance of any procurement or private participation in ICT provision. Since 2004 and as of August 2012, over 15 such consultations are accessible, most recently having been carried out on the issues of tariff applications for ICT. These papers, once posted on the website, invite comments by other stakeholders, and final reports include ICTA recommendations as well as the specific views of several respondents from the wider investor community. This open and interactive process of stakeholder consultation and communication is an excellent mechanism for ensuring that all infrastructure policy changes adequately take into account the needs and views of the general public, including end-users. It also further guarantees the independence of the regulator.

Regulation and pricing of electricity and water

As per the **Electricity Act**, any company wishing to establish an undertaking for the supply of electricity (whether for public or private purposes) must apply to the CEB to act as an undertaker. There is no prescribed application form for such applications, but it must include a description of the area where the supply of electricity will be provided along with any other information that the CEB may require. If the application is considered favourably the applicant must publish it in the *Government Gazette*, on the basis of which any objections must be transmitted to the CEB in writing. Under the Environmental Protection Act of 2002, applicants for independent power provision are also required to submit an environmental impact assessment, to be reviewed by the Minister of Environment and National Development Unit. Issued permits do not exceed 20 years. However CEB may, where it thinks fit and without assigning any reason, refuse to consider any application.

CEB is therefore the regulator for the power sector, at the risk of creating some conflict of interest since it is not independent (reporting to its Ministry), and is also the monopoly actor in transmission and distribution. This situation has generated increasing calls for amending the Electricity Act, and for enacting the Utility Regulatory Agency Act of 2005 (which notably provided for the creation of a **Utility Regulatory Agency** to take over the role of the CEB

– including responsibility for issuing licenses and regulating operations of the licensees). JEC views that an effective Utility Regulatory Agency (URA) would unlock major investment in the renewable energy sector.

The URA would also have regulatory power over the water sector, which also lacks independent regulation to date. In addition Mauritius has recently exchanged experiences with Singapore, regarding the need for a regulatory framework and the need to review the institutions in the water sector. Steps towards setting up this regulatory agency have been taken as of late 2012, but although the government was considering the establishment of the URA's Board by March 2013, as of Spring 2014, the URA still does not exist. Moreover the 2014 Budget Speech makes no mention of its future establishment. Momentum would deserve to be renewed on this front, and likewise as concerns the regulation of transport provision. In its memorandum for the 2012 budget, the JEC urges for creating an independent regulatory body in the air transport sector and addressing the air access policy, which is viewed as an essential step if Mauritius is to develop a real hospitality cluster and become a business platform in the Indian Ocean. Unfortunately however this is also an area on which the 2014 national budget provides no specific policy direction.

Stepped tariffs to ensure wider accessibility in both energy and water

If established in the coming years, the URA would have to assess – and possibly revise – the **existing tariff and price-setting guidelines** for the water and electricity sectors. In both sectors tariffs are currently stepped according to volume of consumption. For water, tariffs are defined as per new Regulations passed in 2011 for both the WMA and the CWA. The CWA regulations clarify modalities for water supply, metering and billing, and sets a new schedule for water charges by – this is based on a stepped tariff, whereby the monthly rate paid by cubic metre of water increases by thresholds of water consumed (from six Rupees for the first ten cubic metres, to 32 Rupees for every additional cubic metre consumed beyond 50 cubic metres). The amended CWA regulations also include Ground Water Regulations which give the CWA regulatory powers, as approved by MEPU, over Section 16 of the Ground Water Act – the CWA is thus mandated to issue ground water licenses.

Over 2003-04, a **willingness-to-pay study for water and sanitation services** was conducted with PPIAF assistance, in view of future private sector participation in the water sector. The study aimed to assess the potential impact of adjustments in tariff levels and structures on consumer demand, which would have implications for cost recovery for private actors and for the design of potential subsidy schemes. This activity therefore sought to inform the design of an optimum tariff structure that would be widely accepted by the population and meet end-user needs. It was concluded that the best option for the wastewater sector was a management (enhanced affermage or

concession) contract between the Government of Mauritius and a private sector operator; however no PPP arrangement had been implemented in the water sector based on these recommendations to date.

Meanwhile, in the electricity sector, the cost of electricity amounts to 27.4% of per capita income for 2013 – substantially more affordable than in the majority of Sub-Saharan African countries (such as Kenya, at 191.3%), but proportionally more expensive than in Botswana (17.6%) and only slightly cheaper than in Namibia (30.6% of per capita income). As from December 2010, and in a bid to secure better affordability, tariffs vary by three thresholds of declared connected load (300 Watts or less; 301-5 000 Watts; and loads exceeding 5 000 Watts). These different groups face different minimum charges and security deposits, with the lowest minimum charge being at 44 Rupees per month. Meanwhile for each consumer bracket, the price per kWh increases by approximately 1 Rupee for every additional 25 kWh consumed. Yet, although this pricing structure is mindful of social needs and endeavours to ensure wide and affordable access to electricity, it has not been optimal in the past. In its 2013 review of the Mauritian economy, the IMF warns that **electricity tariff adjustments are made mainly on an *ad hoc* basis and do not reflect full cost-recovery**. Under-pricing costs are estimated to have reached close to 0.4% of GDP in 2006; moreover since tariff adjustments are mostly backward-looking, they do not cover planned investment costs and could therefore result in under-investment, poor maintenance of the network, and future capacity bottlenecks.

The IMF therefore recommends that the electricity sector adopt an automatic pricing mechanism, based on a formula reflecting not only long-run marginal costs but also monthly adjustments for swings in international fuel prices, inflation, and exchange rate movements. This possibility would deserve careful consideration by the URA once it is operational. Currently however, the only price-related measure considered by the 2014 Budget appears to be the launch of a pre-paid meter system by the CEB and with the help of Mauritius Telecom to facilitate payment of electricity. More structural changes, including renewing consideration of creating an independent regulator in the sector, would be necessary if Mauritius is to resolve its electricity pricing challenges.

4.8. Role of competition authorities in regulating infrastructure sub-sectors

The Competition Act 2007 was passed on 20 December 2007, and Parts I and II came into force on 24 October 2008 to allow the establishment of the **Competition Commission of Mauritius** (CCM). CCM is required to call hearings and investigate enterprises if the need arises so as to determine whether or not a business is engaging restrictive business practices. Penalties

or remedial steps to ensure compliance with the act can be imposed by CCM. The act also makes provisions for ways of appeal, and establishes a list of what are considered as restrictive business practices. CCM also operates on the basis of Procedural Rules and Guidelines developed in 2009 to provide businesses and consumers with greater certainty as to how assessments are made and through what processes. The comprehensive guidelines benefited from consultation with representatives from business, law, consumer associations and academia. As per these guidelines CCM must notably ensure that fair competitive market conditions prevail and that both private enterprises and SOEs are on the same level playing field.

Regulating anti-competitive behaviour in the public procurement process

CCM also has powers to **investigate anti-competitive behaviour in public procurement**. It can compel the production of documents and other information from bidders, and can impose financial penalties (of up to 10% of enterprise turnover during the period of the breach) if businesses have been found to participate intentionally or negligently in bid rigging. The Competition Act prohibits bid rigging and renders any bid rigging agreement void; and Section 53 of the act provides for suspension and debarment of bidders and suppliers involved in collusion.

These competition clauses are paralleled by **existing public procurement legislation:** Section 7(1) of the 2008 Public Procurement Regulations states that the PPO "may request from any source, information or evidence concerning possible grounds for suspension or debarment of a potential bidder or supplier"; and Sections 52 and 53 of the Public Procurement Act specify that bidders shall not engage in collusion, price-fixing, or in other manners deprive the procurement process from "the benefit of free and open competition". As of July 2012, however, no cases had yet been brought to the CCM or to the courts, respectively, for collusion-related violations of the Competition Act or of the Public Procurement Act. Likewise although the PPO website provides for a list of suppliers which are barred from future procurement contracts, this list is empty to date.

All of the above clauses and arrangements apply to private sector as well as public bidders, including SOEs – with the exception of the **State Trading Corporation** (STC). The latter is exempted from the provisions of the Public Procurement Act since June 2009 in respect of procurement of goods destined for resale (that is, the strategic goods controlled and priced by STC – wheat flour, sugar, rice, petroleum and LPG – see Chapter 5). Nevertheless STC states that it is fully committed, in the conduct of its mandate, to the exercise of sound procurement policies and practices based on open and competitive procedures. STC bids are now available online, and STC complies with the

provisions of the Public Procurement Act 2006 for procurement of goods and services for its own use.

CMM, therefore, has some **overlapping powers with the PPO**, and for this reason both bodies entered an MoU on 24 August 2011, clarifying the responsibilities and day-to-day co-operation in the case of public procurement, and as regards overlap between the Public Procurement Act (particularly Sections 52 and 53) and the Competition Act. The bodies have since conducted joint awareness-raising workshops with public entities and business, including a bid rigging workshop in 2010, workshops with the construction industry and with the Association of Building and Civil Engineering Contractors (2010 and 2011), and speaking to the Pan-Commonwealth Public Procurement Conference (2011). Since 2012, CCM and PPO are also developing joint guidelines for enhancing competition in public procurement, and for raising awareness on procurement malpractice and bid rigging among public and private sectors – with an emphasis on the legal prohibitions of bid rigging.

Powers of the CCM in relation to regulatory authorities and SOEs

Competition authorities require adequate resources, political support and independence to exercise effectively, in particular when they must challenge vested interests – such as monopolistic private firms, or state-owned firms that fall under the regulatory authority of other parts of government. In this view, Section 66 of the Competition Act provides for the commission to establish **MoUs with sectoral regulators**, governing their respective responsibilities and practical co-operation and providing for use of specific regulator expertise in CCM investigations. So far, in the infrastructure field, CCM has signed MoUs with the Independent Commission against Corruption (ICAC), the Information and Communications Technologies Authority (ICTA), the PPO, the Bank of Mauritius, the Financial Services Commission and the Mauritius Revenue Authority. Negotiation for MoUs with additional bodies is underway. Yet, the CCM Guidelines on General Provisions (CCM 7) make clear that the Competition Act does not over-ride other legislation or policy decisions, as a sectoral regulator's decisions cannot be in breach of the Competition Act in the way that the behaviour of an enterprise might be (unless the regulator itself is buying or selling). The CCM thus has limited powers over policy (including use of regulatory powers by regulatory bodies) which might restrict, prevent or distort competition.

CCM nevertheless serves an **advisory role on government policy**. Section 19 of the Competition Act 2007 states that "the commission may advise the Minister on any action taken or proposed to be taken by the State or any public body that may adversely affect competition in the supply of goods and services". CCM, thus, has the capacity to evaluate the impact of other government agencies' policies from a competition policy perspective when it is made aware of these. This advisory role for competition authorities should

notably play an active role during privatisation, including in the upstream and preparation phases. One of the key concerns of privatisation endeavours has indeed been the risk of replacing public monopolies with private ones, rather than increasing competition. Critical issues include potential exceptions and exclusions granted to the new (private) firm, such as exclusivity contracts, as well as monitoring the behaviour of formerly state-owned firms, which may still exert considerable market influence. Dominant incumbents have for instance complicated market access for new entrants in industries such as electricity, railroads, and communications in several countries.

In **cases of privatisation**, an active *ex ante* and *ex post* role for competition authorities can therefore: help balance the need to create a more efficient and competitive industry with possible political pressures to sell state-owned assets at the highest possible price (for which exclusivity and other such clauses may come in); and help ensure that anticompetitive practices do not arise *ex post*. However, while CCM has the power to investigate any business transactions including privatisations, to date it has not been active in case of privatisations, which remain a policy decision taken by the government. Across all fields of infrastructure regulation, CCM could participate more actively in government policy. As CCM currently operates only when it is made aware of the policy to be implemented by the relevant Ministries or regulatory authorities, there are instances in which the CCM is not involved when it could usefully have been. While CCM can conduct inquiries into policy matters and can make recommendations to government on the competition effects of policy, this is only an advisory role and the CCM is not viewed as competent for deciding how to weigh competition considerations against other effects of suggested policy – such as social or environmental objectives.

As concerns enterprises that are subject to sectoral regulations (mostly in the infrastructure sectors, where most enterprises are state-owned in Mauritius as shown above), the CCM Guidelines 7 nonetheless emphasise that the **role of CCM *vis-à-vis* sector regulators** "should not be taken to imply that all actions taken by regulated enterprises that are consistent with regulators' directions or other policy decisions are exempt [from competition considerations]". It notes that if enterprises comply with regulatory decisions in a manner that distorts competition while there were more competitive alternatives, CCM could find the behaviour to constitute a restrictive practice and could impose remedies or (for intentional or negligent breaches of the collusive agreements provisions) fines.

Investigation of anti-competitive practices

The CCM Guidelines 7 therefore encourage enterprises to "comply with price controls or other mandatory policies in a manner which minimises distortions to competition", and to consider the least-distortion means of attaining regulatory objectives. Outside of the LPG and petroleum sectors, the

CCM thus has powers to investigate any enterprise that is in breach of the act. The CCM Guidelines 7 state that CCM's power to carry out investigations "includes SOEs, or the State itself when the State is engaged in business activity". The Competition Act does not provide for explicit exemption of any national champions or dominant firms. According to the CCM, it therefore enforces the Competition Act in a way that is **fair to enterprises and blind to ownership** – as evidenced by the varied ownership structure of the enterprises against which investigations have been launched, which includes both government and private individuals. The exception is where the service delivered by SOEs is free to the public, in which case the concept of competition and independent regulations does not arise.

The **21 cases investigated** by CCM since its inception in November 2009 (and up to August 2012) are listed in Table 4.1; two of these cases have thus included as the main parties Air Mauritius and Mauritius Telecom. In the latter case, the cellular subsidiary of Mauritius Telecom (Cellplus, now called Orange) and the former Telecommunications Authority have been engaged in a case with an entity (formed through a joint venture between a local company and a US investor) since 2005. The case remains in the courts and concerns allegations of unfair competitive practices by Mauritius Telecom and Orange. CCM also launched an investigation in the cement industry in which the STC was a party, concerning its cement importing activities. STC has withdrawn from the cement market as of July 2011, based on CCM's conclusions. These are encouraging indications of independence of the CCM from state-owned interests, in infrastructure sectors as well as in other markets.

Addressing competitiveness impacts on consumers: The Mauritius Price Observatory

Officially launched since March 2011 and now fully operational, the **Mauritius Price Observatory** aims to provide information on prices to consumers, while simultaneously encouraging competition in the retail sector, and increasing transparency in price setting. The Price Observatory is managed by a ten-member committee including an independent Chairperson and representatives of: consumers; supermarkets and shop-owners; the Mauritius Chamber of Commerce and Industry; the Mauritius Revenue Authority; Statistics Mauritius; as well as ministries responsible for Consumer Protection, Commerce, and Finance and Economic Development. The Price Observatory publishes regular monthly reports comparing prices of nearly 60 products (mostly food and beverage) across 22 supermarkets around the island – reporting the price of the cheapest item irrespective of brand, within a quality range, collected each month in selected outlets. The Observatory website also provides an interactive price comparator tool, which allows the comparison of the price of products across all major retailers on the island. The Observatory's

Table 4.1. **Competition cases investigated by CCM, 2009-13**

Case investigated by CCM	Status (as of August 2013)
Kraft cheese and general rebates	Commencement: December 2009; completed: September 2010.
Importation of slaughter cattle in Mauritius	Commencement: December 2009; completed: December 2011.
Travel agent service fees (state-owned bodies involved: Air Mauritius)	Commencement: December 2009; completed: October 2010.
Cement market study (state-owned bodies involved: State Trading Corp.)	Commencement: July 2010; new study launched in April 2012.
Possible collusion in the market for secondary school books	Commencement: July 2010; renewed in January 2012 with case of alleged abuse of monopoly power in the supply of secondary school books.
Merger review of Event Strategy Ltd. and Lc. Events Co. Ltd.	Commencement: October 2010; completed: July 2011.
Commingling of Pools Automatic Systems Ltd. and Globalsports Ltd.	Commencement: May 2011; completed: September 2011
Proposed merger of the insurance businesses of Swan Group and Rogers Group	Commencement: November 2011; completed: February 2012.
Bundling of insurance products and credit in the banking sector	Commencement: August 2010; completed: August 2012.
Myt and bundled internet access (state-owned bodies involved: Mauritius Telecom)	Commencement: February 2011; completed: September 2012.
Market for Telecommunications Manhole Covers	Commencement: November 2011; completed: October 2012.
Supply of replacement automatic electronic ignition keys	Commencement: January 2012; ongoing.
Private medical/health insurance schemes	Commencement: January 2012; completed: February 2013.
Alleged abuse of monopoly power in the supply of secondary school books	Commencement: January 2012; ongoing.
Professional architects council rules	Commencement: April 2012; ongoing.
Investigation into supply of coolers to retailers by Phoenix Beverages Ltd. and Quality Beverages Ltd.	Commencement: May 2012; ongoing.
Payment cards	Commencement: May 2012; ongoing.
Investigation into possible restrictive business practices in the chicken industry in Mauritius	Commencement: June 2012; ongoing.
Investigation into merger between Toyota Tsusho Corp. (TTC) and CFAO Automotive	Commencement: December 2012; ongoing.
Investigation into image-based clearing solutions provided to commercial banks	Commencement: March 2013; ongoing.

Source: Competition Commission of Mauritius, completed and current investigations (*www.gov.mu/portal/sites/ccm/Current_Investigations.htm*).

analysis for October 2011 to May 2012 for instance indicates that the average price differential between the cheapest and highest-priced outlets was 32%; price differentials and ranks by geographical district are also shown.

A brainstorming session was organised in February 2012 by the Ministry of Industry, Commerce and Consumer Protection to assess the work carried out and also discuss the future orientations of the Price Observatory. This stressed the need for the Price Observatory to have an independent legal structure as well as the adequate human, financial and technical resources for its proper functioning. This form of data collection is very useful as it provides valuable information for consumers and policymakers and can also put positive pressure for competition

on retailers themselves. A similar observatory structure could be desirable outside of basic consumable goods – such as basic utilities and services. As of 2013, the coverage of the Price Observatory is being extended to the services sector (banking and finance) to stimulate further competition; in future a similar initiative could be usefully **extended to infrastructure services** as well.

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