I. Introduction and Context

Country Context

Mauritius became independent of the United Kingdom in 1968 and became a Republic in 1992. The Republic of Mauritius includes the islands of Mauritius, Cargados Carajos, Rodrigues and Agalega. Mauritius covers a surface area of 2,040 square kilometers and is home to an estimated population of 1.25 million. It has a population density of 628 people per square kilometer. With a population growth rate estimated at 0.5 percent, official projections show that Mauritius will soon face the ageing population syndrome (population above age 60 increase from nine percent in 2000 to 23 percent in 2040). This parliamentary Republic is a member of several regional organizations, including the African Union, the Common Market for Eastern and Southern Africa (COMESA), the Commonwealth of Nations, the Indian Ocean Commission (IOC), the Organisation Internationale de la Francophonie, and the Southern African Development Community (SADC). In Mauritius, the Prime Minister is the head of the government. The ruling party under the Leadership of Prime Minister Navinchandra Ramgoolam, leader of the Mauritius Labour Party, won the general election in May 2010 with the Parti Mauricien Social Democrat (PMSD) and a new partner, the Mouvement Socialiste Militant (MSM). In July 2011 one of the parties of the coalition, the MSM, quit the government in protest of the arrest of the former Health Minister following an enquiry into corruption allegations. A new cabinet was formed in August 2011 with the ruling alliance having a slim majority of three seats and the leader of PMSD being appointed as Minister of Finance an
Economic Development.

Mauritius has solid economic fundamentals: open to FDI (465 US million in 2010, 5.3 percent of GDP), export oriented (5,000 US million in 2010, 57 percent of GDP), high standards of governance (46th in the 2011 Transparency International Corruption Perceptions Index) and business friendly (the top-ranked African country in business climate, ranked 23rd globally in the 2011 World Bank Doing Business report). It has an estimated GDP of US$10,809 million in 2011 and is considered to be an upper middle income country with its GNI per capita at US$8,230. The poverty rate, whether measured as relative poverty, absolute poverty, or with respect to food poverty, is low. Using the relative poverty measure, the poverty headcount is estimated to be 8.7 percent, which is low compared to the average in Sub-Saharan Africa. Despite its small size, regional variations in poverty exist in Mauritius, with incidence of relative poverty higher in urban areas (12.4 percent) than in rural areas (8.0 percent). The country is ranked high in terms of competitiveness, investment climate and governance. The World Economic Forum’s global competitiveness index ranked Mauritius at 54 out of 133 countries in 2011 - 2012, behind only South Africa in the Africa Region. It topped the 2011 Mo Ibrahim Index of African Governance, and is ranked 36 in the AT Kearney Global Services Location Index 2011. The remarkable performance of the economy is attributed to sound economic governance, accelerated reforms to sustain long-term growth and effective State-business relations. These factors together with timely and targeted responses helped Mauritius to weather the negative effects of the global crisis.

Mauritius embarked on a multi-sector reform agenda in 2006 with the objective of improving the competitiveness of the economy. These reforms had considerable success in accelerating the rate of growth, reducing unemployment and speeding up the pace of diversification of the economy through the development of new sectors. The reforms created fiscal space to allow the authorities to perform a comprehensive, well-targeted, and temporary counter-cyclical policy in early 2009 to mitigate the negative impacts of the global financial crisis. The fiscal stimulus contributed to absorb the shock of the 2007/08 global crisis, which was reinforced in August 2010, with a second four percent of GDP stimulus package to cushion the impact of a weaker euro. Since 2010, the government embarked on a second generation reform program to continue improving Mauritius’ competitiveness as it transitions to more diversified export markets, ensuring also that inclusive growth reaches the entire population. Key elements of this reform are the improvement of (i) delivery of public services, including the civil service and public enterprises; (ii) infrastructure development, to overcome critical bottlenecks, particularly on transportation; (iii) skills development to enhance productivity and better integrate those parts of the population that lag behind; (iv) social protection to provide empowerment opportunities to the more vulnerable population; and (v) further liberalization of non-tariff measures to improve trade competitiveness.

The economic outlook for Mauritius is positive, but volatility may persist in the short-term, contingent on external economic conditions. The original economic outlook for 2011 projected a return of Mauritius’ economic momentum to its historical growth trajectory of 4.5 percent annual growth. However, the advanced economies fiscal consolidation programs and the increasing debt and financial worries in Europe took a toll in the Mauritian economy, particularly during the second semester of 2011, and real GDP grew at 4.1 percent. The main contributors to GDP growth have been real estate (0.8 percentage point), manufacturing (0.6 percentage point), transport and communications (0.5 percentage point) and financial intermediation (0.5 percentage point). The fiscal policy stance was broadly similar to 2010 and less expansionary than envisaged due to delays stemming from the limited capacity to execute large infrastructure projects, which resulted in an
overall deficit of 3.4 percent of GDP (a reduction of over 2 percentage points of GDP relative to projections and ½ percentage points relative to 2010, when considering extra budgetary funds). Monetary policy was tightened and the key repo rate increased cumulatively by 65 basis points in response to excess liquidity and inflationary developments. Also, while goods exports increased 16 percent (with strong growth registered across all major tradable industries) and tourism receipts grew 12 percent, the 17 percent increase in imports widened the current account deficit to some 10 percent of GDP, more than covered with portfolio flows and loan disbursements to the government and parastatal bodies. BOM managed to increase its net international reserves in nominal terms, which now cover 4.4 months imports of goods and services.

Mauritius has a successful development record, but many challenges remain. The external shocks demonstrated the heavy reliance of the economy in restricted sectors and markets. However, Mauritius is not yet ready to fully take advantage of the global re-balancing of export markets. It is not yet well integrated in the production chain and final markets of those countries which are bound to increase domestic absorption (particularly in Asia). The main constraints that the country faces are the following: (i) infrastructure - mainly in terms of road congestion and water delivery; (ii) scarcity of skilled human resources due to limited capacity to reform the traditional education system, inability to retain the best brains in the country and limited possibility to make use of diasporas; and (iii) large and relatively inefficient public companies and parastatals.

Prospects for 2012 call for slower GDP growth associated to substantial external uncertainty. Europe continues to be Mauritius major trade and investor partner and the European crisis points to a difficult year ahead. GDP growth projections for 2012 have been reduced to 3.7% (compared to 4.2% before). To respond to this challenge Mauritius should accelerate the reforms to diversify the economy, both in terms of climbing the value chain and reorienting exports toward high economic growth middle income countries (China, India, Russia and the African continent). Also, reforms on trade barriers, education and infrastructure are critical to achieve this. In this context, fiscal consolidation needs to accelerate to achieve substantial efficiency gains in the budget and ensure effective expenditure in priority areas, including strengthening safety net systems to cope with the poverty impact of a potential downturn (including increasing unemployment).

Sectoral and Institutional Context

In parallel to the country’s impressive economic growth over the past decade, has come an increasing demand for transport, particularly for the private modes. Since 1988, the number of cars and dual-purpose vehicles has grown steadily at about seven percent per year, reaching 400 vehicles per 1,000 inhabitants in 2011. This equates to approximately 193 vehicles per kilometer of available road space, a level double that of the rate in the United Kingdom or the Netherlands (82 and 75 respectively). This is despite a level of car ownership per 1000 head of population in Mauritius (109) that is currently a fraction of the level in the two European countries (470, 460 respectively). Without a change in policy, car ownership rates in Mauritius are projected to hit European levels by 2030, with the number of vehicles per km of road increasing to unsustainable levels (793).

Unfortunately, the development of the transport system has not taken place at the same pace. The total road network extends for about 2,000 km, comprising 55 km of expressway (dual carriageway), 1,019 km of primary roads, and approximately 926 km of secondary roads. There is serious and growing congestion on the main routes in and out of the main conurbation on the Curepipe to Port Louis corridor. There is limited application of best international practice in terms
of traffic management, demand management, and the necessary reforms in public transport have been delayed, leaving a sector characterized by fragmentation, driven by structural constraints, delivering a poor quality service. The proposed development of a rapid transport system between Port Louis and Curepipe will help, but its impact will be limited unless the system as a whole is improved.

There is an imbalance between capital and recurrent expenditure in the road sector, with expenditures in the latter category approximately half the required level. This in turn has increased the rate of network deterioration (with the evidence visible across the network), costs for road users, and has created a contingent liability of future rehabilitation costs. A general rule is that rehabilitating a paved road is three times more expensive than maintaining it, in current terms, and around 35 percent more in net present value terms. In addition, failure to maintain a paved road is estimated to increase user costs by a factor of three, in terms of additional time, fuel, and vehicular wear and tear. This dearth of maintenance is clearly visible on the network, with visible cracking, deformation, edge break, blocked weep-holes and gullies, overgrown verges, uncured drains, damaged guardrails and handrails, and dirty road furniture etc.

The poor quality of infrastructure, together with limitations in driver behavior, limited road safety education, and enforcement is resulting in rising rates of serious injury and death. Road injuries are the leading cause of injury deaths in Mauritius. In 2010, there were reported a total of 21,258 road traffic accidents, which resulted in 160 fatalities and 3,517 injuries. Compared to 2009, the number of road accidents in 2010 increased by 8.8%, while number of deaths and serious injuries rose by 14.3% and 13.8% respectively. The fatality rate as a result of road accidents per 100,000 mid-year population increased from 11.3 in 2009 to 12.9 in 2010. Given this position and the rising levels of motorization, road safety is unlikely to improve without a comprehensive and robust response.

There is currently no coherent policy or strategy to guide the development of the transport sector in Mauritius. There is no such strategy available in Mauritius currently, and the result is a piecemeal approach to interventions, with little consideration given to integration, either within or across the sectors, or with respect to the overall economic development. In addition, the institutional responsibilities in the sector remain unclear. It has been nearly six years since the decision was made to establish the Land Transport Agency, but establishment has still not taken place. The result is that the integration of activities within the sector, and with land use more generally remains fragmented. The lines of responsibility remain ill-defined, and activities are being developed in a piecemeal manner, with little consideration of the synergistic effects.

The existing road network has been built with a mix of design standards and specifications. Designers when preparing designs for interventions on the network have drawn on international standards from different countries or the Southern Africa Development Community (SADC) standards. The result is a lack of uniformity in standard and application across the network, with different standards on adjacent sections of the same road category on occasion. There are no Mauritian standards, developed and maintained in country, to ensure that the quality of the interventions fully reflect the context, and aspirations of a middle income country.

The management of the Road Network is the responsibility of the Road Development Authority (RDA). The RDA is a relatively new corporate body, established by Act No. 6 (Road Act) of 1998, and formally responsible for the provision and maintenance of all primary roads, classified under the Roads Act as motorways and main roads, including all bridges and other structures. The RDA is
primarily a technical organization headed by professional engineers and supported by administrative personnel. It was proposed to be established with a defined organizational structure comprising 843 positions. However, to date only 346 of the positions have been filled due to a lack of financial resources.

Relationship to CAS
The Country Partnership Strategy (CPS) for FY07-13 explicitly notes that one of the main reasons why the World Bank should remain involved in Mauritius is to help the elected government and its executives, design and implement reforms using experience and best practice from around the world, to support the Government in its aspiration to attain middle income status by 2020. This involvement is consistent with the role of the World Bank as a knowledge institution, working with other donors to support the Government’s program. This proposed operation is entirely consistent with this role, bringing best practice from elsewhere in the world in terms of managing both the assets of the road sector, and developing a holistic response to road safety interventions, together with the other donors, and the Government agency.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)
The project development objective has been provisionally identified as the following: to reduce transport costs and improve maintenance on the primary and secondary road network in two pilot regions over a 7 year period, whilst strengthening the management of road safety in Mauritius. This is expected to be realized by the following components: (a) the piloting of output and performance based road contracts for a seven year period in two pilot regions of Mauritius; (b) the improvement of the management of road safety; (c) the strengthening of the institutional framework for transport; (d) institutional assistance and implementation support.

Key Results (From PCN)
The key results from the proposed project are envisaged to be the following:

1. Introduction of pilot OPRC contracts for a seven year period for half the primary and secondary road network in Mauritius. It is the a priori expectation that the two pilot contracts would encompass approximately half of the RDA managed network (≈535 km per contract), allowing benchmarking against the remaining half of the network;

2. The preparation of a national results focused road safety strategy and a national action plan, based on final and intermediate outcome targets and institutional output targets, together with necessary institutional strengthening for the defined lead agency, and the associated secretariat, and the design of some pilot projects for implementation; and

3. (i) A masterplan to guide the sustainable development of the transport sector to 2030; (ii) a set of design standards and standard specifications for Mauritius; (iii) a quality review of project initiation, commissioning, design and implementation in transport sector; (iv) the operational establishment of the Land Transport Agency.

III. Preliminary Description

Concept Description
The Road Development Authority (RDA) is a relatively new corporate body, established by Act No.
6 (Road Development Authority Act) of 1998, and operating under the aegis of the Ministry of Public Infrastructure, Land Transport and Shipping (Public Infrastructure Division). The RDA is formally responsible for the provision and maintenance of all primary roads, classified under the Roads Act as motorways and main roads, including all bridges and other structures.

The RDA is primarily a technical organisation headed by professional engineers and supported by administrative personnel. It was proposed to be established with a defined organizational structure comprising 696 positions. However, to date only 417 of the positions have been filled due to a lack of financial resources. Whilst the majority of the unfilled posts are for skilled and semi skilled workers, there are also some vacant technical positions due to the relative scarcity of technical officers and inspectors of works.

The Road Act defines the following activities as being the responsibility of the RDA for the roads classified under the Roads Act as Motorways (55 km) and Main Roads A & B (1019 km):

- Maintenance works - to preserve the assets of the road network by maintaining the level of service of the motorways and main roads in terms of riding quality, comfort and safety to acceptable standards through regular interventions of a routine or periodic nature such as cleaning or upgrading of drains, culverts and bridges, patching of potholes, resurfacing works, repair and extension of footpaths, road marking and cleaning, replacing and upgrading road furniture and addressing water accumulation problems.
- Upgrading works - to improve or raise the level of service of existing roads in terms of capacity, riding quality, comfort and safety to an acceptable standard, through intensive repair, improvement, rehabilitation, strengthening and/or reconstruction works.

There are two divisions at the RDA assigned with Maintenance of the existing network. The country is divided into four regions with two regions under the responsibility of a Divisional Manager. The RDA currently employs a maintenance workforce consisting currently of 294 people, of which 155 are unskilled workers, 85 skilled workers, 34 from the Inspectorate Cadre and the remainder from the Technical cadre. Routine maintenance such as patching, repairs, cleaning etc. is currently carried out in house by direct labour. Periodic maintenance such as provision of overlays, major repair works, construction of footpaths and drains etc. and road safety measures are carried out under traditional input-based contracts by Contractors appointed on a yearly basis by the RDA through competitive bidding. Inspection, scheduling of works, supervision and project management are undertaken by the staff of the Maintenance Divisions.

However, the maintenance divisions are grossly understaffed with the result that routine maintenance is not undertaken with the required regularity. This dearth of maintenance is clearly visible on the network, with blocked weep-holes and gullies, overgrown grass, uncured drains, damaged guardrails and handrails, dirty road furniture etc. Entrusting the routine works such as cleaning of drains, furniture etc. to the private contractors, at the district level, has proven simply extremely expensive. The typical contracts are basically rates contracts and the prices of those items of work which are not usually in major roadworks are often exaggerated.

The RDA have, as an alternative, thought of employing small contractors/one man contractor under traditional method, or input-based maintenance contracts. However, it is feared that, as the Authority would have to specify the works and techniques to be used and carry out the supervision and quality control etc., and the relative scarcity of engineering and inspectorate staff at the RDA would not allow maintenance works carried out this way to be effective, or efficient. Therefore, if
direct labour cannot be employed because of constraints it is essential to explore other means of improving the management of the assets.

The RDA therefore wish to procure Consultants to support the organization in the development of good asset management practices, and produce an appropriate Asset Management Strategy (AMS) with incorporated risk allocation, defined levels of service, and a forward work program. It is essential that the AMS, and the associated procurement plan (probably comprising a mix of output-based and input-based interventions) is fully reflective of the context.

IV. Safeguard Policies that might apply

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