Debt Management Reform Plan (DeMPA)

Madagascar

February 2014
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BCP</td>
<td>Business Continuity Plan</td>
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<td>BCM</td>
<td>Banque Centrale de Madagascar</td>
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<td>CBM</td>
<td>Central Bank of Madagascar</td>
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<td>DDP</td>
<td>Public Debt Directorate</td>
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<td>DeM</td>
<td>Debt Management</td>
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<td>DeMPA</td>
<td>Debt Management Performance Assessment</td>
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<td>DMFAS</td>
<td>Debt Management and Financial Analysis System</td>
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<td>DMS</td>
<td>Debt Management Strategy</td>
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<td>DRS</td>
<td>Disaster Recovery Site</td>
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<td>DSA</td>
<td>Debt Sustainability Analysis</td>
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<td>HIPIC</td>
<td>Heavily Indebted Poor Countries</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>MDRI</td>
<td>Multilateral Debt Relief</td>
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<td>MGA</td>
<td>Malagasy Ariary</td>
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<td>MoFB</td>
<td>Ministry of Finance and Budget</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>MTDS</td>
<td>Medium Term Debt Management Strategy</td>
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<td>ORM</td>
<td>Operational Risk Management</td>
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<td>PFM</td>
<td>Public Financial Management</td>
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<td>SLA</td>
<td>Service Level Agreement</td>
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<td>SOE</td>
<td>State Owned Enterprise</td>
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<td>WEO</td>
<td>World Economic Outlook</td>
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EXECUTIVE SUMMARY

A World Bank mission comprising Lilia Razlog (World Bank, lead), Cigdem Aslan (BDM, World Bank), Mike Williams, Per-Olof Jonsson (External Consultants), and Stella N Rusine (Debt Practitioner, Rwanda), visited Antananarivo, Madagascar, during February 11-20, 2014, to assist the authorities in developing a sequenced medium term reform plan in the area of government debt management. The team wishes to express appreciation to all the counterparts at the Treasury, Ministry of Finance and the Central Bank of Madagascar, for their hospitality and engagement during the technical meetings and workshop sessions.

The reform plan pillars outlined in this report build on the findings of the 2013 World Bank Debt Management Performance Assessment (DeMPA) for Madagascar and the discussions held during this mission with the central government representatives.

Recent presidential elections and envisaged inauguration of the new government provides an enabling environment for engaging into broad economic and institutional reforms. Improvement of the governance practices and continuation of the public finance management reforms are among priorities stipulated in the President’s reform agenda.

It is important to mention that during the last two years MoFB’s Treasury undertook a number of initiatives to improve government debt management. The Public Debt Directorate (DDP) was reorganised in 2012 and additional staff was hired during the last calendar year. Improvement of existing legal framework was initiated by the DDP in close cooperation with legal advisers of the Treasury. Against this background the design of a debt management reform plan is timely. It is expected to contribute to further improvement of debt management capacities and support reforms’ implementation.

Based on consultations with the authorities, and taking into account reforms and technical assistance projects already underway, it was decided to focus the reform plan on four specific issues, and to work under a medium term timeline. Thus, proposed plan focuses mainly on specific activities in 2014 and 2015, many of which can be undertaken within existing capacities of the DDP without substantial external support. In some areas, however, such as operational risk management, it is recommended that external consultants are engaged to support the establishment of risk identification and monitoring process. It is recommended that this reform plan, once it has been finalized by MoFB’s Treasury, is shared with the donor community.
The main areas of reforms identified include: (i) improvement of the legal framework, (ii) formulation of a debt management strategy, (iii) improvement of central government borrowing policies and (iv) operational risk management. Main weaknesses and proposed activities of the reform plan are summarized in the table below.

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Proposed actions</th>
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<tr>
<td>1. Legal Framework</td>
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<tr>
<td>- Legal framework for DeM is scattered among several laws and is incomplete;</td>
<td>- Revise draft debt management law (recommendations provided by the mission team);</td>
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<tr>
<td>- No authority to issue loan guarantees is envisaged</td>
<td>- Consider inclusion of development domestic market into list of DeM objectives;</td>
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<td></td>
<td>- Consider including concrete guidelines for DeM strategy</td>
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<td></td>
<td>- Add purposes, including borrowing for buybacks of debt and borrowing for monetary policy purposes, among others</td>
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<td>2. Debt management strategy</td>
<td></td>
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<tr>
<td>- Risks of the existing debt portfolio is not assessed</td>
<td>- Analyze government debt portfolio and associated risks</td>
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<td>- No debt management strategy</td>
<td>- Prepare and publish a medium term debt management strategy document covering 2015-2017</td>
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<td>- Revise the medium term debt management strategy annually</td>
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<td>3. Borrowing policies</td>
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<td>- The overall borrowing planning is weak</td>
<td>- Identify potential external creditors with their respective focus on activities and expected financial terms and conditions</td>
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<td>- Limited information on planned T-bills borrowing is provided</td>
<td>- Produce an aggregate annual cash plan on monthly basis</td>
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<td></td>
<td>- On the basis of the overall cash plan prepare a quarterly auction calendar, starting in 2014, and make it public</td>
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</table>
| 4. Operational risk management | - No integrated operational risk management framework  
- Apparent risk exposures arising from:  
  a) Incomplete segregation of duties  
  b) DMFAS database can still not be used as DDP’s primary database  
  c) Extensive services supplied by the CBM are not documented in a MoU  
  d) Lack of procedures manuals in the DDP | - In the short term:  
  a) Bring the DMFAS database into full operation  
  b) Dialogue with CBM with a view to preparing MoU  
- In the medium term:  
  a) Prepare procedures manuals within the DDP  
  b) Appoint a risk champion  
  c) Undertake a full risk identification and assessment process  
  d) Establish regular risk monitoring process and decide mitigation priorities |

The above activities are discussed in more detail in the report, including sound practices in specific areas, highlights of the current situation, and description of recommended actions. Also, a log-frame (Annex 1) outlines the specific actions, sequencing, and expected outcomes.

The reform plan mission team is ready to provide input and feedback throughout the reform plan implementation phase. Also, within next 12 to 16 month, the MoFB may wish to request a follow-up reform plan mission to take stock of activities undertaken during the year, and to provide input for further reforms.
BACKGROUND

1. **Madagascar’s economic growth remains weak and inflation contained.** Since 2010, the Malagasy economy has been growing slowly; this followed negative growth in 2009 (-4.1 percent) as a result of the political crisis after which the economy slowed down in general. In 2013, real GDP growth was estimated at 2.4 percent against 2.8 percent projected. This shortfall was in part because of weak performance in the mining and agro-industry sector, but also low government spending caused by a restrictive fiscal policy to cope with the reduction of external aid. Inflation was maintained at 6.7 percent, thanks to prudent monetary policy.¹

![Figure 1: Growth, Inflation and Current account balance](image)

Source: World Economic Outlook, October 2013

2. **The current account balance has continued to record a deficit in recent years.** Exports of goods and services have remained subdued, as well as capital and financial inflows, generating an overall deficit of 2.3 percent of GDP in 2013.²

3. **The Budget implementation process during 2013 was jeopardized by lower domestic revenue collection,** reflecting the slowdown in almost every sector of the economy. Moreover, according to authorities, budget and capital grants were lower in 2013 compared to 2012. On the other hand, expenses rose, due to additional subsidies for petrol and compensation to pension funds arising from past indemnities despite a budget cut by 20 percent approximately. The overall deficit was estimated at 1.6 per cent of GDP against 0.6 per cent previously projected. This was mainly financed through issuance of Treasury bills and advances granted by the central bank.

4. **Central Government Debt**

Having reached the HIPC completion point in October 2004 and subsequently receiving additional debt relief (USD 1.8 billion) under the MDRI, Madagascar’s external public

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² Source: MoFB/Budget law 2014
Debt was significantly reduced, and total public debt declined to USD 1.7 billion (23.4 percent) in 2006. By end 2013, total public debt was estimated at 26.3 per cent of GDP. The external debt stood at 17.7 per cent of GDP and domestic debt at 6.5 per cent.

![Debt Stock as a share of GDP](image)

*Figure 2: Debt Stock as a share of GDP*

Source: MoFB

Foreign loans in outstanding debt account for the largest share, 73.2 per cent against 26.7 per cent for domestic debt. External borrowing slightly increased in nominal terms during the last year, from USD 1786.2 million in 2012 to USD 1792.8 million in 2013.

Domestic debt stood at MGA 1.5 billion (approximately USD 740 million). A significant part of the domestic debt has to be refinanced in 2014. This includes T-bills amounting to MGA 1.13 billion issued for budget funding, and statutory advances amounting to MGA 33.4 billion to be repaid six months after the end of 2013 (year in which it was disbursed).

The stock of domestic debt also includes recapitalization and other consolidated loans held by the CBM as well as some interest arrears. Recapitalization loans held by the CBM amounted to MGA 110.80 billion as per 2007’s convention between the CBM and the Treasury, and consolidated loans amounted to MGA 227.32 billion as per 1992’s convention. Both these loans were securitised and are held in the form of *Titres de Créances Négociables* (TCN), which can be used by the CBM in its monetary policy operations.

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3 This stock excludes domestic arrears, which include the costs of sterilization of the monetary policy, subsidies for the purchase of petroleum products, and reimbursement of amounts paid by the central bank on VAT charges.


5 Source: Article 21 to 28 of the Articles of agreement between the CBM and the Treasury concerning the modality for reimbursement of debts from 1992’s Convention and other loans granted to the Treasury of 31/03/2004 addendum number 1,2,3, 4 of 08/02/2006, 07/03/2007, 30/04/2007, and 22/04/2010.
In 2013, total government debt service was USD 896.18 million; this represented approximately 57.8 percent of total revenues, with the largest share attributed to domestic debt repayment (54.5 percent).

5. Risk Indicators and Currency Composition, End 2013

The tables below sets out details of the currency composition and risks indicators associated to Malagasy debt portfolio:

<table>
<thead>
<tr>
<th>Risk Indicators</th>
<th>External debt</th>
<th>Domestic debt</th>
<th>Total debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount (in millions of USD)</td>
<td>2,028.7</td>
<td>740.0</td>
<td>2,768.8</td>
</tr>
<tr>
<td>Nominal debt as % GDP</td>
<td>17.0</td>
<td>6.2</td>
<td>23.2</td>
</tr>
<tr>
<td>PV as % of GDP</td>
<td>9.6</td>
<td>6.2</td>
<td>15.8</td>
</tr>
<tr>
<td>Cost of debt</td>
<td>Weighted Av. IR (%)</td>
<td>0.9</td>
<td>7.4</td>
</tr>
<tr>
<td>Refinancing risk</td>
<td>ATM (years)</td>
<td>17.0</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Debt maturing in 1yr (% of total)</td>
<td>2.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Interest rate risk</td>
<td>ATR (years)</td>
<td>16.9</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Debt refixing in 1yr (% of total)</td>
<td>2.9</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Fixed rate debt (% of total)</td>
<td>99.9</td>
<td>24.7</td>
</tr>
<tr>
<td>FX risk</td>
<td>FX debt (% of total debt)</td>
<td></td>
<td></td>
</tr>
</tbody>
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6 Risk indicators include: Present Value (PV), Interest Rate (IR), Average Time to Maturity (ATM), Average Time to Re-fixing (ATR), and Foreign Exchange denominated debt (FX)
External loans in the Malagasy debt portfolio constituted 17 per cent of GDP by Dec 31st, 2013. The estimated average time to maturity is 17 years, and only 2.9 percent of external loans are being re-fixed in one year. This reflects a large proportion of highly concessional external loans. The criterion for considering concessional financing has been a minimum requirement of grant element of 35.0 per cent or more, before contracting new external loans.

At the same time, indicators show a high exposure of the debt portfolio to exchange rate risks. Should there be a significant depreciation in the Malagasy Ariary, this would have an adverse impact on servicing the debt denominated in foreign currency.
Total domestic debt is almost entirely in treasury bills with a very short maturity. Average time to maturity is at 0.5 years, and 24.7 percent is at fixed rate. This poses a high risk in terms of refinancing (rollover of the Treasury bills each two weeks) and interest rate risk.

In terms of currency composition, the SDR has the largest portfolio share, 51 percent as of 2013. The decomposition of the SDR reveals a high exposure of the external debt service to fluctuations in the US dollar (37 percent). Madagascar’s major external creditors are International Development Association (IDA) and the African Development Bank (AfDB).

The last DSA, which was undertaken in June 2008 by the IMF, suggested Madagascar’s risk of debt distress as low although vulnerable to a shock on export growth given the country concentration of exports in textiles and mining products. The IMF plans to conduct a joint DSA with the World Bank in spring 2014.

**THE LEGAL FRAMEWORK**

**Sound Practice**

6. The legal framework for government debt management (DeM) comprises both primary legislation (laws enacted with approval of the Parliament) and secondary or delegated legislation (executive orders, decrees, ordinances etc.) determined by the Council of Ministers or individual Ministers.

7. The primary legislation should include a clear authorization by the Parliament to the executive branch of government (to the Council of Ministers or directly to the Minister of Finance) to approve borrowings and loan guarantees on behalf of the central government. In the secondary legislation the Council of Ministers or the Minister of Finance could delegate the mandate further. Thus, the legal framework should clearly set out the authority to borrow (in both domestic and foreign markets) and issue loan guarantees. It is important that the line of delegation is clear, both for internal control and for due diligence purposes. All creditors and lenders require a legally binding and enforceable contract with the central government in its capacity of the borrower. The primary legislation on delegation is normally found either in the general Public Finance Act or in a dedicated debt law.

8. The primary legislation should also include specified purposes for which the executive can borrow. Purposes may include, for example, financing budget and cash balance deficits; refinance and pre-finance outstanding debt; finance investment projects approved by the Parliament; finance honoring of outstanding guarantees; fulfill requirements by the central bank to replenish foreign currency reserves; and fulfill requirements by the central bank to issue government securities to support monetary policy objectives. The main reason to include borrowing purposes in the primary legislation is to safeguard against
borrowing for speculative investments and borrowing to finance expenditures that have not
been included in the annual budget or approved by the parliament or congress in another
way.

9. Furthermore, the primary legislation should contain clear DeM objectives and
requirements to develop a DeM strategy and report back to the Parliament on DeM activities,
with an evaluation of outcomes against stated objectives and the determined strategy.
Common DeM objectives found in modern legislation include meeting the funding needs of
the central government, minimizing the cost of debt from a medium-term or long-term
perspective, keeping the risks in the debt portfolio at acceptable levels, and promoting the
development of the domestic debt market. Once the DeM objectives are set, they must be
translated into an operational strategy that sets out the medium-term framework for how the
government will achieve its DeM objectives. Reporting to the parliament or congress
increases transparency and strengthens accountability. It is also common to include a
requirement to conduct a risk assessment before issuing loan guarantees or conduct on-
lending. Based on the risk assessment a risk premium could be levied upon the beneficiary of
the loan guarantee or the on-lending.

Current Situation

10. The legal framework for central government DeM consists of the Constitution, the
Organic Budget Law, the annual budget laws and the decree on the functions and
organization of the Ministry of Finance and Budget. A debt management law is currently
being prepared within the Treasury of the MoFB.

11. The Organic Budget Law clarifies that all borrowing must be authorized by the
Parliament in the annual Budget Laws and undertaken on behalf of the State by the
Minister of Finance and Budget. The Constitution further clarifies that the President must
ratify loan agreements that are considered a treaty, i.e. loan agreements with
international organizations and other sovereigns, after approval by the Parliament.

12. In the annual Budget Laws, the Parliament authorizes the government to borrow
domestically for deficit financing and externally for the government investment program, up
to certain indicative amounts. The external financing consists mainly of disbursements of
already contracted borrowing but also of disbursements of expected new borrowings. The
annual Budget Law also contains a firm limit on the amount of new external debt to be
contracted during the year. This amount is calculated as the average borrowing during the
last couple of years plus 80 percent.

13. The Minister of Finance and Budget has further delegated to the Director General of
the Treasury authority to borrow domestically for deficit financing. Thus, the authority to
borrow is clearly delegated to the Minister of Finance and Budget in the primary legislation
and he has further delegated the authority to borrow domestically to the Treasury. However, the legal framework provides no authority to issue loan guarantees, which is an instrument that has been used although not very frequently.

**Issues and Recommendations**

14. The Treasury has initiated a process of establishing a comprehensive debt management legislation. The process has been led by the DDP and the Treasury legal advisor. The mission was given the opportunity to review the draft legislation.

15. The draft legislation includes provisions for:

*Definitions*
- A set of definitions, including also that debt includes both direct debt and guarantees, is part of the draft legislation

*Objectives*
- Objectives of debt management including that the financial needs of the government agencies are guaranteed, that the costs of debt are minimized; and that borrowings have a reasonable level of risk

*DMS and Debt Committee*
- Establishment of a Technical Debt Committee whose main role is the development and periodic review of the National Strategy for Debt
- The Debt Strategy is a general document updated every three years and it is complemented with an annual framework letter to be included in the Budget containing more precise guidelines
- The National Strategy is subject to the approval of the President of the Republic in the Council of Ministers for its adoption and diffusion
- The Ministry of Finance is responsible for the implementation of the National Strategy for the public debt

*Central Bank*
- The Central Bank is the main financial agent of the Central Government for its cash transactions, banking and credit

*Authority*
- The Ministry of Finance is the sole authority to assess the funding offers for the Central Government, taking into account the terms and financial conditions offered
• The Central Government may enter into domestic debt in order to replenish the state treasury for the payment of expenditures in the general budget and to finance investment programs

• The issuance of new stocks and bonds by the Treasury should be by way of decree of the Council of Ministers

• The implementation of domestic debt operations of the Central Government belongs exclusively to the Treasury

• Only the state can issue guarantees. The Minister of Finance is the only authorized for this purpose

• The Minister of Finance may issue guarantees in favor of a public body or a company where the state holds shares

• Any proposed issuance of a guarantee of the State must be subject to a preliminary analysis of the Treasury. The Treasury Department will evaluate the risks to the guarantees of the public debt in order to predict the cost of debt service to be included in project finance laws

• Following a favorable opinion of the technical team, the loan guarantee shall be adopted by the Council of Ministers before it is signed by the Minister of Finance.

**Reporting**

• The Minister of Finance shall prepare an annual report to the Government, the National Assembly and the Senate on the management and the situation of the domestic and external public debt

• Copies of these reports shall be forwarded to the Court of Auditors. The report can be shared with stakeholders and the public debt may be widely disseminated

**Audit**

• Audits and / or external controls can be made to provide a comprehensive account on the management of public debt. An audit and / or external audit will be carried out following an order from the President of the Republic, an order from the Prime Minister, a request from Parliament or a request from Technical and Financial Partners.

**16.** The mission welcomes the initiative to establish a comprehensive debt management law. The mission has the following comments in order to further improve the legislation and to align it with international sound practice, meeting the government’s requirements now and in the coming years.

**17.** The delegation to the Minister of Finance and Budget for borrowing (external as well as domestic) and issuing loan guarantees could be drafted in a more unified way, including the sole authority to sign these contracts and delegate the authority further. The mission also notes that approval is required from the Council of Ministers regarding domestic borrowing and issuing of loan guarantees. The mission assumes that this approval relates to the overall T-bills borrowing plan and not the individual borrowing transactions, which should be
clarified. According to the proposal the Council of Ministers should approve the debt management strategy, but the authorities were considering whether the Minister could approve the debt management strategy himself. The mission has not studied the procedures for government decision-making in detail and therefore urges the Treasury to ensure that the proposed level of the decision-making is in line with government normal procedures. The mission also urges the Treasury to ensure that the proposed draft legislation is not inconsistent with other existing legislation.

18. The borrowing purposes should refer to both domestic and external borrowing and include also borrowing for redemptions and buying back outstanding debt in advance, borrowing for honoring of outstanding guarantees, as well as borrowing for monetary purposes on instruction by the CBM. The latter might become necessary e.g. in order to sterilize fund inflows should the government succeed to mobilize more resources from foreign donors. The possibility of providing for borrowing for entering into derivative contracts should also be considered. Such operations are currently not conducted or planned to be conducted; but in the future situations could arise where it would be advantageous to undertake such operations in order to manage the risks of the debt, should sufficient capacity exist.

19. The objectives of debt management may include developing the domestic market, which is an objective (in some cases a secondary objective) found in many countries’ debt management legislation. The risk assessment before issuing loan guarantees may be extended to cover also on-lending operations since the credit risk that might arise in principle is the same and there should be provisions making it possible for the Minister of Finance and Budget to levy a risk premium on the beneficiary of the loan guarantee or the on-lending based on the risk assessment. The DMS should include concrete guidelines for the operations under a medium term time horizon but the document should be updated annually and made public. In the definitions of debt guarantees should not be included. Guarantees are not liabilities but contingent liabilities. As well as reporting to Parliament, the DDP should develop a strategy for reporting more generally, to the financial markets and the wider public. A quarterly statistical bulletin is likely to be an important element of this strategy. Annex 2 discusses the options and makes a number of suggestions for the development of a quarterly bulletin (the coverage of which could also be used as guidance for reporting to Parliament).

20. Removal of some of the proposed provisions to secondary legislation (whether issued by the Council of Ministers or the Minister directly) should be considered in order to add flexibility, since secondary legislation is easier to adapt to changing circumstances than primary legislation, and to ensure an appropriate level of the decision-making. For instance the establishment of the Debt Management Committee and the appointment of body to undertake domestic borrowing and risk analysis could be subject to such secondary legislation.

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7 Additional issuance of T-bills, with the extra proceeds sterilised in the central bank, avoids the risk of market fragmentation that arises if the central bank issues its own bills alongside T-bills.
21. Omission of the references to the CBM and external audit should also be considered further, since the clauses as far as the mission understands do not add anything to the existing legislation. The references to bank accounts in the CBM and the MoFB sole ownership of the debt management system could also preferably be omitted from the proposed debt management legislation.

22. The following actions are proposed as part of the process of establishing a debt management law:

*In the short term:*

i. DDP internal review of comments provided by the mission on the draft Debt Law
ii. DDP consult with legal advisors in the Office of the Secretary General of the Government
iii. Review of the draft within the MoFB
iv. Submission to PM’s Cabinet for approval
v. Submission to Council of Ministers for approval
vi. Submission to Parliament for approval

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**DEBT MANAGEMENT STRATEGY AND RISK MANAGEMENT**

**Sound Practice**

23. A well-designed medium term debt management strategy (DMS) is based on the debt management objectives and set within the context of the government’s fiscal and monetary policies. It is a plan that the government intends to implement over the medium term in order to achieve a desired composition of the government debt portfolio. The strategy reflects the government’s preferences with respect to the cost and risk trade-offs and provides clear direction for borrowing choices. This can be formulated as targets regarding the composition and the risk exposure of the government debt portfolio.

24. The design of the DMS involves the evaluation of the risks embedded in the debt portfolio. Additionally, debt managers conduct scenario analyses with future borrowing paths to quantify the potential costs and risks of the debt portfolio, subject to the macroeconomic environment and market conditions. This exercise requires the use of an analytical tool.

25. Where countries are severely constrained in their borrowing choices, that is with few funding sources from abroad and/or a shallow domestic market, a sound DMS can be developed without the use of an analytical tool. However, the use of scenario analysis always provides useful information, enabling the debt managers to quantify the potential risks to the budget of alternative debt management strategies.
26. It is good practice for the debt management strategy to be formally approved at the political level (Cabinet, Council of Ministers or the Minister of Finance), and to be a publicly available document. It can often conveniently be annexed to the yearly budget law, although some countries publish it as a stand-alone document. Publication helps to promote accountability and transparency, enhances the visibility and hence the credibility of debt management policy.

27. Many countries review the DMS on an annual basis. This helps to evaluate the results of the strategy implementation, to facilitate updating the analysis with the latest revisions of the macroeconomic framework and market developments, and to fine-tune the financing targets based on cost/risk preferences and the overall debt management objectives.

**Current Situation**

28. As a result of the protracted political crisis, funding sources have been limited since 2008 (with on average only 2 external loans being signed annually according to the authorities) and the DDP has had little room for maneuver in terms of borrowing. The implicit debt management strategy has been, for many years, to maximize concessional financing from external sources to fund investment projects and to issue T-bills of up to one year for budget financing purposes (although recently the MoFB has also borrowed from the CBM). This strategy generates a debt portfolio which is exposed to currency fluctuations reflecting the high share of external debt; domestic debt on the other hand is exposed to both interest rate and refinancing risk due to short maturity of the securities.

29. No annual borrowing plan for external or domestic debt has been prepared over the last few years, which is partly a reflection of the crisis resulting in difficulties to forecast external flows. This, in turn, has contributed to weaknesses in cash flow forecasting in the domestic debt side.

30. Medium term macroeconomic forecasts have yet to be prepared, with officials waiting for the establishment of the new government. This makes it impossible to estimate the medium term borrowing requirement which the DDP will have to finance. In addition, it is not clear which creditors will be willing to lend to Madagascar. However, although financing choices will continue to be limited, with its economic performance expected to improve, Madagascar expects to have access to more funding sources including some bilateral and commercial lenders with various term and conditions.

31. Consequently, the DDP wishes to undertake a strategy analysis which would take into account the increasing financing choices and provide a basis for future borrowing decisions. Director of the DDP has already identified the key staff members from the Middle Office who will be responsible for coordinating and leading this process. The plan is to use the
Medium Term Debt Management Strategy (MTDS) analytical tool\(^8\) and prepare the first ever debt management strategy, covering the period of 2015-2017. To this end, WB conducted a workshop on the methodology of the MTDS tool using Malagasy debt data following the reform plan mission to train the relevant staff in its use.

**Issues and Recommendations**

32. The DDP has to coordinate among all related entities (DG Budget, BCM) the DMS analysis, ensuring that the input is realistic and taking into account macroeconomic policies and market conditions. This process could be conducted through the technical committee if the approved debt law institutes such a structure as is currently planned. In any case, a working team led by the middle office staff (3 staff) within the DDP should be responsible for this effort in consultation with technical staff from relevant units (such as CBM and DG Budget). This team can undertake the drafting of the strategy document once the preferred strategy is selected.

33. As a pre-requisite to conduct DMS analysis, the debt database has to be accurate and complete, and updated on a timely basis. It is also important that appropriate and dedicated staff have been identified to conduct the cost and risk analysis. The preparatory work ahead of the DMS analysis should then be centered on training and capacity building of not only these key staff but also the broader contributors to the process, such as staff from the CBM and DG Budget.

34. Given the lack of information on the macroeconomic framework and funding sources, it is unlikely for the DDP to be in a position to undertake a thorough forward looking DMS analysis until the new government is fully established. Initially, however, it would be sufficient to prepare a directional debt management strategy document and, after approval by the Executive body (CoM or Minister of Finance as required), publish it. This document would express the strategy as guidelines to indicate the direction in which certain key indicators (see Box 1) are expected to evolve (for example, a statement that “the amount of local currency debt maturing within 12 months shall be reduced”).\(^9\) The document should i) identify the vulnerabilities of the existing debt portfolio, ii) present the potential funding sources available to Madagascar, iii) discuss briefly the macroeconomic context (fiscal and monetary policies) and iv) express the government’s desired portfolio with soft strategic targets (i.e. indicating the direction of change, rather than quantitative targets, e.g. “extend the maturity of domestic debt”, see Annex 3).

35. The DMS document should be updated every year on a rolling basis (even if there are no big changes) to sustain and improve the level of expertise of key staff, to ensure regular

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\(^8\) Developed jointly by the WB and the IMF.  
\(^9\) DeMPA Tool, Indicator DPI-3, WB, 2009
monitoring of the debt portfolio costs and risks and to review the implementation of the borrowing transactions against the strategy. The authorities can start undertaking a more detailed debt management strategy analysis for 2016-2018 and update the document accordingly.

Box 1: Risk measures

The following are some useful portfolio statistics that capture directly the inherent exposure of the debt portfolio to such risks as interest and exchange rate changes or the refinancing risk.

**Interest rate risk**
Interest rate risk refers to the vulnerability of the debt portfolio, and the cost of government debt, to higher market interest rates at the point at which the interest rate on variable rate debt and fixed rate debt that is maturing is being re-priced. The following indicators provide measures of the exposure to this risk:
- Amount of the debt stock refixing the interest rate in a particular period
- Share of debt in the debt portfolio refixing the interest rate in a particular period
- Average time to refixing of the debt portfolio. This indicator is a measure of the weighted average time until all principal payments in the debt portfolio become subject to a new interest rate.

**Refinancing (roll-over) risk**
Refinancing risk captures the exposure of the debt portfolio to unusually higher interest rates at the point at which debt is being refinanced; in the extreme, when this risk is too high debt managers are unable to roll over maturing obligations. The following indicators provide measures of the exposure to this risk:
- Redemption profile of the outstanding debt.
- Proportion of the debt stock falling due within a particular period.
- Ratio of debt falling due to tax revenues
- Average time to maturity. This indicator measures the weighted average time to maturity of all the principal payments in the debt portfolio. ATM shows how long it takes on average to rollover the debt portfolio.

**Foreign exchange rate risk**
FX risk relates to the vulnerability of the debt portfolio, and the government’s debt cost, to a depreciation/devaluation in the external value of the domestic currency. The following indicators provide a measure to the exposure to this risk:
- Ratio of foreign currency debt to total debt
- Mismatch in the level of foreign currency liabilities in relation to foreign currency reserves
- Mismatch in the composition of foreign currency liabilities in relation to foreign currency reserves

36. The strategy documents should include a summary of the debt management performance along with a short evaluation of the costs and risks relating to the targets or other objectives set the previous year.

37. In summary, the following actions are recommended:

In the short term:

i. Conduct a simple MTDS analysis for 2015-2017 and identify the strategy to be proposed for approval. This should be led by DDP in coordination with relevant technical staff from other units
ii. Draft the strategy document by DDP
iii. Circulate draft for formal opinion to MoFB General Directorates and the CBM
iv. Present/submit strategy to the Secretary General and the Finance Minister
v. DMS approved by the Executive body (Minister and Council of Ministers as required)
vi. Publication of the first DMS

In the medium term:

i. In the course of 2015, revise the medium term debt management strategy, so that it applies to the period 2016-2018, and contains more detailed analysis. This activity should be renewed on a yearly basis.
ii. Train on an on-going basis the technical staff on the DMS design methodology

GOVERNMENT BORROWING POLICIES

Sound practice

38. The government’s borrowing operations, both external and domestic, should be planned carefully and be based on the guidelines in the DMS, e.g. composition external/domestic, currency composition of external borrowing, fixed/floating composition, maturity and interest rate fixing targets. The borrowing operations should be incorporated into an overall annual cash plan on monthly basis with forecast total revenues and expenditures, borrowing operations and resulting net cash flows and hence cash balances. The cash plan should be prepared before the beginning of the year and be updated regularly, at least on a monthly basis.

39. External borrowing should be included in the cash plan according to the expected disbursements of both already contracted loans and planned new loans. All external planned
borrowing during the year, whether planned to be disbursed or not, should be quantified and potential creditors identified with their focus of lending and expected terms and conditions. The list of potential creditors should not only include current active creditors but also creditors that potentially could provide credits, whether or not they were previously active creditors to the government. This requires identification of all creditors active in the region. The potential external creditors’ expected terms and conditions should be systematically analyzed in terms of cost and risk and the analysis be regularly updated.

40. All domestic borrowing should be included in the aggregate cash plan, including securities, loans, retail borrowing and eventual borrowing from the Central Bank. The composition of the planned borrowing should reflect cost and risk considerations, but could also be based on the objective of developing the domestic securities market, since having access to a well-functioning domestic securities market provides the government with a stable and secure financing source, as well as bringing wider benefits to the economy.

41. The aggregate borrowing and its overall composition should be made public, in the Budget document or in another document. The most common technique by governments to sell domestic securities is by way of auction. In such cases the planned borrowing in the securities market should be made public through an auction calendar where the instruments, dates for issuance and volumes are presented on an indicative basis. Firm amounts of the instruments to issue should be presented to the public in advance of the auction and generally follow the previously announced indicative amounts. The issued amounts should normally closely follow the auctioned amounts, but the government should keep the right not to accept all bids even though the planned volumes would then not be issued. This right should be used very cautiously and sparingly.

42. All procedures should be documented. This includes overall borrowing procedures in the domestic market that should be made publicly available as well as internal procedures on how to process the domestic and external borrowings. Legal advisers should be available for advising on both domestic and external contracts.

Current situation

43. As mentioned above, the Budget contains indicative amounts of aggregate domestic (net) and external borrowing (gross and net) to be disbursed during the year. The Budget also contains a limit on the amount of contracted new external debt. The domestic borrowing is supposed to be guided by a quarterly auction plan but no such plan has existed in practice. The DDP internally produces a plan for T-bill issuance for the coming month. However, at weekly Liquidity Committee meetings between the MoFB and the CBM the only background information on T-bills provided is the maturing amount. The Treasury normally proposes an
extra issuance volume on top of the maturing amount for deficit financing purposes. The final decision on the amounts to issue is taken by the Director General of Treasury.

44. Cash flow forecasting within the Treasury is conducted in several steps by different units. The Research directorate breaks down the Budget numbers for revenues and expenditures on a quarterly basis for the year. The breakdown is based on contacts with the tax authorities and the Budget directorate. The DDP further breaks down the quarterly estimates on a monthly basis adding domestic financing items consisting of letters of credits (CBM credits to the government whereby it discounts some importers’ future payments of customs revenue to government), T-bills on a net basis and statutory advances. Repayments of statutory advances are not included. The table ends with the estimated cash balances. External debt disbursements are not included and nor are the capital expenditures these disbursements finance. Based on the monthly cash flow estimates by the DDP, the Accounting directorate, also in the Treasury, produces a breakdown of the numbers on a daily basis for the coming month.

45. External debt is contracted by the Government for investment purposes. Thus, such borrowing may arise based on the following processes: (i) the line ministry has identified a creditor which intends to fund a specific project, (ii) no creditor is identified for financing an investment project, in which case the DDP is responsible for contacting potential creditors, or (iii) the donors propose to the authorities projects that they are willing to fund.

46. For each negotiation of an external loan, a formal decision, including the composition of the negotiation team, is approved by the MoFB. The delegation often includes representatives of the relevant line ministry and DDP. No legal advisors, however, take part in the negotiations or are consulted on the draft agreement.

47. The DDP assesses the loan proposals based on concessionality analysis. Most of the loans have a fixed interest rate. The government requires a concessionality element of 35 percent. The degree of concessionality is calculated using the tool available on the IMF website. The DDP also considers the most appropriate repayment dates. When the loan agreement has been signed it is entered into a DDP Excel application, and also into the DMFAS (for bilateral loans). The DDP also submits a summary loan declaration form and a copy of the loan contract to the CBM for entering into an Access application developed in-house by CBM. Disbursement requests are submitted to the creditors by the DDP and the debt recording systems are updated based on creditor disbursement advices. The procedures are not documented.

48. In the domestic market, auctions of T-bills with four maturities (4, 12, 24 and 52 weeks) are conducted every second week on Wednesdays. A formal announcement in the newspapers is made on the Monday (the banks are contacted 2 working days before the announcement) and settlement is on the Friday. Everybody can participate in the auctions but
the banks provide almost all bids, both for their own purposes and on behalf of their clients. Sealed envelopes with the bids, in form of interest rates, are presented to the CBM. Bids can also be submitted by fax. The bids are entered into an auction application and ranked using the multiple price auction technique. The list, without the bidders’ identities, is submitted to the Treasury (one of its staff is participating at the auctions) and the Director General decides on the winning bids. The winners are informed and the aggregate result is presented on the CBM website the same day. Settlement is carried out on Friday, when the CBM debits the bank accounts of the successful bidders and credits the bank account of the Treasury. At the settlement date the successful bidders also have to pay a tax of 20 percent of the interest that will accrue over the life of the T-bill. It is possible to deduct this tax payment later from the corporate tax. Confirmation is sent to the registry system that payment has been made and the securities accounts of the successful bidders are credited. Trading in the secondary market is very infrequent, but settlement is carried out in a similar way with the exception that information on the trades is transmitted via the RTGS.

49. There is a procedures manual available on the CBM website concerning the issuance of T-bills. The manual is from 2006 (there is a similar manual on the MoFB website dated 2008) and does not always reflect the current procedures. For instance, the manual states that a quarterly auction plan should be issued and that a primary dealer system should be in place. This is not the case in practice.

50. The government can also borrow through advances provided by the CBM up to 15 percent of previous year’s ordinary revenues to be paid back within six months after the end of the fiscal year. Until recently this facility had not been actively used since 2009. However, at the end of 2013, as a result of substantial cash shortages the MoFB had to draw on the advances for execution of payments during the last couple of months of the year. In addition to the advances strictly limited by the legislation the government has also accumulated debts with the CBM for several reasons, including recapitalization of the bank. This debt is not always serviced fully or on time. Currently the CBM is also providing credits to the government whereby it discounts some importers’ future payments of customs revenue to government (letters of credit).

**Issues and recommendations**

51. All potential external creditors should be identified, with their respective focus on activities and expected financial terms and conditions. The DDP should actively approach the creditors offering the best terms and conditions within the government core development areas. A mobilization plan for external borrowing for the year should be developed after initial contacts with the creditors.
The terms and conditions of the loans should be subject to a financial analysis that goes beyond only concessional analysis. The focus should be to get the lowest possible borrowing costs within the guidelines of the DMS in terms of currency and fixed/floating composition. For commercially viable projects, the total return of the projects, including financing costs, should be calculated. For these projects the debt manager should analyze the yield or net present value (NPV) for the total project including the financing. The rationale is that the government should seek to do as profitable investments as possible. A project with high direct return can service also a relatively costly financing source. Thus, the standard techniques for investment evaluation, including the expected revenues and costs for the investment as well as the financing costs, should be applied by debt managers and project managers together in a coordinated analysis.

Several of the commercially viable projects are sometimes implemented through loan guarantee or on-lending arrangements. Loan guarantees and on-lending could imply credit risk if the beneficiary is outside the central government. The credit risk should therefore be assessed\(^\text{10}\) and possibly form the basis for a credit risk fee levied upon the beneficiary.

The overall borrowing planning needs to be strengthened. An aggregate annual cash plan on a monthly basis with expected revenues, expenditures, domestic and external borrowing as well as cash flows and balances should be produced by the Treasury as a tool for planning the borrowing and the budget execution. Compared with the existing cash plan, the T-bills should be on gross basis and per maturity, thereby providing a better basis for the auction calendar, see below. The external debt disbursements and the associated capital expenditures should also be included. Redemptions of statutory advances should be included. Ideally, the outstanding debt stocks and the CBM credit limit should also be incorporated into the cash plan.

In the domestic market an auction plan for T-bills for at least a quarter ahead and based on the aggregate cash plan should be made public. The announcements and the issued volumes should stay close to the indicative amounts (which may be in the form of ranges) and only be changed if there are substantial unanticipated changes in cash flows. The auction plan should be complemented with other forms of more active communication with the market participants in order to provide feedback and avoid market uncertainty, which ultimately will harm the government.

The mission has analyzed the 26 auctions of 52 weeks T-bills during 2013. This instrument constituted around 55 percent of the total auctioned amount. In the beginning of 2013 the interest rates were falling gradually, see figure 1. The interest rate spreads (difference between highest and lowest interest rate) for the successful bids were also low and stable.

\(^{10}\) This is a requirement in the proposed Debt Law
57. However, at the end of May the trend of falling interest rates reversed and the spreads in the auctions increased to more than 2 percentage points. This led to a change in the borrowing policy also, see figure 2. Before the sudden interest rate increase the issued amount closely followed the announced amount, but after the rate increased. The authorities responded by taking a more flexible attitude to the announced amounts. Initially the issued amount was substantially lower than the announced amount. For the rest of the year the issued amounts were often substantially larger than the announced amount. The differences between announced and issued amount for 52 weeks T-bills were to a certain extent moderated by corresponding changes in issued amounts for the other maturities, making the overall volatility in the issuance less than for the 52 weeks T-bills. However, the policy did not succeed in calming investors. The interest rates continued to increase and the spreads remained high during the remainder of the year indicating a less efficient primary market, where investors were buying the same securities at the same time to very different prices.

58. More information to the market, including an auction calendar, would probably to some extent reduce the uncertainties faced by market participants and make them more capable of assessing the market clearing prices in the auctions. This would reduce their risk and probably reduce the interest rate required in the auctions.

59. Governments all over the world have found that domestic borrowing primarily should be conducted in the form of marketable securities. A security as opposed to a loan can easily be traded. The trading feature reduces the liquidity risk of the investor and will therefore reduce the interest rate required. In order to provide this desired reduction in liquidity risk the securities should not only be possible to trade; they should also be actively traded in practice. This is not the case in Madagascar. Secondary trading is negligible.
60. Developing the secondary market is an important and difficult task. Reforms need to be undertaken in several areas but are likely to include the following steps and measures:

- The information before the auctions could be improved as discussed above
- The different maturities falling due the same day can be designed to be fungible, i.e. they are legally the same loan being issued at different times. By making the T-bills fungible it would be possible to re-open the outstanding volumes in each T-bill, thus creating larger issues which would be more easily traded.
- Non-resident investors could be actively promoted (as far as the mission understands foreigners are not restricted from buying government securities, but they are not active in the market)
- A primary dealer system could be implemented, where the PDs have the exclusive right to participate in the auctions but with the obligation to be active in both the primary and the secondary market
- A market place could be implemented by the PDs showing indicative prices on dedicated Reuters pages.

61. However, these measures alone will not have much of an impact on the secondary market trading unless the tax regulations are changed. Experience from all over the world shows that it is very difficult to levy taxes on securities transactions without significant negative effects on trading. In this case, moreover, the tax is constructed in a way that makes these effects larger than necessary. For companies making profits the tax, since it is deductible from corporate tax, is more of a tax payment in advance than a real burden. But
since profitability always is uncertain it will not be clear for anyone whether a tax liability will occur from which that paid on the securities is deductible. For other companies and for individuals it will be obvious that the tax is a real tax since it will not be possible to deduct it from any profits. These uncertainties will effectively make it very difficult to arrive at prices on the secondary market and hinder the development of a well-functioning domestic securities market.

62. It is recommended that the issues raised above concerning the functioning of the secondary market should be further analyzed within a comprehensive reform program for the securities market development.

63. The borrowing procedures presented on the CBM and MoFB website should be uniform and updated to reflect existing current procedures. Internal procedures manuals should be developed within the DDP for both domestic and external borrowing. Legal advisors should be invited to review the proposed loan proposals and other contracts entered into by the DDP and the Treasury.

64. The following actions are proposed:

   In the short term:

i. External creditors to be identified with their respective focus on activities and expected financial terms and conditions

ii. Prepare annual resource mobilization plan for external borrowing for 2015 (as part of the budget process)

iii. Training the staff on how to conduct basic financial analysis of cost effectiveness of loan

   In the medium term:

i. Develop the in-house methodology to undertake financial analysis

ii. Expand the current borrowing plan for 2014 with T-bills on a gross basis and maturing domestic instruments

iii. Based on the borrowing plan, develop an auction calendar for T-bills on a quarterly basis and make it public and present it actively to the market participants

iv. Develop an aggregate and comprehensive annual borrowing plan for external and domestic borrowing for 2015 (as part of the Budget preparation process)

v. Update the borrowing procedures for T-Bills presented on the CBM and MoFB websites
vi. Legal advisors review the loan proposals and other contracts entered into by DDP and the Treasury

OPERATIONAL RISK MANAGEMENT

Sound practice

65. Government debt management operations involve the processing and recording of all borrowing and debt-related transactions and maintenance of systems and procedures required for effective and secure debt administration. These processes and operations expose the government to risk, with consequences that may be financial, reputational or political. This operational risk can arise from a range of sources, internal and external to the debt management function; they include human error, failure of IT systems, a lack of suitably trained staff, poorly designed procedures, staff inertia, greed or fraud, badly performing suppliers and a failure to plan adequately to respond to business continuity events.

66. The consequences of poor risk management can be various. They include failure to pay creditors on time; paying an incorrect amount; not observing laws or regulations; or failing to borrow enough or borrowing at an unnecessarily high cost. Even if the financial consequences are modest, the reputational impact can impose lasting damage on the economy, not least through the impact on credit ratings.

67. Sound practice in the management of operational risk requires:

a. An appropriate risk management environment, which is a responsibility of senior management

b. A framework for management of risks: their identification, assessment, and monitoring; and a process for prioritising action for their mitigation and/or control

c. Recognition by all staff, and their line managers, of their responsibilities for the management of the risks in their area; and the continuous nature of risk monitoring and assurance processes.

68. An effective operational risk management (ORM) framework requires a function within the debt management unit that is independent of day-to-day decision making, that has direct access to senior managers, and that is able to develop a consistent approach to risk in the different policy areas, as described more fully below. This function might combine an advisory role with its analytical and monitoring role. The advisory role includes helping

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11 Operational risk is usually defined as “the risk of loss (financial or nonfinancial) resulting from inadequate or failed internal processes, people and systems, or from external events that impact a company’s ability to operate its on-going business processes.” (Basel II)
managers at different levels to identify the risk in their areas, to analyze processes and institute necessary controls. These controls should be based on best financial sector practice, including:

a. Policy and operational control of transactions and projects.

b. A separation between operational and processing areas (i.e. between front and back office).

c. Documentation of processes; which should include relevant controls

d. Clarity in the relationship with external suppliers of services (including the central bank)

e. An ability to respond to events that threaten the continuity of the business

f. Embedded monitoring.

69. Some offices have identified a “risk champion” within the middle office (MO), with lead responsibility for operational risk management. This role includes helping staff to identify the risk in their areas, to analyze processes and institute necessary controls. This is a significant task, particularly setting up the processes, and needs the full support of senior management.

**Current situation**

70. There is currently no ORM framework in place in the DDP. In a number of areas, however, some thought has been given to operational risk, albeit not in a systematic way across the range of activities. The databases are reconciled with creditors and there are checking and authorization procedures for data entry and debt servicing payments. Debt servicing procedures are triggered two weeks in advance to reduce the risk of delay. The CBM has adequate arrangements for data back-up as well as full procedures manual for external debt operations, a business continuity plan (BCP) and a disaster recovery site (DRS).12

71. There are nevertheless a number of apparent risk exposures. Within the DDP there is a less than full segregation of duties. The DMFAS database can still not be used by the DDP as its primary database because of the inadequate treatment of some restructured loans in transferring the data from version 5.2 to 6.0.13 It has to rely on the Access database at the CBM despite its relative lack of robustness and security, and lack of electronic interfaces (including within the CBM). The extensive services supplied by the CBM are not

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12 The details in this and the next paragraph are summarized from the DeMPA report, as elaborated during meetings of the current mission. Neither mission reviewed the CBM’s BCP or DRS, or their effectiveness.
13 The DDP has been waiting for a response from UNCTAD to its request for a fix.
documented in a memorandum of understanding (MoU) or similar, with the risk of misunderstanding (and recrimination if anything goes wrong). There are no procedures manuals, nor a BCP/DRS for those data and operations that are located within the DDP or wider MoFB. More generally heavy trust is placed on the professionalism and honesty of the staff in both the DDP and the CBM, which is admirable in management terms but not acceptable in an environment of high risk exposure. All these risks are heightened by the apparent lack of an effective (or adequately resourced) internal audit function; there has been no recent internal audit of debt management functions in either the MoF or the CBM.

**Issues and recommendations**

72. Some of the risks noted above need immediate action, in particular bringing the DMFAS database into full operation. Procedures manuals are also required within the MoF. A more systematic process is needed and it is recommended that the DDP puts in place a comprehensive ORM framework in line with sound practice. In a small debt unit, it may not be possible in the near future to dedicate one staff member to ORM; but it is possible for make substantial process with one official working for half of his or her time on this task, with some management time. This official, referred to below as the “risk champion” could be part of the MO.

73. The question arises as to whether the DDP, rather than the wider MoFB, is the appropriate unit for this exercise. However, it does not seem likely that the MoFB will be putting an ORM framework in place in the near future; and given the risk profile of DDP’s work, it should not be delayed. The DDP is large enough for a successful exercise, and it has a well-defined management structure. If successful the process could in due course be widened to include the rest of the ministry as has happened elsewhere.

74. The importance of the wider risk culture should also be stressed. Senior management should signal the importance they attach to sound operational risk management; but also ensure that everyone is aware how they collectively and individually contribute. Risk awareness should be embedded in all day to day activities, and responsibility does not lie just with the risk champion or risk managers. Office meetings and more informal

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14 Data used by MoFB applications are backed up daily, and taken off-site weekly. An initial study on options for a DRS and associated BCP is under way although in practice both will need to be linked with the forthcoming project for an integrated financial management system; that will also aim to integrate from an IT perspective the directorates within the MoFB to which some IT responsibilities are currently dispersed. The timeline of these major initiatives is unclear.
A simplified process is set out below. Although a fully-fledged risk control framework would be a significant undertaking, there are potential benefits from even a coarse-grained exercise, which can be developed as resources grow.

In due course the Head of the MO would develop risk polices which, after approval by senior management would be promulgated across the office. This would include advice on the way in which processes should be documented and on control mechanisms. But before this — and more straightforwardly — the risk champion would facilitate a process, involving all DDP staff, to identify relevant risks (the risk register), score or estimate them, and after management approval, establish the key mitigation controls or policies. Box 2 summarizes how this might be done in practice.

**Box 2: Risk Identification and Assessment**

The suggested first step is to run a series of workshops, organized on a team basis across the DDP. The workshops should be guided by someone, probably the risk champion, who has an understanding of risk across the range of functions; and can also ensure a consistency of approach and terminology. In practice there will be far bigger risks in some areas of the business than in others — and without some process to ensure consistency, there is a significant risk that the result will be lists of risks that have been ‘scored’ by very different criteria.

The approach is to break down the main business areas into business activities or processes, each with a stated objective; and then to identify and describe in the workshops the key risks that might impact on each area of the business. There is a balance to be drawn between the amount of detail and usefulness to management.

One way of scoring risks is to rate each risk for both likelihood (low, medium, high) and impact (low, medium, high) and plot the combinations on a 3x3 matrix (some use a 4x4 or 5x5 matrix). The most serious risk exposures are those of high likelihood and large impact. They will be identified for urgent management action. Ideally this scoring process would be done separately before and after the mitigating controls, and some view formed as to whether the residual risk can be further reduced or is unavoidable (it will never be possible to control against all external events). But initially scoring the present positions would be the highest priority.

The risk champion should report to management on the overall risk profile. This will require the

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16 It would be good practice also to discuss these plans with the internal and external auditors for their input; but that will depend on the local context. As noted in the DeMPA the internal audit function in the MoFB is not fully developed, which is arguably a significant weakness of the wider control environment.

17 It is important that everyone is involved, including the more junior staff. It helps to develop risk understanding and a risk culture – and they often bring a different perspective anyway.

18 In the first round of assessment workshops, the risk champion could be supported by an international consultant, both to ensure a full coverage and to transfer knowledge and confidence to the risk champion.
champion to identify from the workshops the risks where there is greatest exposure, together with the actions that have been taken or might be taken in future. Some of this might require improvement in control procedures; but action might lie elsewhere, for example in the relationship with the CBM, in improving IT or in building capacity in the DDP.

77. The identified controls should link to the documented operating procedures for each activity. These procedures should be prepared by the relevant official and manager. Controls should be embedded within them. The procedures need not be documented in great detail; but sufficiently to allow a new or substitute staff member to follow them. It is more practical for there to be several slim manuals, each linked to a key area of activity, rather than one large one. It is for the DDP to decide what breakdown makes most sense in organizational terms, but a possible split is shown in Box 3, together with a suggested priority for their preparation (with the emphasis being on operational risk exposure, not the intrinsic importance of the activity). They should ideally be agreed with the risk champion.

<table>
<thead>
<tr>
<th>Box 3: Procedure and Control Manuals: a Possible Listing</th>
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<tr>
<td><strong>High Priority</strong></td>
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<tr>
<td>1. Analysis, negotiation and agreement of external loans and associated documentation</td>
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<tr>
<td>2. Projecting and initiating debt servicing payments</td>
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<td>3. Maintenance of databases, external &amp; domestic</td>
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<td>4. Aggregate cash flow forecasting</td>
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<td>5. Domestic auction processes</td>
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<tr>
<td><strong>Other</strong></td>
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<tr>
<td>6. Preparation of Bulletin and other reports</td>
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<td>7. Forecasting and monitoring of disbursements</td>
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<td>8. Domestic market monitoring and advice on domestic borrowing (links to cash flow forecasting above)</td>
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<td>9. Preparation of DMS and annual financing plan</td>
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<td>10. Credit risk and ORM processes</td>
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<td>11. Project analysis processes</td>
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78. The purpose of documenting the procedures is twofold:

a. To provide a check-list for the relevant member of staff or his/her manager to ensure that all the necessary actions underpinning an activity have been executed. Key controls should be evidenced, for example with tick-off sheets if not electronically, and any errors, incidences or exceptions recorded.

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19 The manuals should not be prepared by an external consultant, which would discourage ownership, although an external consultant could assist in setting up the process and formats and subsequent review. It would be good practice also to review the whole ORM framework after it had been in operation for, say, two years, to see whether it could be better tuned or made more pertinent; an external consultant could contribute also to that review.
b. To provide a basis for the risk manager, auditor or compliance officer to confirm that actions are being taken in accordance with agreed procedures and to investigate whether the embedded controls are effective, efficient and proportionate.

79. The procedures should be written in summary form, and should not be any more detailed than is needed; they should comprise bullets and flow charts, rather than prose; they can also usefully be presented on screens. However, there should be sufficient detail so that if a staff member was taken ill or unexpectedly leaves, his or her replacement could step into the relevant functions.

80. The risk champion should also report regularly (say, quarterly) on changes in the risk profile. These changes could arise from many sources, both internal such as key members of staff leaving or the introduction of new IT systems, and external, not least as the DDP’s own interaction with the financial markets becomes more sophisticated. This updating process is best linked with individual managers themselves reporting on the risk profile in their area. Once the relevant spreadsheets, summarizing the output from the workshops, have been prepared, this should be relatively straightforward. Managers should report their experience over the previous period, and indicate how their risks have changed, any changes in controls, and any recommendations for further mitigation action. Their reports would be coordinated and summarized by the risk champion.

81. Part of the regular report to senior management should be a summary of incidents and exceptions, all of which should be reported. They are relevant both as a way of monitoring the control framework and in identifying new or poorly managed risks. It must be emphasized to staff that this is not a matter of their having to “own-up”, nor does it in any way expose them to disciplinary action. But it is important to learn lessons so that the same problem does not recur. Many incidents and even staff errors are often not the fault of the individual concerned, but of management who has failed to develop an adequate control environment.

82. Many of the DDP’s risk exposures are “external” to it, in particular its dependence on the CBM’s management of its databases (for both external and internal debt); and of the auction process.20 There are also risks arising from a failure of debtors to pay on time, in particular those public sector enterprises to which loans from donors have been on-lent by the government. Receivables of this kind have many of the characteristics of contingent liabilities (they are arguably “contingent negative assets”) and need to be monitored (by back office) as carefully as the government’s exposure to the risk that guarantees are called.

---

20 As well as the MoFB’s banker, the CBM is its fiscal agent, IT services supplier, settlement agent and paying agent for domestic securities.
83. Some of the apparent risks will be reduced as soon as the DMFAS database is fully operational, and that should clearly remain a high priority. But the process outlined should cover the risks arising from the role of the CBM. The DDP cannot directly control the risk management environment within the CBM, but in can seek to clarify respective responsibilities to ensure that risks are addressed. It may not be appropriate to have a fully-fledged contract between two organizations that are in effect guaranteed by central government. But some form of memorandum of understanding (MoU) or “service level agreement” (SLA) would be normal to set out the roles and responsibilities of both parties. This also helps to give effect to the expectations on both sides.  

84. There is currently a one-page agreement between the Treasury and the CBM covering the issuance and management of securities, but it has only the briefest of details concerning respective responsibilities. It does, however, provide for the Treasury to pay for this service; it is generally good practice for the government to pay a cost-related fee for the services supplied by the central bank and the commercial banks; although in the interest of aligning incentives and avoiding cross-subsidy it is also good practice for the central bank to pay a market-related interest rate on government cash balances. No such interest is paid by the CBM, despite interest being charged on advances to the MoFB. However, as noted in the previous chapter, there is a range of other financial interactions between the CBM and the MoFB which complicate an overall assessment.

85. Issues covered by the SLA might include:  

a. The arrangements for the DDP’s access to the databases.

b. The procedures for Tbill issuance, including timings, handling of bids, decision making and settlement processes.

c. The notice that both sides would give of any impending change in the auction pattern or timetable.

d. The turnaround times by the CBM in handling any relevant transactions or processes.

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21 The terminology is not important but an SLA would normally have some quantitative deadlines, targets or indicators, and be more akin to a contract than a MoU which often focusses more on policy issues.

22 Not many ministries publish their SLAs. But the French Agence France Trésor has published some of the details of its agreement with the central bank. As well as details of information flows and execution deadlines, it specifies service availability covering technical incidents and the implementation of backup procedures; and it requires compensation for investment opportunities that are missed as a result of the central bank’s inability to honor its contractual commitments. In many countries the MoU/SLA would cover the basis of calculation of fees paid for the services and the rate of interest to be paid on government accounts; and the circumstances in which either might be changed. There is a wider discussion of the operational and contractual interaction between the Treasury and Central Bank in Mario Pessoa and Mike Williams “Government Cash Management: Relationship between the Treasury and the Central Bank (IMF, FAD, 2012), available at: http://www.imf.org/external/pubs/cat/longres.aspx?sk=40111.0.
e. Details of information flows in either direction (including on cash management related activities).

f. The handling of any business continuity problem (the CBM should be obliged to have a business continuity and disaster recovery plan which is regularly tested).

86. It should be stressed that the focus of the SLA is on the operational services supplied by the CBM. Those interactions where the MoFB is acting as “owner”, which includes the injection of capital through the issue of securities, or compensation for the quasi-fiscal activities of the CBM, would normally be handled separately (and often organizationally separately within the ministry of finance).

87. The risk management arrangements in place within the CBM should cohere with similar processes as they are developed across the MoFB. The DDP is potentially exposed to a business continuity event in both institutions, and as thinking on the MoFB’s business continuity plan develops there could be some advantage in exchanging experience with the CBM, identifying common responses, jointly testing business continuity and related plans, and potentially sharing facilities. In the meantime, the DDP should explore within the MoFB, with the IT function and others, whether there is any scope for reducing the DDP’s exposure to business continuity risks relating to the MoFB as a whole, ahead of the MoFB’s full development of a BCP and DRS.

88. Some of the recommendations discussed above could have implications for staff numbers, capacity and training. There are different aspects: the risk assessment process of itself will have a limited impact on resources; but it is possible that recommended enhanced controls will be more demanding. Additional training is likely to be required, to improve understanding of the policy and risk issues that need to be addressed in decision-making. There must also be adequate back-up for key staff when they are on leave or sick; that will in turn require identifying the back-up staff and ensuring that they have the necessary skills for this dual task. Such issues need to be addressed in developing the training program for the DDP. There is a brief overview of a suggested approach to training generally in Box 4.
Box 4: Training for Government Debt Management

Training Policy

Government debt management requires staff with a combination of financial market skills and public policy skills. These are unusual even within a ministry of finance that will normally have access to a greater range of financial and economics skills than any other unit of government. Since it will often be impractical to buy those skills in from the private sector debt management units must rely on training to improve their skill base. It also has an important role in helping the debt management function to attract and to retain staff.

It is good management practice to have a formal statement of training policy. That stresses to staff the importance that management attaches to training; draws attention to the role that every individual must play in relation to their training; and is a reminder to senior management of the role that training must play in establishing an effective debt management function; and that it should be resourced accordingly.

The key elements of a training policy are likely to include that:

- all staff should have the necessary training to ensure their professional effectiveness; this includes their ability to contribute across teams and to cover for others
- training and development should be part of an internal culture that is open to new ideas and is able to assimilate them
- staff should have access to training and development opportunities to further their careers.

Training Assessment and Delivery

There is no single template for the skills requirement of a debt management function. The identified skills gaps flowing from a training needs assessment will often be general rather than specific, and in most cases individuals will have the relevant skills to some extent. But there is typically a collective need for specific skills that are over and above those gained from experience. There will be a mix of

- Debt Management Concepts, Principles and Activities (for all staff)
- Specific debt management techniques (for more senior staff)
- Administrative and task-related skills (for specific identified staff). This can often usefully extend to managerial training to reflect the specific nature of debt management policies and processes.

Delivery options will include: on the job training; job shadowing; study tours and similar; local training courses for skills that are not debt-management specific; scheduled professional courses and seminars; and tailored courses.

Every member of the debt management unit should prepare individual objectives and a personal development plan that flow from the unit’s targets and objectives. The individual performance review process, both during the year and in the annual review, coupled with feedback on training opportunities, provides the means of monitoring and evaluation.
89. In summary, the following actions are recommended:

**In the short term:**

i. Bring the DMFAS database into full operation

ii. Maintain dialogue with the CBM with a view to the preparation of MoU/SLA (focusing on services)

**In the medium term:**

iii. Appoint a “risk champion”, with suitable announcement to DDP staff (which emphasizes that this appointment does not take away from staff’s own responsibilities).

iv. A full risk identification and assessment process (starting in 2015 but continuing thereafter)

v. Senior management meeting [quarterly] to consider risk mitigation priorities, advised by risk champion

vi. The DDP to identify scope for reducing its exposure to business continuity risk relating to the MoFB as a whole, ahead of the MoFB’s full development of a BCP and DRS

vii. Prepare procedures manual within the DDP

viii. Identify back-up for key people, and integrate with training program
## ANNEX 1: DEBT MANAGEMENT REFORM PLAN LOGFRAME\textsuperscript{23}

### Madagascar Debt Management Reform plan – February, 2014

<table>
<thead>
<tr>
<th>Issues/Project Components</th>
<th>Actions</th>
<th>Timing</th>
<th>Expected Outputs of the Actions</th>
<th>Budget (for external assistance)</th>
<th>Expected Outcome of the Project Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragmented and incomplete legislation relating to government debt management</td>
<td>DDP internal review of comments provided by the mission for the draft Debt Law</td>
<td>April-May, 2014</td>
<td>Revised draft law</td>
<td>Internal</td>
<td>Enhanced legal control of, and accountability for government debt management</td>
</tr>
<tr>
<td></td>
<td>DDP consultation with legal advisors in the Office of the Secretary General of the Government</td>
<td>June, 2014</td>
<td>Second revision of draft law for compatibility with the existing legal framework</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review of the draft within MoFB</td>
<td>July, 2014</td>
<td>Third revision of draft law</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submission to PM’s Cabinet for approval</td>
<td>September, 2014</td>
<td>Draft law submitted</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submission to Council of Ministers for approval</td>
<td>October, 2014</td>
<td>Draft law submitted</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submission to Parliament for approval</td>
<td>November, 2014</td>
<td>Draft law submitted</td>
<td>Internal</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{23} For external assistance the cost estimates are based on weekly total cost of external consultants of USD 7,000, and USD 6,000 for a roundtrip.
## Madagascar Debt Management Reform plan – February, 2014

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</tr>
</thead>
<tbody>
<tr>
<td>No medium term debt management strategy in place</td>
<td>Conduct a simple MTDS analysis for 2015-2017 and identify the strategy to be proposed for approval</td>
<td>July-October 2014</td>
<td>The analysis is undertaken by the DDP team and the identified strategy discussed with the technical staff from relevant units (DDP, CBM, DG Budget and other relevant units if any)</td>
<td>Internal</td>
<td>The Government is able to achieve the desired level of risk at an acceptable cost through the development, implementation and publication of the medium term DMS on an annual basis.</td>
</tr>
<tr>
<td></td>
<td>Draft the strategy document by the technical staff</td>
<td>October-November 2014</td>
<td>DMS document is drafted.</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Circulate draft for formal opinion to MoFB general directorates and the CBM</td>
<td>November 2014</td>
<td>Formal opinion of the MoFB general directorates and CBM are collected.</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Present/submit strategy to the Secretary General / Minister of Finance</td>
<td>December 2014</td>
<td>Secretary General / Minister of Finance are informed about the proposed strategy.</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DMS approved by the Executive body (Minister/Council of Ministers as required)</td>
<td>December 2014</td>
<td>Executive body approves the strategy.</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Publication of the DMS (including the MoFB website)</td>
<td>December 2014</td>
<td>DMS published.</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Publish a revised DMS</td>
<td>November-2016-2018</td>
<td>DMS published.</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td>Issues/Project Components</td>
<td>Actions</td>
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<tr>
<td>for 2016-2018, containing more detailed analysis. Renew this activity on an annual basis.</td>
<td>December 2015</td>
<td>Staff has sufficient capacity to produce the DMS.</td>
<td>External, Participate in the MTDS workshops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Train the technical staff on the DMS design methodology.</td>
<td>on-going</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved borrowing procedures for external and domestic debt</td>
<td>External creditors to be identified with their respective focus on activities and expected financial terms and conditions</td>
<td>To start April, 2014</td>
<td>Documented list of all potential creditors and their expected terms and conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prepare annual resource mobilization plan for external borrowing for 2015 (as part of the budget process)</td>
<td>July-August 2014</td>
<td>Documented external mobilization plan for 2015. Ongoing procedure as part of the annual budget formulation process</td>
<td></td>
<td>Government borrowing conducted based on thorough analysis of all available options. Borrowing operations on the domestic market conducted transparently and predictably.</td>
</tr>
<tr>
<td></td>
<td>Training the staff on how to conduct basic</td>
<td>September-October,</td>
<td>Increased capacity to undertake financial analysis</td>
<td>Internal consultant USD 20,000</td>
<td></td>
</tr>
<tr>
<td>Issues/Project Components</td>
<td>Actions</td>
<td>Timing</td>
<td>Expected Outputs of the Actions</td>
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<tr>
<td></td>
<td>financial analysis of cost effectiveness of loan</td>
<td>2014</td>
<td>of the loans.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop the in-house methodology to undertake financial analysis</td>
<td>To start November-December, 2014</td>
<td>Excel applications for assessing loan proposals developed</td>
<td>External consultant USD 20,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expand the current borrowing plan for 2014 with T-bills on a gross basis and maturing domestic instruments</td>
<td>April 2014</td>
<td>Expanded borrowing plan</td>
<td></td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td>Based on the borrowing plan, develop an auction calendar for T-bills on a quarterly basis and make it public and present it actively to the market participants</td>
<td>May 2014</td>
<td>Quarterly auction calendar made public; ongoing procedure</td>
<td></td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td>Develop an aggregate and comprehensive annual borrowing plan for external and domestic borrowing for 2015 (as part of the Budget preparation process)</td>
<td>July-August 2014</td>
<td>Documented borrowing plan for 2015; ongoing procedure in Budget process</td>
<td></td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td>Update the borrowing</td>
<td>September</td>
<td>Revised borrowing</td>
<td></td>
<td>CBM internal</td>
</tr>
</tbody>
</table>
## Madagascar Debt Management Reform plan – February, 2014

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</tr>
</thead>
<tbody>
<tr>
<td>procedures for T-Bills presented on the websites</td>
<td>2014</td>
<td>procedures for T-bills made public on MoFB and CBM websites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal advisors review the loan proposals and other contracts entered into by DDP and the Treasury</td>
<td>On-going</td>
<td>Loan agreements cleared by legal adviser/s</td>
<td></td>
<td></td>
<td>Internal</td>
</tr>
</tbody>
</table>

### Operational Risk Management (ORM)

- **Action on immediate priorities to reduce operational risk exposure**
  - Coordinate with UNCTAD and bring DMFAS into full operation
  - By end April 2014
  - All debt data in DMFAS 6 and accessible
  - Internal /in cooperation with UNCTAD
  - Reduced operational risk exposures in key areas

- **Drafting of procedures manuals.**
  - End January 2015
  - Agreed process, priorities and format of procedures manuals
  - Internal

- **Identify back up staff for all key functions; integrate with training program**
  - 2015
  - Full set of procedures manuals
  - External consultant (USD 32,000) to facilitate early stages

- **Identify back up staff for all key functions; integrate with training program**
  - 2015
  - Staff able to cover adequately for key staff in the event of absences or departure
  - Internal; External training as required
<table>
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<tr>
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<th>Expected Outputs of the Actions</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Dialogue with CBM with a view to the preparation of MoU/SLA (focusing on services supplied)</td>
<td>April to October 2014</td>
<td>Management of expectations and clarification of responsibilities between DDP and CBM; understanding of risks arising</td>
<td>Internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOU/SLA agreed and submitted to signature</td>
<td>November-December, 2014</td>
<td>MoU signed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DDP to identify scope for reducing its exposure to business continuity risk relating to MoFB as a whole ahead of MoFB’s full development of BCP and DRS</td>
<td>2015, extending into 2016</td>
<td>Risks to DDP minimized in the event of a business continuity shock applying to MoFB</td>
<td>Internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORM framework required to improve management of operational risk, ensuring a consistent approach</td>
<td>Appoint a “risk champion”, with suitable announcement to DDP</td>
<td>End January 2015</td>
<td>ORM champion nominated</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td>Risk champion to specify risk assessment process, agreed by Head/DDP</td>
<td>End March 2015</td>
<td>Process agreed</td>
<td></td>
<td>Internal</td>
<td></td>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Risk champion to organize series of workshops across DDP, supported by external consultant</td>
<td>April to June 2015</td>
<td>OR areas defined, assessed and prioritized</td>
<td>External consultant (USD 20,000)</td>
<td>Risk culture in DDP</td>
</tr>
<tr>
<td></td>
<td>Risk exposures prioritized with proposed mitigation strategies submitted to senior management of DDP (consulting others in MoFB as necessary)</td>
<td>Sept 2015</td>
<td>Sound basis for further risk mitigation actions</td>
<td></td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td>Meeting of senior DDP management to consider recommendations and agree actions; onward submission to DG Treasury and others as necessary depending on recommendations</td>
<td>Nov 2015</td>
<td>New controls or other mitigation actions</td>
<td>[Will depend on recommendations]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Risk champion to collect exception data; managers to refresh risk profiles, with</td>
<td>End March 2016 and quarterly thereafter</td>
<td>Updating of risk assessment to ensure high risk exposures are fully addressed</td>
<td></td>
<td>Internal</td>
</tr>
<tr>
<td>Issues/Project Components</td>
<td>Actions</td>
<td>Timing</td>
<td>Expected Outputs of the Actions</td>
<td>Budget (for external assistance)</td>
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</tr>
<tr>
<td></td>
<td>assessment submitted to senior management by risk champion</td>
<td>End 2017</td>
<td>More pertinent ORM framework in place</td>
<td>External consultant (USD 20,000)</td>
<td></td>
</tr>
</tbody>
</table>
ANNEX 2. OUTLINE OF QUARTERLY DEBT BULLETIN

[Initially central government debts only; where relevant include details on guarantees. Note that this initial bulletin is intended to be no more than 4 pages] 24

1. Headlines:

Summary of Key/New Points in bullet form; example:

a. Debt/GDP rose to [    ] at end of [3rd quarter 2014], a rise of [    ]

b. Domestic currency composition of debt portfolio rose slightly from [    %] to [    %]

c. Net domestic securities issuance was slightly higher over the quarter, compared with the average of the previous [6 quarters]

d. [The government agreed 2 new external project loans and issued its first 2-year bond.]

2. Costs and Risks of the Debt Portfolio

[The figure for the latest quarter compared with the previous quarter. There is no need for a long run of figures provided that the graphs show the time trend over more than, for example, 4 years. A current estimate will be needed of GDP: indicate its source e.g. in a footnote. The chosen indicators should be those included also in the DMS. Unless it looks too cluttered all these indicators could be in the same table]

a. Debt sustainability (e.g. Debt/GDP and Interest to GDP or to Revenue)

b. Interest rate risk (e.g. Average time to refixing; or proportion of variable rate debt; or share of debt to be refixed within the next [1 year], domestic and external separate as well as total)

c. Exchange rate risk (eg share of external debt in total debt and currency composition)

d. Refinancing risk (e.g. share of debt falling due within the next [1 year] or average time to maturity (domestic and external separately as well as total)

3. Main Charts

[These charts support the indicators above although may include data that is taken from the more detailed tables below.]

a. Debt/GDP over time (line chart showing external and domestic separately)

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24 Material in italics is explanatory only; it is not intended to be part of the bulletin.
b. External debt and domestic debt over time (in MGA and percent)

c. Refinancing profile over time, showing both domestic and external (in MGA)

4. More Detailed Tables

[Unless indicated otherwise, all tables should include data for the last [4 full years]; and with the last 6-8 quarters shown separately. The graphs might show a longer run of years where relevant.]

a. Stock summary (in MGA): Total central government debt split by: external (split by bilateral and multilateral, with subtotal in both USD and MGA) and domestic (split by bonds [when relevant] bills and “other”). Add GDP as a memo item.


c. Summary details of all domestic auctions

d. Debt servicing (in MGA except for effective interest): servicing payments, split by interest and principal for domestic and external separately; and projections of such payments over the next [3 years], on the basis of the current debt stock (ie no assumption about new borrowing). Include calculation of effective interest rate (percent for past data).

5. Supporting Charts

a. External debt by creditor (pie chart)

b. External debt by currency (pie chart)

c. [External debt by beneficiary sector, indicating on-lending]

d. Debt servicing over time, split by interest principal and currency (line chart or histogram)

e. Domestic debt by category (bonds, bills, other)

6. Other

a. Contact details

b. Glossary, sources, etc as necessary.
Objectives and Scope

Debt management objectives of the Malagasy government should be specified here, as described in the debt legislation which is expected to be finalized and enacted in coming months.

DMS document can state that the contingent liabilities from guarantees may be included in the future, once the credit risk assessment framework is developed.

The main objective of debt management in Madagascar is to ensure that the government’s financing needs and payment obligations are met at the lowest possible cost consistent with a prudent degree of risk. A second objective is to support domestic debt market development.

Scope of the DMS is limited to central government debt portfolio, which is the one with direct impact on the budget.

Headlines

Historical context for the debt portfolio will be described: changes in its size (including relative to GDP) and composition through time along with commentary of significant events in the evolution of the debt. This is similar to the Headlines in the quarterly debt bulletin that is a summary of Key/New Points in bullet form covering the yearly developments. For example:

a. Debt/GDP rose to [ ] at end of [2013], a rise of [ ]

b. Foreign currency share of debt portfolio rose slightly from [ %] to [ %]

c. Debt service payments amounted to [ ] at end [2013], compared to [2012]

d. [The government signed [ ] external project loans in [2013] and continued to issue 4 week to 52 week T-bills.]

e. [T-bill interest rates saw an upward trend starting from [June 2013] as a result of political uncertainty and reduced liquidity. During this period, statutory advances from CBM were utilized to finance the budget, complementing the T-bill issuances.]

Costs and Risks Characteristics of Debt Portfolio

This section also is similar to the respective section of the quarterly bulletin. Only current debt portfolio’s costs and exposure to risks can be described in the first DMS document (2015-2017). The following years’ strategy documents can start highlighting

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25 This appendix uses information from the template which can be found in Appendix VII of “Developing a Medium-Term Debt Management Strategy (MTDS) Guidance Note for Country Authorities”, WB/IMF, 2009.
the impact of the previous year’s borrowing operations on the cost and risk exposure of the debt portfolio, based on quarterly information. For example:

- As a result of high share of external debt (73.2 percent), government debt portfolio is exposed to foreign exchange risk, that is to increases in debt service payments resulting from depreciation in the external value of the domestic currency. This risk is subdued thanks to the low cost concessional terms of the external debt which has a long average period to maturity and generates lower foreign currency interest payments over the year.
- The impact of a 30 percent depreciation of the Ariary against USD in 2014 would increase the expected interest payments by [   ] Ariary, that is [   ] of central government revenues.
- Domestic debt is exposed to interest rate and refinancing risk as a result of short maturities, with 100 percent of debt renewed and refixed within next year. However, the low share of domestic debt (25 percent) reduces the impact of this risk on the budget.

Sample Charts and tables:
- Nominal debt stock table( and or as percentage of GDP) with external and domestic debt breakdown, providing also lender type for external debt and instrument type for domestic debt; (see chart 2)
- Debt service payments with external and domestic debt breakdown; (see chart 3)
- Currency composition of external debt; (see pie chart , chart 4)
- Primary yield curve for the T-bills; (see chart 6)
- Redemption profile; (see chart 5,)
- Risk indicators: (see table 1 from MTDS tool of the report)

Outlook for Macroeconomic Environment and Future Funding Needs

The environment for debt management in terms of future funding needs and assumptions about exchange and interest rates should be described. Information on the three-year macroeconomic fiscal framework, when and if available, can be provided in this section.

- Table containing: budget deficit, Principal Payments, Interest Payments, Funding needs (nominal, local currency), Funding needs / GDP (see table in Macro&Market Data, MTDS tool)

Potential Sources of Financing

Potential sources of financing from abroad identified by the Treasury should be portrayed here, with a description of the possible impact on the costs and risks of the debt portfolio. Constraints of the domestic market should be discussed, and plans for the development of the domestic market, if any, should be presented.

- Multilateral lenders X, Y, Z at concessional terms, (low cost and low risk)
- Bilateral lenders A, B, C at semi-concessional rates, (costlier and riskier than the previous group of lenders)
Commercial lenders D, E, F at market rates, fixed floating interest rates and shorter maturity (costlier and riskier type of external debt)
- T-bills from 4 weeks to 52 weeks are the domestic market instruments currently available to the government, (costlier and riskier than [most] external debt).

Plans for Domestic Market Development [2016-2018, on following periods]

If the development of the domestic market is one of the objectives of debt management and stated in the debt legislation, this section could be added to the DMS in order to share the steps (see section X of the report) the government considers taking to reach this objective. This could be introduced in the DMS documents once (and if) such an action plan has been developed.

Government of Madagascar is committed to developing domestic government securities market with a view to becoming less vulnerable to the shocks in market rates, having greater market access and lowering borrowing costs over the long term. To this end, the following actions will be taken:

- Enhancing the communication with the market participants
- Exploring the possibility to introduce new longer dated instruments, with the impact of reducing the interest rate / refinancing risk (but increasing the cost)
- Publish the auction calendar to improve the price discovery.

Debt Management Strategy and Medium Term Strategic Targets

The recommended strategy and its rationale should be set out. In the first few DMS documents, it is enough to provide some direction for managing the different risks. As detailed analysis is conducted, the document could briefly describe the analysis that has been undertaken to support the recommended debt management strategy. The assumptions used and limitations of the analysis should be made clear.

- During [2015-2017], most of the borrowing (project financing and budget financing) will be conducted from external concessional sources with low cost and risk impact on the debt portfolio.

- T-bills will continue to be used for budget financing and cash management. 2-year T-bonds can be introduced in [2016 or 2017] depending on investor appetite and market conditions, with a positive impact on the refinancing and interest rate risks.

- Management of the FX risk
- Reduce FX risk in the medium term, if the concessional sources of financing start declining.
- Management of refinancing and interest rate risk
- The amount of local currency debt maturing within 12 months shall be reduced
- External borrowing will be conducted in fixed interest rates to the extent possible
Conclusion

The Malagasy government thrives to achieve the desired level of risk at an acceptable cost by executing the DMS annually, based on a sound analysis of cost and risk.

The documented DMS will be revised and published every year on a rolling basis. The underlying analysis will be updated to check whether key assumptions continue to hold and that the DMS remains appropriate.

Additionally, the implementation of the DMS will be regularly monitored through quarterly bulletins.
### ANNEX 4. PEOPLE MET

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