

August 17, 2012

GUIDE TO THE SUBNATIONAL DEBT MANAGEMENT PERFORMANCE ASSESSMENT (DeMPA) TOOL



THE WORLD BANK

Economic Policy and Debt Department (PRMED)

Poverty Reduction and Economic Management Network (PREM)

TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
ABBREVIATIONS AND ACRONYMS	3
ACKNOWLEDGMENTS.....	4
1 INTRODUCTION	5
2 SUBNATIONAL DEBT PERFORMANCE INDICATORS	6
2.1 Governance and Strategy Development.....	6
DPI-1 Legal Framework	6
DPI-2 Managerial Structure	9
DPI-3 Debt Management Strategy.....	13
DPI-4 Evaluation of Debt Management Operations.....	15
DPI-5 Audit	16
2.2 Coordination with Fiscal and Budgetary Policy.....	18
DPI-6 Coordination with Fiscal and Budgetary Policy.....	18
2.3 Borrowing Planning, Borrowings, and Other Financing Activities.....	21
DPI-7 Borrowing Planning.....	21
DPI-8 Borrowings.....	22
DPI-9 Loan Guarantees, On-Lending, and Derivatives.....	25
2.4 Cash Flow Forecasting and Cash Balance Management.....	28
DPI-10 Cash Flow Forecasting and Cash Balance Management.....	28
2.5 Operational Risk Management	31
DPI-11 Debt Administration and Data Security	31
DPI-12 Segregation of Duties, Staff Capacity, and Business Continuity.....	34
2.6 Debt and Loan Guarantee Records and Reporting.....	38
DPI-13 Debt and Loan Guarantee Records.....	38
DPI-14 Debt and Loan Guarantee Reporting.....	40
Annex 1: Differences between the Sovereign and the Subnational DeMPA Tool	42
Annex 2: Regulatory Frameworks for SNGs.....	48
Annex 3: Treatment of Arrears in Finance Statistics	50

ABBREVIATIONS AND ACRONYMS

Center	Central Government
DeM	Debt Management
DeMPA	Debt Management Performance Assessment (Tool)
DMFAS	Debt Management and Financial Analysis System
DPI	Debt Management Performance Indicator
DRP	Disaster-recovery plan
DSA	Debt Sustainability Analysis
FABDM	Financial Advisory and Banking - Debt Management Department (World Bank)
GDP	Gross Domestic Product
IMF	International Monetary Fund
N/A	Not applicable
N/R	Not rated or assessed
PEFA	Public Expenditure and Financial Accountability
PRMED	Economic Policy and Debt Department (World Bank)
SNG	Subnational Government
T-bills	Treasury bills
T-bonds	Treasury bonds

ACKNOWLEDGMENTS

The Subnational Debt Management Performance Assessment (DeMPA) Guide was prepared under the leadership of Jeffery Lewis and Sudarshan Gooptu of the Economic Policy and Debt Department (PRMED) and Phillip Anderson of the Financial Advisory and Banking–Debt Management Department (FABDM) of the World Bank. The core Bank team included Abha Prasad and Lili Liu (PRMED). External consultants Tomas I. Magnusson, Ian Storkey and Ying Li provided central contributions throughout the development and testing of the indicators. The development of subnational DeMPA tool and guide has been closely coordinated with the Brazilian and Nigerian country teams.

Valuable contributions were made by officials in the subnationals where the indicators were field-tested: Lagos and Ondo States (Nigeria), Rio de Janeiro state (Brazil), DKI Jakarta and Metropolitan Municipality of Lima (Peru). Comments received from peer reviewers Phillip Anderson (FABDM), Hiroaki Suzuki (Finance, Economics and Urban Development Department), Helena Maria Ramos (Public Expenditure and Financial Accountability (PEFA) Secretariat) and Kai Kaiser (Poverty Reduction and Economic Management Network) are gratefully acknowledged. The framework for subnational debt management using the DeMPA methodology was also discussed with client country participants and World Bank country economists working on subnational fiscal and debt issues at the three Subnational Fiscal and Debt Management Trainings (Vienna, Shanghai and Rio de Janeiro).

The contributions from the Technical Advisory Group of the Debt Management Facility¹ are also gratefully acknowledged.

¹ Members of the TAG consist of one expert selected from each of the following official institutions: UNCTAD, CEMLA, Commonwealth Secretariat, DRI, the IMF, MEFMI, the OECD's Public Debt Management Programme, and the WAIFEM. In addition, representatives from four developing country governments are also appointed to the TAG.

1 INTRODUCTION

The SNG DeMPA tool will apply to individual SNG entities and not the entire SNG sector in a country. Moreover, it will apply to SNGs that have the capacity to incur debt and have debt outstanding. SNGs can differ significantly in terms of size and degree of autonomy from central government across countries. Most SNGs will be guided by highly simplified borrowing rules: e.g. only borrowing in domestic currency; only borrowing in foreign currency after approval of the central government; only borrowing for projects and then matching the maturity of the borrowing to the project. Such simplified borrowing rules would have significant implications for the conduct of debt management strategies, the organization of the SNG debt management operations, and the legal framework among other SNG DeMPA indicators. As a result in many instances, the main issue the SNG should focus is debt sustainability, including project evaluation, i.e. lending for proper projects just as a corporation. And the main DeM decision would be on whether interest rates are floating or fixed. Typically much less resources should be devoted to SNG DeM. Thus a key issue for the SNG DeMPA exercise is whether the central government has delegated reasonable degrees of freedom to the SNG, and if the SNG operates within that framework with an appropriate focus.

It will be important with the assessment to examine the borrowing frameworks for the SNG and the reliance on central government transfers, which will have a bearing on the type of debt management strategy and managerial structure that is required by the SNG for DeM. The variability in size of debt outstanding and/or the number of loans/securities together with the degree of reliance on central government funding will have a bearing on the minimum requirements in some DPs but not all. Notwithstanding, the minimum requirements will apply for all SNGs. However, for very small SNGs and/or where the number of loans/securities is very small and/or the borrowing and debt related activities are so infrequent that it is not feasible to complete an assessment, then a not rated or assessed (N/R) or not applicable (N/A) can be assigned, depending on the situation.

The differences between the sovereign and the subnational DeMPA tool are set out in Annex 1.

2 SUBNATIONAL DEBT PERFORMANCE INDICATORS

2.1 Governance and Strategy Development

DPI-1 Legal Framework

Rationale and background

Dimension 1

The first rationale is to ensure that the legal framework clearly sets out the authority to borrow (in both domestic and foreign markets), undertake debt-related transactions (such as currency and interest rate swaps, where applicable), and issue loan guarantees.

It is common that the central government (the Center) has imposed restrictions on SNG borrowings, such as ceilings on the outstanding debt, restrictions on the borrowing purposes, and/or allowing borrowing in certain markets only (often domestic and local currency only). These limitations are commonly found in the Constitution, the public debt management law, the budget system law, the fiscal responsibility law, the investments and securities law, the local government law, and similar legislation enacted by the Center. To fully understand the legal framework, these restrictions (if any) should be presented in the DeMPA report.²

Within these restrictions imposed by the Center, it is important that the authority to decide borrowing, undertake debt-related transactions, and to issue loan guarantees on behalf of the SNG are clear, both for internal control and for due diligence purposes. All creditors and lenders require a legally binding and enforceable contract with the SNG. If in doubt, the creditors/counterparts will ask for risk premiums or be prohibited from entering into any transaction with the SNG. The legal authority is commonly found in the local government law enacted by the Center, and in laws passed by the SNG, such as the SNG debt management law, and the SNG budget system law.

A systematic approach is recommended to assess whether the minimum requirements have been met. The starting point is to check the legal decision-making process for borrowing in the domestic and external markets, and for borrowing by using different techniques, such as issuing debt securities (where applicable) and by concluding common loan agreements. The borrowing authorities are normally vested in the local assembly (or similar body), the executive council, and the local equivalent to the minister of finance. Sometimes, particularly for borrowing in foreign markets, approval by the Center also might be necessary. When in doubt, local legal experts should be consulted, e.g. the legal support unit in the SNG ministry of finance or equivalent.

² Examples of the regulatory frameworks for control of SNG debt are set out in Annex 1.

Once the approval process has been clarified, and assuming this process is adhered to, the next step is to check the signing of the necessary agreements related to a particular borrowing. Commonly, some official (or officials) has been given the authority to sign these agreements on behalf of the SNG. Normally it is the local government minister of finance (or his/her equivalent) that has this power, either through expressed authority in law or in his/her capacity as head of the ministry/unit that is responsible for borrowing and other debt management activities.

Similarly approach is recommended for checking the decision-making process for undertaking debt-related transactions and for issuing loan guarantees.³

All relevant laws should be referred to in the DeMPA report.

To meet the minimum requirements, the legislation also must specify for which purposes the SNG can borrow. The main reason to include borrowing purposes in 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 local assembly in some other fashion. If the executive branch of the government were allowed to borrow to finance expenditures not approved by the local assembly, the budget process would lose its meaning, eventually resulting in the local assembly being forced to raise taxes or cut expenditures to service the debt contracted to finance such expenditures.

Examples of borrowing purposes are to finance budget and cash balance deficits; finance investment projects approved by the local assembly outside the budget process; refinance and prefinance outstanding debt; and to finance honoring of outstanding guarantees.

The second rationale for DPI-1 is to ensure that the legal framework, at least for the higher scores, also includes clear DeM objectives; a requirement to develop a medium-term DeM strategy; reporting requirement to the local assembly on debt management activities and loan guarantees; and a mandate for external audits of the effectiveness and efficiency of the DeM operations.⁴

³ In case of use of financial swaps, it must be clarified whether the SNG has the authority to enter into such transactions. In a famous case from 1988, the auditors discovered that the London Borough of Hammersmith and Fulham had a massive exposure to interest rate swaps. When legal opinions were obtained, it was concluded that the Borough did not have any legal authority to enter into these transactions, and consequently the courts declared the contracts illegal (referring to the principle of *ultra vires*). The banks involved in these swap transactions lost millions of pounds.

⁴ Normally it is the local Office of the Auditor-General, or equivalent, that conducts the external audits of the SNG operations. The mandate for external audits is normally found in the law governing external audits.

Common DeM objectives are to meet the government's borrowing requirements, to minimize the medium- to long-term expected cost of funding, and to keep the risks in the debt portfolio at acceptable levels.

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. In accordance with existing sound international practice, a requirement in the primary legislation to develop a DeM strategy has also been included in this indicator for the highest score.

Reporting to the local assembly increases transparency and strengthens accountability. This reporting requirement is commonly found in any policy-based legislation that includes longer-term objectives.

The key requirement for DPI-1 is to review the legislation to see whether it meets the list of requirements and the criteria to be assessed. It is also important to determine the extent of adherence to the legislation, because in some countries, the legislation may be sufficient but may not be fully enforced.

Dimension 2

The rationale is to ensure that any borrowing by the SNG from the central bank is legally restricted, if at all allowed. Monetary financing of government deficits, whether at the level of central or SNG, imposes undesirable constraints on monetary policy operations by increasing the money supply.

In some countries the central bank may lend funds to the private sector and SNGs, provided these borrowers are pledging collateral as security for the loan, and on terms determined by the central bank. These secured loans are not considered monetary financing in the Subnational DeMPA tool.

Any right of access to financing from the central bank is normally regulated in the central bank law.

Indicative questions to ask

- Has the Center imposed some restrictions on SNG borrowings? If so, what are those restrictions, and which legislation includes these restrictions and what sections or clauses?
- Is there clear authorization in legislation to approve borrowings and loan guarantees on behalf of the SNG assigned to the local assembly (or similar body), the executive council or directly to the local minister of finance (or equivalent)? If so, which legislation provides authorization and what sections or clauses?

- Who signs the loan agreements and other necessary agreements related to a particular borrowing? Which legislation provides this authorization and what sections or clauses?
- Is there clear authorization in legislation to undertake debt-related transactions on behalf of the SNG? If so, which legislation provides authorization and what sections or clauses?
- What sections or clauses in the legislation cover the following?
 - Specified borrowing purposes
 - Clear DeM objectives
 - Requirement to develop a DeM strategy
 - Annual mandatory reporting to the local assembly (or similar body) covering the DeM activities and issued loan guarantees (where applicable)
 - Mandate for the external auditors to audit the DeM operations
- Has there been any instance in the past five years in which the laws have not been followed? If so, what were the instances, why were the laws not followed, and what were the consequences?
- Does the SNG have an overdraft or ways and means facility with the central bank? If so,
 - Is there a ceiling imposed by legislation, and what is the ceiling?
 - Does the legislation impose a tenor on the duration of this facility, and what is the tenor?
 - Has the SNG used the facility, and if so, how often, for what amounts, and for what tenors?
 - When does the facility have to be reduced to a zero balance?

DPI-2 Managerial Structure

Rationale and background

Dimension 1

The rationale is to ensure that the managerial structure for debt management activities is effective. That includes an efficient organization on the execution level, as well as a clear division between the political level (the local assembly, the executive council, the governor/mayor, and the local minister of finance) that sets the overall DeM objectives and approves the medium-term debt management strategy, and the entities at the execution level responsible for implementing the decisions taken at the political level. The advantage of this approach is that major decisions about the overall volume of indebtedness and the acceptable risks in the debt portfolio—in terms of their effect on the budget, taxes, government spending programs, or other such fiscal indicators—are assigned to political decision makers while allowing technical professionals to seek the optimum risk-adjusted outcome within those parameters.

An example of “undue political interference” is when the minister of finance (or equivalent) is interfering in the work at the execution level by pressing the debt manager to borrow in the short end of the yield curve or in a low-coupon currency to reduce the short-term debt service cost at the expense of an increased risk in the debt portfolio that goes against an approved strategy. Other types of behavior that should be avoided on the political level are involvement in the discussions of any cutoff price after the bids have been received in an auction of government debt securities, selection of borrowing currencies in single loan transactions, and selection of the lead manager and banks for borrowings in the international capital markets or through the issue of debt securities in the domestic market using a syndicate of underwriters or through loans from select commercial banks.

Undertaking a concessional loan from a multilateral creditor that includes a range of policy triggers, however, clearly has political implications and may very well be subject to political scrutiny without being qualified as undue interference. Similarly, large public bond issues, borrowing from new sources, or borrowing through new structures may not be delegated to the same level as routine domestic T-bond and T-bill auctions.

Though strongly recommended, the SNG DeMPA tool does not require establishment of a Principal DeM entity or a Debt Management Office (DMO) to be in charge of the debt management activities at the execution level. If the SNG has multiple DeM entities, however, it is essential that these entities closely coordinate their DeM activities through a coordinating mechanism, e.g. in shape of a committee that meets frequently, or through one DeM entity that is responsible for taking the lead in the coordinating effort. Coordination is important to avoid over-borrowing and to keep track of the debt portfolio risks. This aspect is particularly important when the DeM activities are steered by a medium-term DeM strategy and annual borrowing plans.

Only for the highest score, there is a requirement to have a Principal DeM entity.

Dimension 2

Loan guarantee is an explicit contingent liability that typically is issued to financially support a certain beneficiary or project or a specific sector of the local economy. Because this is a political decision, use of these guarantees should be approved at the political level and before any loan guarantee can be issued. However, as with debt transactions, it is desirable to leave overall responsibility for the preparation and issuance of the loan guarantees to one entity, i.e. a Principal guarantee entity responsible to:

- Independently assess and price the credit risk;
- Mitigate the financial effects of a default or trigger event;
- Monitor the risk during the term of the loan guarantee;
- Coordinate the borrowings of the guarantee beneficiaries with the SNG borrowing;
- and

- Record these guarantees properly.

Coordination of the borrowings of the SNG and the guarantee beneficiary is particularly important when both undertake market borrowings. From the creditors' or investors' point of view, whether the SNG borrows directly or whether it supports borrowing by another entity through a loan guarantee does not make much difference. In both cases, the credit risk is the same, and consequently, the credit risk premium would be similar. However, if the underlying loan is substantially more expensive than the SNG would have negotiated because of the inexperience of the guaranteed beneficiary, this factor can adversely affect the future pricing of the SNG's own market borrowing. Similarly, if both the SNG and the guaranteed beneficiary enter the same market because of lack of prior consultation whenever a favorable market opportunity arises, it likely will lead to more expensive loans for both and create an impression of disorganization, as compared to an orderly coordination of their market operations.

It has become increasingly common to use the Principal DeM entity to also prepare and issue the loan guarantees once the political decision to support a certain beneficiary or project by guarantees has been made. Apart from the technical skill normally found at the Principal DeM entity, this approach also ensures proper coordination with the SNG borrowing operations. In countries without adequately trained staff in finance, this managerial structure is particularly relevant for better coordination and beneficial use of scarce technical skills.

In the case of a more fragmented managerial structure, it is important that the SNG entities in charge of preparation and issuance of loan guarantees regularly exchange information and closely coordinate their respective activities both between themselves and with the DeM entity(ies). This should be done through a formalized institutional arrangement whereby information flows are regularly shared.

In the Subnational DeMPA tool, loan guarantees do not include export credit guarantees.

Indicative questions to ask

- Which entities have responsibility for DeM activities? What are the respective roles and responsibilities?
- What is the process, and who is responsible for negotiating and contracting new loans (concessional, multilateral, bilateral, commercial, domestic, and so forth)?
- What role does the local assembly, the executive council and the minister of finance play in any new borrowing, particularly with regard to the authorization to borrow and during the contract negotiation and transacting process? Any undue political interference?

- If there are two or more DeM entities, what debt and other information are exchanged between them? How frequently is this information exchanged? Do the entities closely coordinate their respective activities to avoid over-borrowing and keep track of the portfolio risks, and what mechanism is used for this coordination?
- Which entity is responsible for preparation and issuance of loan guarantees? How are these loan guarantees prepared?
- Are borrowings by the beneficiary of loan guarantees coordinated with SNG borrowing, and how?

DPI-3 Debt Management Strategy

Rationale and background

Dimension 1

The rationale is to ensure that the SNG has prepared and approved a medium-term DeM strategy that is based on the longer-term DeM objectives and set within the context of the SNG's macroeconomic assumptions and budget framework.

The content of the strategy and risk indicators will vary, depending on the stage of development or DeM reform, the sources of funding, and the transactions used to manage SNG debt. The following indicators are most likely to be assessed:

- Total debt service under different scenarios, particularly sensitivity to interest rate and exchange rates;
- Maturity profile of the debt under different scenarios; and
- Strategic benchmarks such as the following:
 - Share of foreign currency to domestic debt;
 - Currency composition of foreign currency debt;
 - Minimum average maturity of the debt;
 - Maximum share of debt that is allowed to fall due during one and two budget years;
 - Maximum share of short-term (up to one year) to long-term debt;
 - Maximum share of floating rate to fixed rate debt; and
 - Minimum average time to interest rate re-fixing.

For SNGs that have limited access to market-based debt instruments and rely mainly on external official concessional finance, all of these risk-based parameters may not be equally relevant. In such cases, the most relevant parameters to containing the risks to the debt portfolio will probably be meeting of the concessionality requirements, currency composition, and amount of debt that must be refinanced over a particular time.

Dimension 2

The rationale is to ensure that the SNG has a robust decision-making process for strategy development, and that the strategy is published.

It is important to have a robust process in place for strategy development. The strategy is essentially a decision on the SNG's preferred risk tolerance that must be updated frequently—preferably yearly—to reflect changed circumstances (an iterative process). On the basis of existing good international practice, the Principal DeM entity (or the DeM entities together) prepares a feasible strategy proposal, and the executive council, the Governor or mayor, or similar political body, approves the strategy document.

Indicative questions to ask

- Has the SNG a written and approved medium-term DeM strategy? If so,
 - How was the strategy produced?
 - Which DeM entities or people were responsible for producing the strategy, and what were their respective roles?
 - Who authorized or approved the strategy?
 - What analysis was undertaken in formulating the strategy?
 - How was the analysis undertaken, who was responsible for setting economic and budget parameters, and who was responsible for debt forecasts?
 - Does the strategy cover the items required to meet the minimum requirements?
 - Was the strategy made publicly available? If so, when was it published, and in what format?
 - How has the strategy been implemented?
 - How often will the strategy be updated?

DPI-4 Evaluation of Debt Management Operations

Rationale and background

The rationale is to ensure that the SNG is accountable for its DeM activities to the local assembly or similar body by submitting a detailed report that can form the basis for an annual evaluation of its DeM activities. This approach promotes transparency in DeM operations and good governance through greater accountability.

To form the basis for a proper evaluation, the report must be rather detailed, explaining the reasons for borrowing choices and other DeM activities. It would not be enough to furnish a report only listing the new borrowings and other transactions that have been undertaken. Similarly, budget execution reports normally would not meet the minimum requirements for this DPI, nor the annual financial statements or government accounts. These documents focus on financial information, and little, if any, information on performance is included.

For the higher scores, the SNG must evaluate compliance with the DeM strategy and assessment of outcomes against stated DeM objectives. A good example of what is required to meet this requirement would be an annual report published by the SNG DeM entity.⁵

Indicative questions to ask

- Is an annual report on DeM activities submitted to the local assembly (or similar body), and is the report detailed enough to form the basis for an evaluation of the borrowing and other DeM activities?
- Does this report contain an evaluation of how the DeM activities have complied with the SNG's DeM strategy, and an assessment of outcomes against the stated DeM objectives?
- Is the report made available publicly?

⁵ At the time of preparing this Guide useful examples among others, were the reports from State Treasury Corporations in Australia and the provinces in Canada (e.g. Ontario).

DPI-5 Audit

Rationale and background

Dimension 1

The rationale is to ensure that the DeM activities, policies, and operations are subject to scrutiny by the national audit bodies. Transparency of DeM operations is enhanced if the results of external audits are made available to the public.

Audit of the effectiveness and efficiency of the SNG DeM operations is part of a performance audit. Audit of the effectiveness of performance checks the achievement of the stated objectives and the actual impact of activities compared with the intended impact, while audit of the efficiency looks at the efficient use of resources, including examination of information systems, and performance measures and monitoring arrangements.

Audit of the effectiveness of the internal control system is assessing whether the control system is properly designed to provide reasonable assurance for the SNG to achieve its DeM objectives, and to prevent fraud within the organization. Examples of an internal control system that prevents fraud are to set up a debt management unit based on segregation of duties, establish sound IT security, and having a risk control unit that frequently monitor adherence to these internal rules.

Dimension 2

The rationale is to ensure that the relevant decision makers of the SNG are committed to address the outcomes from the audits. In many developing countries, this is still not the case.

To assess performance under this DPI, meetings should be held both with the external auditor (normally the local office of the auditor-general), and the internal audit function covering SNG DeM activities (normally the internal audit function of the ministry of finance or its equivalent).

Indicative questions to ask

- What is the status of the auditing of the SNG's financial statements? (This information can be useful even though it is not assessed because it often explains why in many cases most of the resources are fully committed to financial audits and little or no time or resources are available for performance audits.)
- Have any external performance audits been undertaken on DeM activities? If so, when, what was the process, what were the findings, and how have they been addressed? Have these been publicly disclosed, and if yes, where?

- Is there an internal audit function in the Principal DeM entity or the ministry of finance? If so,
 - What are the mandate, roles, and responsibilities of this function?
 - What internal audits are undertaken, how frequently, and what is the basis of determining the audit program?
 - Have any internal audits been conducted on the effectiveness of the internal control system for the SNG debt management operations? If so, when, what was the process, what were the findings, and how have they been addressed?
- What is the SNG's commitment to address audit findings in the area of debt management?

2.2 Coordination with Fiscal and Budgetary Policy

DPI-6 Coordination with Fiscal and Budgetary Policy

Rationale and background

Dimension 1

The rationale is to ensure that reasonably reliable forecasts on debt service are provided during the yearly budget preparation.

'Reasonably reliable' requires forecasts to be prepared based on macroeconomic and fiscal parameters provided by the budget department (or equivalent) and covering all existing debt and projections of future borrowing to meet the deadlines set for the budget preparation and update process. The forecasts will cover one or more fiscal years (for some SNGs this will be 3 or even 5 years) and could be on a cash and/or accrual basis. The forecasts must be used in the budget formulation process. It would be acceptable for the budget department to prepare its own forecasts, based on what is provided to them by the debt managers, as can be the case in some SNGs. Meeting with the budget department is necessary to obtain their assessment of the reliability and timeliness of the debt service forecasts.

For these forecasts, two broad categories of stress tests preferably should be used: sensitivity tests and scenario tests. These tests may be used either separately or in conjunction with each other.

Sensitivity tests are normally used to assess the effect of change in one variable (for example, a large upward shift in the yield curve or a significant depreciation of the foreign exchange rate) on the stock of debt and debt service.

Scenario tests include simultaneous moves in several variables (for example, foreign exchange rates and interest rates) based on some historical measures or risks perceived in the current environment. Also, this could comprise a sudden or prolonged severe economic downturn. The aim is to assess the effect on the stock of debt and debt service.

During the assessment, the meeting with the budget department (or equivalent) should check the reliability of the debt service forecasts⁶, and whether sensitivity and/or scenario tests were used.

Dimension 2

The rationale is to ensure that key fiscal variables are available and shared with the Principal DeM entity (or DeM entities), and that debt sustainability analyses (DSAs) at

⁶ The team can ask for past data of 3-5 years for the estimated and actual debt service numbers to form an assessment if the forecasts were reasonably reliable or not.

the SNG level are undertaken and shared with the Principal DeM entity (or DeM entities).

The key fiscal variables set out the SNG's fiscal strategy in the medium term. For example, these variables normally include the fiscal policy objectives and strategy, and total SNG expenses, revenues, and debt level, as well as the medium-term plan (three or more years) for total expenses and revenues. The fiscal strategy is focused on the medium-term implications of fiscal policy and allows users to assess the sustainability of the fiscal and external position and its sensitivity to changes in policy. The outlook on these variables defines the environment in which the debt managers operate and is essential for the DeM strategy development.

A DSA is undertaken to assess the long-term (10-25 years) sustainability of the future debt path. It includes forecasts of the GDP, revenues and SNG debt level (including risk assessment of its contingent liabilities).

A DSA is often undertaken by external agencies such as the World Bank or IMF. Such an analysis would not be sufficient for a C score because of the requirement that the DSA be undertaken by the SNG. It is acceptable for the C scores, however, that an observer from the central government, international/regional agency or consultant may be present during the DSA exercise to provide assistance. For the higher scores, the SNG authorities must develop in-house capacity to undertake DSAs without any external assistance.

To meet the minimum requirements, the results of the DSAs must be used to inform fiscal/budgetary and debt policies.

It is important during the assessment to meet with officials from both the budget department and the macroeconomic unit to receive their views on the key fiscal variables. A copy of the most recent document detailing key fiscal variables—actual outcomes and forecasts—(for example, SNG revenues, expenditures, primary balance, and SNG direct and guaranteed debt) should be obtained.

Indicative questions to ask

- Who is responsible for preparing forecasts of total SNG debt and debt service? What assumptions are used in preparing these forecasts, and who is responsible for setting the assumptions? Do the forecasts include sensitivity analyses of the baseline to interest and exchange rate changes? Do the forecasts include scenario analyses, including forecasts for a worst-case scenario?
- What debt and other information is shared between the Principal DeM entity (or the DeM entities) and the fiscal and budget authorities? How frequently is this information shared?
- Does the SNG regularly prepare and update a document detailing key fiscal variables—actual outcomes and forecasts—(for example, revenues,

expenditures, primary balance, and debt), undertake a DSA, or both? Are these shared with the Principal DeM entity (or DeM entities)? If so, how were they used by the Principal DeM entity (or DeM entities)?

- When was the DSA last conducted? Did it cover domestic or external debt or both? What entities or people were involved in conducting the DSA, and what were their respective roles and responsibilities? Did the SNG receive any external assistance? How was the output used?
- Did the result of the DSA inform fiscal/budgetary and debt policies? If so, in what manner?

2.3 Borrowing Planning, Borrowings, and Other Financing Activities

DPI-7 Borrowing Planning

Rationale and background

The rationale is to ensure that the SNG prepares an annual plan for its aggregate borrowing requirement based on the medium-term DeM strategy and the annual budget cash flow forecasts.

The annual borrowing plan is more detailed on planned borrowings than the medium-term DeM strategy. It is an internal document that includes assessments of the most beneficial or cost-effective terms and conditions for available borrowings, and the risks embedded in these options. In this regard, the borrowing plan operationalizes the medium-term DeM strategy. For the higher scores, the borrowing plan needs to be regularly updated.

Indicative questions to ask

- Does the SNG prepare a borrowing plan, and if so, how was the plan produced?
- What is the scope of the borrowing plan, and what is it based on?
- Does the plan include an assessment of both the most beneficial or cost-effective terms and conditions for available borrowings over the year, and the risks embedded in these options? Does it include timing of the planned borrowings?
- Is the annual borrowing plan frequently updated, and if so, when?

DPI-8 Borrowings

Rationale and background

Dimension 1

The rationale is to ensure that the SNG prepares and publishes an auction calendar whenever it regularly issues debt securities (short-term bills and/or longer-term bonds) through auctions in the domestic market. Auction of debt securities is a common funding mechanism for larger borrowers. When using auctions, the SNG receives bids from registered bidders or from primary dealers with whom the price of the debt securities is arrived at on either a multiple-price or a uniform-price basis. International practice has shown that the issuer can benefit from providing market participants and investors with details of an auction calendar well in advance and then acting consistently when issuing new debt securities. This approach can lead to lower costs by providing investors with greater certainty, increasing liquidity, broadening the investor base, and creating a level playing field for investors.

Other funding mechanisms in the domestic market are underwriting/syndication, tap issuance or book building,⁷ and private placements.

Dimension 2

The rationale is to ensure that the front-office staff either enters the transaction data into the debt recording/management system or prepares a terms sheet for every new borrowing.

It is sound practice for the front-office staff to enter transaction data into the debt recording/ management system, which is then independently validated by the back-office staff. These entries should be undertaken without delay after each new borrowing. In most low-income countries, however, historically all recording of debt data (including transaction data) are handled by the back-office staff only. Against this background, the Subnational DeMPA tool allows, as an alternative, preparation of a terms sheet by the front-office staff, which then can be used by the back-office staff to validate the entries on the terms sheet with the loan agreement, which in turn will reduce the risk that some financial terms in the agreement are not fully understood and entered incorrectly into the system.

The terms sheet should include the following information:

⁷Tap issuance or book building will involve the acceptance of bids during a 'window' open for a set time period at rates or spreads that have been set. Where these issue mechanisms are used, the SNG should provide information to the market on the amounts to be issued and the time period. These two issue mechanisms, however, are not covered by the Subnational DeMPA tool.

Effective or start date	Maturity date	Grace period (if any)
Borrowing instrument	Currency	Principal amount
Interest rate	Interest payment frequency	Interest calculation basis
Fees	Any complementary benefits	Lender or creditor
Disbursement start date	Disbursement end date	Disbursement schedule
Principal repayment start date	Principal repayment end date	Principal repayment amount (or principal repayment schedule)

In case of borrowing by issuing debt securities in the domestic market by way of auctions, the terms sheet will be the auction result. There is no need to include in the terms sheet the accepted bids and the names of all successful bidders, or enter these information in the debt recording/management system. From a debt management point of view, it is better to treat the results of each auction as one borrowing, and in case of a multiple-price auction, use the average coupon/yield as the interest rate.

Dimension 3

The rationale is to ensure that legal advisers are actively involved in the loan negotiation process to ensure the documentation meets all legal and contractual requirements.

This is particular important in all foreign borrowings, which by rule is governed by a foreign law, and normally include clauses that restrict the use of certain actions, such as a negative pledge clause, as well as default clauses beyond ordinary payment defaults. The role of the legal adviser would also be to alert the SNG whenever there is a risk that a certain action will breach any of the loan conditions and to provide a legal opinion for each loan.

Terms and conditions for borrowings by issuance of debt securities in the domestic market, normally governed by domestic law, are rather standardized, and thus do not need the same degree of involvement by the legal adviser.

Dimension 4

The rationale is to ensure that written procedures are prepared for all borrowing operations that are presently undertaken.

The procedures should include all steps in the borrowing process, from negotiating the terms and conditions, signing of the loan contracts, preparation of the terms sheets, disbursement procedures, to entry of the transaction data in the debt

recording/management system. When auctions are used, the procedures should cover announcement of the auction, bidding time-period (opening time and closing time), processing of bids, approval of auction cutoff, announcement to successful bidders and the market, and settlement of the auction. Often auction procedures will be documented in an information memorandum (or prospectus) and/or operating procedures that are made available to market players.

Indicative questions to ask

- What instruments are issued by the SNG in the domestic market, and what techniques are used to issue each instrument? What percentage of SNG debt is issued in this manner?
- When does the SNG announce the auction calendar, and what information is provided? Is the auction calendar prepared and announced on a rolling basis?
- When are information on planned issue dates and instruments to be issued at those dates made public?
- When is information on indicative amounts for each instrument to be auctioned given to the market?
- Is a terms sheet (physical or electronic) produced for all financial terms, including any complementary benefits, of every loan transaction? If so, when is this document completed, and by whom?
- When is the terms sheet delivered to the back-office staff responsible for debt data recording?
- Are legal advisers involved in the contracting of new loans? If so, from which stage are they involved, and what are their involvement and role?
- What is the decision-making and approval process for borrowing in the domestic and external markets, and for issuing debt securities and raising funds from commercial banks by concluding loan agreements?
- What is the process for loan disbursements?
- Are there written procedures for all borrowing operations, including (where applicable) the auction process?
- Is there an information memorandum (or prospectus) and/or operating procedures that are published and made available to market players?

DPI-9 Loan Guarantees, On-Lending, and Derivatives

Rationale and background

Dimension 1

The rationale is to ensure that the SNG has documented policies and procedures for the approval and issuance of loan guarantees, and, for the higher scores, that these procedures include a requirement to assess the credit risk embedded in any loan guarantee before the decision has been made to issue the guarantee, and a requirement to monitor this risk during the life of the loan guarantee.

Loan guarantees represent potential financial claims against the SNG that have not yet materialized but could trigger a realized financial obligation under certain circumstances (contingent liability). To cover this risk, the SNG should charge a guarantee fee based on a proper credit risk assessment. If not, the SNG is subsidizing the beneficiary of the loan guarantee.

It is common that the Principal guarantee entity is given the responsibility to assess the credit risk and keep records of all outstanding loan guarantees, normally in the debt recording/management system.

Dimension 2

Similar to issuance of loan guarantees, the rationale is to ensure that the SNG has documented policies and procedures for the approval and lending of borrowed funds (on-lending), and, for the higher scores, that these procedures include a requirement to assess the credit risk before the decision has been made to on-lend these funds, and a requirement to monitor this risk during the life of the on-lending.

To cover the credit risk, the SNG should add a charge on the interest rate based on a proper credit risk assessment. If not, the SNG is subsidizing the borrower of these funds.

Dimension 3

The rationale is to ensure that the SNG has a debt recording/management system with proper functionalities for handling derivatives, that documented procedures are in place for the use of derivatives, and, for the higher scores, there are rules in place for managing the counterparty exposure risk, and a separate risk monitoring and compliance unit to monitor all risks connected with the derivatives.

The procedures should include the following:

- The purposes of derivative transactions;
- Clear decision-making process;
- Preparation of a terms sheet after each transaction;
- Rules for debt database entry and accounting; and

- Involvement of legal advisers from the first stage of the negotiating process of concluding the legal agreements with the counterparty to the derivative transaction.

History has shown that derivatives can create huge risks if not properly handled, and that it is necessary to have a system in place for proper recording and accounting of derivative transactions.

Embedded options in certain loan agreements, such as options to change a floating interest rate to a fixed interest rate, to cap a floating interest rate, to change the original borrowing currency to another currency, and to prepay a loan before the final maturity date are not considered derivative transactions in the Subnational DeMPA Tool.

Indicative questions to ask

- Does the SNG provide loan guarantees? If so,
 - Who is responsible for approving and signing loan guarantees?
 - Who is responsible for assessing the credit risks before the approval of any loan guarantees?
 - Who is responsible for monitoring the credit risk?
- Does the SNG charge a guarantee fee? If so, how is this fee calculated, and who is responsible for calculating and administering the guarantee fee?
- Does the SNG provide on-lending? If so,
 - Who is responsible for approving and signing the on-lending agreements?
 - Who is responsible for assessing the credit risks before the approval of any on-lending agreements?
 - Who is responsible for monitoring the credit risk?
- Does the SNG charge the borrower for the credit risk? If so, how is charge calculated, and who is responsible for calculating this charge?
- Does the SNG enter into derivative transactions? If so,
 - Who is responsible for approving and undertaking derivative transactions?
 - Who is responsible for monitoring the risk of these transactions?
- Is there a debt recording/management system for handling the derivatives?
- Are there documented procedures for the use of derivatives? What is the content of the documented procedures?
- When are legal advisers involved in the negotiating process of concluding the legal agreements with the derivatives counterparty?
- Is a terms sheet (physical or electronic) produced for all financial terms of every derivative transaction? If so, when is this document prepared or made available to those entering details into the debt recording or management system?

- Who is responsible for entering derivative transactions into the debt recording or management system? What data source is used? Who validates the data?
- Who is responsible for accounting of derivatives, and what accounting rules are applied?
- Are limits imposed on the counterparty exposure risk? If so, what is the basis for setting the limits?
- Is there a separate unit for risk monitoring and compliance to monitor the risk of derivative transactions? If so, where is it located, how many staff members are involved, and how actively do they monitor derivative transactions?

2.4 Cash Flow Forecasting and Cash Balance Management

DPI-10 Cash Flow Forecasting and Cash Balance Management

Rationale and background

Dimension 1

The rationale is to ensure that reasonably reliable forecasts of the SNG cash balance are provided to the Principal DeM entity (or DeM entities). It is a common procedure for local government line ministries (or the equivalent) to prepare monthly forecasts of the budget provision, which are used for allocating funds or providing expenditure warrants on a monthly basis. These forecasts do not take into account the timing of expenditures and collection of revenues into the government bank account(s). For example, the revenue collection process can have a delay before the funds are received by the SNG, particularly if the bank(s) are able to hold funds to effectively compensate for their costs as fees are not paid by the SNG to the bank(s). Clearance of expenditure through the bank account will be determined by the means of payment (i.e. cash, check or electronic). To obtain reliable forecast of the aggregated SNG cash balance, it is necessary to determine the relationship between budget cash management forecasts (normally monthly) and the impact on the SNG cash balance.

If payments are processed centrally by the local government ministry of finance (or equivalent), then the forecasts should be prepared by the local ministry of finance. If line ministries and government entities are responsible for its own payments and receipts, forecasts should be prepared by these ministries/ entities and submitted to the local ministry of finance (or equivalent) including the Principal DeM entity (or DeM entities).

It is essential for borrowing planning (see DPI-7) to have reliable cash flow forecasts. To reduce the negative cost of carry, the SNG should aim at borrowing only when the funds are needed.

To assess whether the forecasts are reasonably reliable, a comparison with the actual outcomes must be undertaken. The following can be used as a guide to determine “reasonably reliable forecasts”:

- Forecasts of end-of-day cash balances should be obtained from line ministries and government agencies that cover at least 80% of expenditures and revenues;
- Comparisons of actual outcomes against forecast are undertaken at least monthly to identify the variance and are used to improve the forecasting system;

- The number of instances in the past 12 months where the aggregate cash balance has fallen below a minimum balance (e.g. requiring a call on the overdraft or ways and means advance) or generated excess funds that were not anticipated and therefore could not be invested can be used as a measure to assess reliability of the forecasts.

Dimension 2

The rationale is to ensure that the level of the cash balance has been determined, that the cash balance is actively managed to be kept within the determined range, and that any investment of cash in the market is in line with appropriate credit risk limits.

It is important that the SNG cash balance is set at a point that provides sufficient protection against periods of market instability, and that actions are taking to keep the cash balance at this level. Cash in excess of the determined level will increase the negative cost of carry (borrowing cost is higher than the risk-adjusted yield on investments), and a cash balance below the determined level will increase the vulnerability of the SNG. Normally the Principal DeM entity is in charge of cash balance management.

In addition, it is important to determine the appropriate credit risk the SNG is willing to carry when investing cash in the market. As the SNG normally will not have the option to place its cash in the central bank, the alternatives are to invest the cash in highly liquid debt securities, such as central government debt securities, or place the cash into deposit accounts with commercial banks. To keep the cash at commercial banks, however, entails credit risks, which should be managed. This includes setting credit limits for each bank based on the strength of its balance sheet. Official credit ratings can also be a factor to take into consideration when setting these limits.

Indicative questions to ask

- Who is responsible for forecasting the SNG cash flows and aggregate cash balances? How accurate are the forecasts? How often are forecasts prepared, and for what period are these calculated?
- What model is used to compare the forecasts with the actual outcomes? Has the accuracy of the cash flow forecasts been improved during the last year? If not, what are the causes for the inaccuracy?
- Has the SNG set a range of its cash balance? If so, what is the range, and who decided this range?
- Who monitors that the cash balance is within the determined range, and what actions are taken to ensure that the cash balance is within this range? How often are actions taken to keep the cash balance within the determined range?
- How many instances in the past 12 months has the aggregate cash balance fallen below a minimum balance (e.g. requiring a call on the overdraft or ways

and means advance) or generated excess funds that were not anticipated and could not be invested?

- Where is the cash balance deposited or invested? Have credit risk limits been determined for each bank where cash has been deposited? If so, what model has been used to set these limits?

2.5 Operational Risk Management

DPI-11 Debt Administration and Data Security

Rationale and background

Dimension 1

The rationale is to ensure that there are documented procedures for the processing of debt-related payments and receivables, including the following requirements: (i) all payment notifications to be checked with internal records before payments are made, (ii) internal payment orders to be subject to a minimum two-person authorization process, (iii) payments to be made by the due date, and (iv) receivables to be promptly collected.

It is essential that strong controls and well-documented procedures exist for settlement of transactions. Payments must be secure, with controls to ensure that a minimum two-person authorization process is used to validate and process payments.

The debt administration operations for payments and receivables should be checked by working through examples of the validation of loan payment notifications and controls around the payment process, and of collection of receivables.

Most Principal DeM entities (or DeM entities) will have a debt recording/management system with accompanying user and technical manuals. These manuals are not sufficient to meet the minimum requirements because they are generic to the system and not necessarily to the payment process in the SNG.

Dimension 2

The rationale is to ensure that there are documented procedures for the debt data recording and validation, and for storage of agreements and debt administration records, including the following requirements: (a) accuracy of debt data entries to be separately checked before the entries are deemed to be completed; (b) debt data to be constantly validated against received payment notifications; (c) all original, signed copies of loan and derivative agreements to be stored and filed in a secure location; and (d) all debt administration records to be kept in a secure filing system. If there are scanned copies of original loan agreements and all debt administration records and these are backed up and stored securely, this will meet the requirements for this dimension⁸.

⁸ It is also important to ensure that these backups include key documents that have been scanned and/or are maintained on the servers related to processing of DeM operations (e.g. payment advices from creditors).

It is essential that strong controls and well-documented procedures exist for maintenance of the financial records. Many developing countries are still struggling to have accurate, complete and timely debt data.

For the highest score, an independent confirmation of all data must be conducted annually with external creditors, domestic banks and major domestic investors.

User and technical manuals that accompany a debt recording/management system are not sufficient for meeting the minimum requirements.

Dimension 3

The rationale is to ensure that there are documented procedures for controlling access to the debt recording/management system.

The debt data in the debt recording/management system must be secure. The system should be located in a locked area, and access to the system by users and information technology specialists should be tightly controlled through access permissions and password controls. For the highest score, the system must produce audit trails that show who has accessed the system, the level accessed, and the activities of each user.

User and technical manuals that accompany the debt recording/management system are not sufficient for meeting the minimum requirements.

Dimension 4

The rationale is to ensure that debt recording/management system backups are made frequently, and that the backups are stored in a separate and secure location.

For the highest score, backups must be made daily or, if the SNG is not active on a daily basis, as soon as debt data are entered into the debt recording/management system.

Indicative questions to ask

- Does the Principal DeM Entity (or DeM entities) have a procedures manual for processing of debt service? If so, where is it located, what is the content of the manual, and how is it updated and maintained?
- Who is involved in arranging debt service payments, and what is the authorization process?
- Has the SNG met all debt service payment obligations by the due date? If not,
 - How often have payments been late, and how late have they been?
 - What were the reasons for, or sources of, the delay?
 - Were penalty charges imposed for late payment? If so, how significant were these penalty charges?
- Are there a procedures manual for the debt data recording and validation, and for storage of agreements and debt administration records? If so, where is it

located, what is the content of the manual, and how is it updated and maintained?

- Are debt data entries checked for accuracy before the entries are deemed to be completed?
- How often does the principal DeM entity (or DeM entities) reconcile loan data with creditor advices?
- When are loan and other agreements made available to the Principal DeM entity?
- Where are original signed loan and derivative agreements stored? Is this location considered to be a secure location in order to protect these records from incidents such as theft, fire, or flood or other incidents that may damage or destroy any of these records?
- Where are debt administration records stored and filed? Is this location considered to be a secure and fireproof location?
- Are the loan agreements and debt administration records scanned? If so, where are the scanned copies stored? Do these include key documents that have been scanned and/or are maintained on the servers related to processing of DeM operations?
- Are there documented procedures for controlling access to the debt recording/management system? If so, where are these located, what are the controls, and how frequently are they updated?
- Who sets the access levels and functions for those staff members or persons that access the debt recording/management system? Do these persons also enter data into the system?
- Are audit trails produced for the debt recording/management system? If so, who is responsible for monitoring these audit trails and the users who have accessed the system?
- Who is responsible for making debt recording/management system backups? What is the process for making the backups? How often are backups made, and where are the backups stored?

Rationale and background

Dimension 1

The rationale is to ensure that the internal organization of the Principal DeM entity (or DeM entities) is based on segregation of duties between the front- and the back-office functions, between the officials who have the power to authorize payments and those responsible for debt data recording, and that there is a separate risk monitoring and compliance function.

Segregation of duties is one of the most important parts of a proper internal control system for any financial activity. Strong operational controls and well-articulated responsibilities for staff members will reduce the risk of errors, policy breaches, and fraudulent behavior, which can potentially lead to significant losses to the SNG and can tarnish the reputation of not only the Principal DeM entity (or relevant DeM entities) but also the whole SNG.

The negotiation of loans or decision around the issuance of debt securities, whether in the domestic market or in international markets, will normally rest with the head of the Principal DeM entity or higher (e.g. minister of finance or equivalent such as the Governor or mayor). These officials can formally sign the resulting agreements and other documentation, but entry of the data into the debt recording/ management system should be undertaken by other staff normally located in the back office (drawing on the agreements and a term sheet prepared by the front office) or front office if there are dedicated staff with this responsibility.

Officials with power to authorize payments are commonly the head of the Principal DeM entity and senior officials at the Accountant-General's Office (or similar function). These officials should not have the license to also record debt data into the debt recording/management system. This will be the responsibility of staff in the back office.

The risk monitoring and compliance function is a middle-office function. Its primary function is to monitor whether all DeM operations are within the authorities and limits set by government policies, e.g. within the risk parameters included in the approved DeM strategy and in accordance with the operational risk management plan. Another responsibility is to ensure that the activities are in compliance with any statutory obligation.

Dimension 2

The rationale is to ensure that the DeM staff is sufficient and adequately trained, that individual job descriptions have been prepared, and, for the higher scores, there are

code-of-conduct and conflict-of-interest guidelines, as well as individual training and development plans and yearly performance assessments for key DeM staff.

To assess whether there are sufficient DeM staff, one must have information on the number of outstanding loans, weekly front-office operations, daily back-office activities, and other activities the DeM staff is engaged in. It is likely for many SNGs that the number of staff will be small, certainly in comparison to the DeM operations at central government level. In this case, assessing whether there are sufficient staff will come down to whether the “segregation of duties” criteria can be met. This is explained under Dimension 1. The capacity to perform the tasks will of course be an important factor.⁹

Code-of-conduct and conflict-of-interest guidelines set out rules that staff members are required to follow, the activities that they are or are not permitted to undertake or transact, and the requirements to disclose personal investments and financial activities. For example, if staff members buy or sell SNG debt securities, this activity could be perceived as equivalent to insider trading because they may have access to budget and other government information. These guidelines will help to allay concerns that staff members’ personal financial interests may undermine sound DeM practices.

Training plans should be well structured to ensure that each staff member receives the training he/she needs for performing the duties assigned.

Dimension 3

The rationale is to ensure that there is a business-continuity and disaster-recovery plan, and, for the highest score, documented guidelines for operational risk management (an operational risk management plan).

Business-continuity planning allows an organization to prepare for future incidents that could jeopardize its core mission and its long-term health. Incidents include local incidents such as building fires, regional incidents such as earthquakes, or national incidents such as pandemic illnesses.

Disaster recovery is the process of regaining access to the data, hardware, software, and the minimum number of staff necessary to resume critical business operations after a natural or human-induced disaster. A disaster-recovery plan (DRP) should also include

⁹ For some small SNGs it can in fact be efficient to combine certain DeM functions, such as back-office functions and the risk control function, with similar functions not directly related to debt management, particularly when financing transactions are few and infrequent. This would provide the scale to facilitate the segregation of responsibilities, e.g. a treasury back office would process other transactions as well, such as payables and receivables, or a risk monitoring and compliance function could cover all risks and procedures in a finance department, not just those relating to debt.

plans for coping with the unexpected or sudden loss of key personnel. A DRP is part of the business-continuity planning process.

If the ministry of finance has a DRP, it is important to check that the DRP incorporates DeM operations, that staff members in the Principal DeM entity (or the DeM entities) are aware of the DRP and what it covers, and that the DRP has been tested to cover DeM operations.

Many different risks can negatively affect the normal operations of an organization. An operational risk assessment would determine what constitutes a disaster, which risks the organization is most susceptible to, what are the critical systems and activities, and what the potential impact (financial and reputation) might be. The assessment covers incidents such as natural disasters, fire, power failure, terrorist attacks, organized or deliberate disruptions, theft, fraud, system or equipment failures (or both), human error, computer viruses, legal issues, worker strikes or disruptions, and loss of key personnel. Actions to mitigate those risks are included in the operational risk management plan.

Indicative questions to ask

- What are the roles and responsibilities for the staff members in the principal DeM entity (or DeM entities)?
- Who has the authority to negotiate and transact on behalf of the SNG? Who is responsible for settlement of the transactions, arrangement of payments, and debt data recordings? Are these functions performed by different staff members, separate divisions, or both?
- Are there staff members responsible for monitoring government DeM operations to ensure that such operations are within the authorities and limits set by SNG policies and comply with statutory and contractual obligations? Is this work reinforced by the organizational structure and by job descriptions for the staff members responsible for risk monitoring and compliance?
- Does the principal DeM entity (or DeM entities) have a separate unit for risk monitoring and compliance? If so, where is it located, how many staff members are involved, and how actively do they monitor the risks?
- How many professional staff members are in the principal DeM entity (or DeM entities)? How long have the staff members been employed in their current DeM activities? What are the qualifications of staff members?
- What is the situation with regard to staff recruitment and retention? What is the level of staff turnover?
- Do all staff members have clear job descriptions or terms of reference? If so, how frequently are these job descriptions reviewed and updated?
- Do staff members have individual training and development plans? If so, how are these plans formulated, and what are the policy and budget for training?

- What training have staff members received? When and where was this training conducted or provided?
- Do staff members have performance assessments? If so, how frequently? What is the process?
- Do staff members have code-of-conduct guidelines, conflict-of-interest guidelines, or both? If so, who is responsible for preparing and monitoring the guidelines?
- Is there a business-continuity plan and a DRP? If so, is there an alternative recovery site for relocating the business, and where is it located? When was the plan last tested?
- Are there documented guidelines for operational risk management? What risks are covered in these guidelines?

2.6 Debt and Loan Guarantee Records and Reporting

DPI-13 Debt and Loan Guarantee Records

Rationale and background

Dimension 1

The rationale is to ensure that the SNG has complete records of its debt, loan guarantees, and debt-related-transactions, such as currency and interest rate swaps.

To keep complete, accurate and timely records of all debt, loan guarantees and outstanding derivatives is a key DeM function. It forms the base for all DeM activities, including the cost/risk analysis of the debt portfolio, borrowing planning, and debt service.

For disbursing loans, which are commonly used for project financing, it is important that the actual disbursement is recorded without delay. It is only when a loan is disbursed (paid out) that a debt is created. Before disbursements, the lender has only a commitment to lend the funds, but no borrowing has been undertaken yet.

Dimension 2

The rationale is to ensure that there is a proper and secure registry system for SNG debt securities issued in electronic form.

A secure registry system is essential for any debt securities issued in electronic form (often referred to as 'book-entry' or 'scripless' securities). Instead of keeping debt securities in paper or physical form in a secure location, the investors of these securities now rely completely on an electronic registry system to keep track of their legal title to these instruments and for the payment of interest and principal on the due dates. Thus, the registry system must be very secure. In most countries, the registry system will be developed, maintained and managed by the central bank. In some countries, the registry system is provided by an external party such as commercial banks, or Computershare (a private company).

To assess whether the registry system is secure, the following should be considered:

- Identifying the entity that is responsible for the registry system and its location;
- Assessing how the registry system is managed, the resources responsible and the procedures including controls for maintaining the system;
- Assessing the physical security around the registry system and registry operations;
- Frequency and nature of the audit of the registry and registry system.

When the registry system allows nominee accounts (that is, accounts in the name of a local custodian bank that holds securities on behalf of its clients), the beneficial owner can be determined only from the books of the custodian. In such cases, some official entity (for example, the central bank or the central depository) should ensure that information on the amount of domestic debt held by foreigners is available for statistical reporting purposes. Also, the registry should ensure that the records are regularly reconciled and audited.

Indicative questions to ask

- What debt recording/management system is used?
- Does the debt recording/management system capture all debt transactions and loan guarantees?
- Does the debt recording/management system include all categories of debt, loan guarantees and derivatives used?
- What is the time period or lag from when a loan is disbursed and when the disbursement is entered into the debt recording/management system?
- How does the registry system operate?
- How frequently are registry records reconciled and audited?
- Does the registry system allow nominee accounts? If so, how is the residency of the holders of the SNG debt securities determined?
- What procedures are in place for controlling access to the registry system?
- What physical security is in place for the registry system and registry operations?
- Has the registry system been audited to assess the effectiveness of the internal control system and security of the data?

Rationale and background

Dimension 1

The rationale is to ensure that the SNG meets its statutory and contractual obligations (if any) to report its debt and loan guarantees to outside entities.

“Outside entities” includes the central government, the security and exchange commission (if any), and international institutions such as the World Bank and the IMF. On the other hand, the local assembly or its equivalent body is not considered being an entity outside the SNG. Likewise, the auditors, even the external audit function, are not considered as an outside entity for the purpose of this DPI.

An issue that may arise is the treatment of arrears. Refer to Annex 3 on when arrears could be treated as debt for statistical purposes.

Dimension 2

The rationale is to ensure that the SNG meets its statutory and contractual obligations (if any) to report its public sector debt and loan guarantees to outside entities.

The “public sector debt and loan guarantees” comprises of the debt and loan guarantees of the SNG, the local governments under its jurisdiction, and the public corporations of both the SNG and its local governments.

Dimension 3

The rationale is to ensure that the SNG frequently prepares and publishes a debt statistical bulletin (or its equivalent).

A published debt statistical bulletin is essential for the transparency of the debt and outstanding loan guarantees, and is vital for the investors in the SNG debt securities.

Indicative questions to ask

- What statutory and contractual reporting requirements does the SNG have?
- How well has the SNG met these statutory and contractual reporting requirements?
- What is the process and who is responsible for preparing a debt statistical bulletin or equivalent debt report? How frequently is this debt information published? Is it publicly available? If so, how and in what format?
- Does the debt statistical bulletin or equivalent include the following:
 - Information on the SNG debt stocks (by creditor, instrument, currency, interest rate basis, and residual maturity)?
 - Debt flows (principal and interest payments)?

- Debt ratios or indicators or both?
 - Basic risk measures of the debt portfolio?
- What other debt reports are produced by the SNG? Are they publicly available? If so, how and in what format?
- What is the time period or lag from the debt reporting period to the period when reliable debt reports are produced? What validation measures are used to ensure the accuracy of these reports?
- Who is responsible for signing off on or authorizing the release of these reports?

Annex 1: Differences between the Sovereign and the Subnational DeMPA Tool¹⁰

Dimension (dim)	Rationale	Assessed in Sovereign DeMPA	Subnational DeMPA
DPI-1 Legal			
DPI-1 dim 1: Existence, coverage and content of legal framework	Authorization to borrow and to issue loan guarantees, purposes for borrowing, debt management objectives, reporting requirement to the local assembly, and mandate for audits.	Yes but clearly specified that certain key provisions should be included in the primary legislation.	The same existence, coverage and content of legal framework for DeM are required. However, the specification that certain key provisions should be included in primary legislation has been removed. This can be either in the primary or the secondary legislation.
DPI-1 dim 2: Extent of a legal limit to direct access of resources from the central bank	Whenever possible, the subnational government (SNG) should avoid direct borrowing from the central bank. Monetary financing of government deficits, whether at the level of central or subnational government, imposes undesirable constraints on monetary policy operations by increasing the money supply.	Yes, but covered under DPI-7 on Coordination with Monetary Policy, dim 3.	As the indicator assessing "Coordination with Monetary Policy" is not relevant for SNGs, it has been dropped from the subnational DeMPA tool. However, in case SNG has access to central bank funds, the issue is assessed in this dimension.
DPI-2 Managerial Structure			
DPI-2 dim 1: Borrowing and Debt-Related Transactions	Clear division of political level and the entities implementing the debt management strategy; carry out debt management (DeM) without undue political interference; coordination of DeM	Yes.	Given the importance of coordination between the DeM entities in SNGs the need for formal institutional mechanisms, such as a coordination committee has been expressly mentioned.
DPI-2 dim 2: Loan Guarantees	Coordination and risk assessment of issuance of loan guarantee by technical staff.	Yes, coordination in preparation and issuance of loan guarantee.	The coverage of guarantees in the SNG is similar to the sovereign and is limited to loan guarantees.
DPI-3 Debt Management Strategy			
DPI-3 dim 1:			For SNGs there are no (i)

¹⁰ The sovereign DeMPA tool refers to the one revised in December 2009.

Dimension (dim)	Rationale	Assessed in Sovereign DeMPA	Subnational DeMPA
Content	Quality	Yes.	requirements to describe measures aimed at supporting domestic debt market development, and (ii) exception for retail borrowing.
DPI-3 dim 2 Decision-Making	Process	Yes.	There is (i) no requirement to obtain the views of the central bank, and (ii) in case the political level decides on a different strategy than proposed by the DeM entity, the need to explain the rationale for this decision is not scored.
DPI-4 Evaluation of Debt Management Operations			
DPI-4: Evaluation of Debt Management Operations	Accountability process should be there.	Yes submit annual report to Parliament on debt data and activities.	This is similar with the need to submit to the Regional legislature/council, as the case may be.
DPI-5 Audit			
DPI-5 dim 1: Frequency	Accountability strengthened by regular audits and transparency enhanced if these are disclosed.	Yes, both external and internal audits.	The requirements for external audit are same. But internal audits to only focus on internal control systems.
DPI-5 dim 2: Appropriate Response	Adopt corrective measures to strengthen the accountability.	Yes. Action taken on audit observations.	Similar in both the tools.
DPI-6 Coordination with Fiscal and Budgetary Policy			
DPI-6 dim 1: Provision and Quality of Debt-Service Forecasts	For effective fiscal policy there should be reliable debt service forecasts.	Yes.	It is important that the forecasts should be reasonably reliable and this is added in the subnational DeMPA tool.
DPI-6 dim 2: Availability of Information on Key Macro Variables, and DSA	Share information and conduct debt sustainability analysis.	Yes. Share debt/macro data and undertake DSA in-house.	For the SNG it is acceptable if there is oversight from the central government, international, or regional technical assistance provider while doing the DSA in the first instance.
DPI-7 Borrowing Planning			

Dimension (dim)	Rationale	Assessed in Sovereign DeMPA	Subnational DeMPA
DPI-7: Preparation and quality of an annual borrowing plan for the aggregate borrowing requirement, including cost/risk assessment of borrowing options.	An annual borrowing plan is needed for efficient DeM.	No. (In the sovereign DeMPA tool, DPI-7 deals with coordination with monetary policy, which was considered not relevant for the subnational DeMPA tool, hence dropped.)	This is an added DPI for the subnational DeMPA tool.
DPI-8 Borrowings			
DPI-8 dim 1: Preparation and publication of an auction calendar for issuance of SNG debt securities	Market predictability to ensure borrowing in a cost-effective manner.	Yes.	This is similar with some modifications.
DPI-8 dim 2: Preparation of a terms sheet after conclusion of any borrowing	Important as a reference for future loan negotiations, and for the transaction data entries into the debt recording and management system.	Yes, however limited to external borrowings.	Covers all borrowings, including domestic borrowings.
DPI-8 dim 3: Availability and degree of involvement of legal advisers	Sound legal features.	Yes, however limited to external borrowings.	Covers all borrowings, including domestic borrowings.
DPI-8 dim 4: Availability of documented procedures for all borrowing operations	Sound practice. Reduce human errors and makes the processes more robust.	Yes.	Same, with some minor modifications.
DPI-9 Loan Guarantees, On-lending and Derivatives			
DPI-9 dim 1: Loan guarantees, Availability and Quality of Documented Policies and Procedures	Control and risk monitoring of loan guarantees.	Yes.	Given the importance this is kept similar with the aim to cover all loan guarantees.
DPI-9 dim 2: On-lending, Availability and Quality of Documented	Control and risk-monitoring of on-lending.	Yes.	This focuses on the funds borrowed by the SNG to on-lend to its enterprises.

Dimension (dim)	Rationale	Assessed in Sovereign DeMPA	Subnational DeMPA
Policies and Procedures			
DPI-9 dim 3: Derivatives, Availability and Quality of Documented Policies and Procedures	Control and risk-monitoring of derivatives if used.	Yes.	Same.
DPI-10 Cash Flow Forecasting and Cash Balance Management			
1. Effective Cash Flow Forecasting	Make sure financial obligations are met when falling due.	Yes, frequency and length of cash balance forecast.	Currently more relaxed than for the sovereign..
2. Effective Cash Balance Management	Actively manage cash balance to maximize profit within preset risk indicators.	Yes, how actively cash balance is managed.	Same, with some minor modifications.
DPI-11 Debt Administration and Data Security			
DPI-11 dim 1: Availability and Quality of Documented Procedures for the processing of debt-related payments and receivables	Control and procedure for processing debt service transaction.	Yes, however limited to debt service.	The scope is widened to include all debt-related payments and receivables.
DPI-11 dim 2: Availability and Quality of Documented Procedures for Data Recording and Storage	Control and procedure for debt data recording and storage.	Yes.	The only addition is that all scanned copies of original loan agreements and all debt administration records if properly backed and stored securely are acceptable as meeting the requirements for secure storage.
DPI-11 dim 3: Availability and Quality of Documented Procedures for Controlling Access to Data Recording and Management System	Ensure data security by controlling access to debt data recording and management system.	Yes.	Same.
DPI-11 dim 4: Frequency of Backups and Secure storage of these backups	Ensure data security by secure backing-up procedures.	Yes.	Same.

Dimension (dim)	Rationale	Assessed in Sovereign DeMPA	Subnational DeMPA
DPI-12 Segregation of Duties, Staff Capacity, and Business Continuity			
DPI-12 dim 1: Segregation of Duties and presence of a risk monitoring and compliance function	Reduce operational risk by separation of key functions and effective risk monitoring.	Yes.	The roles are more clarified, keeping in mind that there may be fewer staff at the subnational level.
DPI-12 dim 2: Staff Capacity and Human Resource Management	Staff capacity and code-of-conduct.	Yes.	Same.
DPI-12 dim 3: Operational Risk Management Plan, including Business Continuity, and Disaster Recovery Arrangements.	Reduction of operational risk, and to ensure business continuity in event of serious incidents.	Yes.	Same.
DPI-13 Debt and Loan Guarantee Records			
DPI-13 dim 1: Complete and timely records of all debt and loan guarantees.	Accurate, complete and timely debt records.	Yes.	Same, streamlined to remove mention of "past debt relief".
DPI-13 dim 2: Complete and timely records of holders of debt securities in a secure Registry System	Secure registry system ensures accurate and up-to-date records of security holders.	Yes.	No need to assess the residency of holders.
DPI-14 Debt and Loan Guarantee Reporting			
DPI-14 dim 1: Statutory and Mandatory Reporting Requirements of SNG debt and loan guarantees to all domestic and external entities outside the SNG.	Reporting obligations are fulfilled.	Yes.	Clarified that this requirement is limited to entities outside the SNG (external entities, including the central government if required).
DPI-14 dim 2: Statutory and Mandatory Reporting Requirements of the SNG public	Reporting obligations are fulfilled.	Yes.	Clarified that this requirement is limited to entities outside the SNG (external entities, including the central government if required).

Dimension (dim)	Rationale	Assessed in Sovereign DeMPA	Subnational DeMPA
sector debt and loan guarantees to all domestic and external entities outside the SNG.			
DPI-14 dim 3: Quality and Timeliness of the publication of a debt statistical bulletin.	Publish debt data regularly with international standard to enhance transparency.	Yes.	Some modifications (e.g. no requirement for residency classification).

Annex 2: Regulatory Frameworks for SNGs

Regulatory frameworks for control of SNG debt consist of two components: (a) ex ante fiscal rules for SNGs, stipulating purposes and types of and limits for debt instruments, and issuance procedures; and (b) ex post debt restructuring in the event that SNGs become insolvent. Insolvency mechanisms increase the pain of circumventing ex ante rules for both lenders and borrowers, thereby strengthening preventive rules. Regulatory frameworks in many countries are still evolving, and the pace of putting together a full range of regulatory elements varies.

The choice of approaches varies across countries, depending on history, political and economic structure, and motivation for establishing an insolvency mechanism. Details across SNs are presented in the table below, that systematically classify existing SN borrowing frameworks based on (i) the degree of dependence on the center; and (ii) the spectrum of financing methods that sub-nationals use to meet their funding requirements. These frameworks range from a relationship of on-lending from the federal government, at one end, to direct market access, including external markets, at the other end.¹¹

<i>SNG is autonomous to borrow or incur debt. The borrowing activities of SNG is mainly monitored and controlled by the market and/or regulated by local level regulations</i>	<i>SNG borrowing controls such as fiscal targets and debt ceiling are results of negotiation process between central and local governments</i>	<i>SNG borrowing activities are (at least partially) regulated by the rules imposed by central(or upper level) government</i>			<i>SNG is eligible for borrowing with prior approval of central(or upper level) government</i>	<i>SNG is not eligible for borrowing except on-lending through central government</i>
		<i>Constraints on purpose of borrowing</i>	<i>Numerical constraints on fiscal balance, expenditure</i>	<i>Numerical constraints on new debt, debt level and debt service</i>		

¹¹ The Annex is drawn from “Sub-National DeMPA: Typology of Sub-National Borrowing” authored by Lili Liu, Abha Prasad and Ying Li, and published by the World Bank as a PREM Note.

Canada province Japan local (up to certain limit) Switzerland state US state Argentina province (domestic) Czech Republic local Zimbabwe local	Australia state Austria local Belgium local Germany region Spain region	Germany region and local (the Constitution) Italy state and local (the Constitution) France local Brazil local Mexico state Peru local (external) Estonia local Romania local Russia local Slovakia local Indonesia local South Africa local	Germany local Italy state and local France local Brazil local Columbia local Peru local Lithuania local Russia local Indonesia local Vietnam local	Germany local Spain local Brazil local Peru local Estonia local Hungary local Lithuania local Latvia local Poland local Russia local Serbia local Slovakia local Philippine local Thailand local Nigeria state	Japan local (above certain limit) Korea local Germany local Spain region and local (outside EMU) Turkey local UK local (external) Argentina province (external) Brazil local (external) Columbia local (bond issuance) Peru local (external) Serbia local Slovakia local (above certain limit) India state (domestic) Indonesia local (domestic) Thailand local Vietnam local (external)	Mexico state (external) Armenia local (external) Kazakhstan local (external) Kosovo Russia local (external) Cambodia local India state (external) Indonesia local (external) Nigeria state (external)
--	---	---	---	--	---	---

Annex 3: Treatment of Arrears in Finance Statistics

A common definition of debt in public debt management laws are the following: “All financial liabilities created by borrowing, outstanding liabilities that have been securitized by issuance of debt securities, and any guaranteed loan which the issuer has been forced to take over from the beneficiary of the loan guarantee.” This is the debt that commonly is managed by the debt management unit.

For statistical purposes, however, arrears in general should also be reported as debt according to the Public Sector Debt Statistics: Guide for Compilers and Users (2011), and the Balance of Payments and International Investment Position Manual, sixth edition, 2012 (BPM6), published by the IMF's Statistics Department. In these documents, arrears should be recorded as a memorandum item under the government balance sheet. Securitization is often the trigger to add arrears to domestic debt but this should not be the only trigger according to these recommendations. BPM6 suggests arrears that are rescheduled or refinanced would also be included in the definition of debt. Other examples are unpaid pension contributions to the public service pension agency that have been outstanding for years, and substantial amount of arrears in general which is rolled over from one year to the next.