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Integrating public debt management within Integrated Financial Management Systems (IFMIS)

by

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.



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On Debt Management

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Public Debt System and Public Finance Management Systems Integration

**Design, systems development and implementation,
experiences and lessons learned**

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Initial Considerations

- **Public Finance Management Reform**
 - Initial Regional Background
 - Definition, components and objectives
 - Impact at the Management of Public Debt
- **Integrated Finance Management Information Systems (IFMIS)**
 - Objectives
 - Scope and functionalities
 - Impact for the Management of Public Debt
- **Public Debt Management Systems (PDMS)**
 - Definition and processes
 - Main users and information providers
 - Distinctive aspects
- **PDMS and IFMIS integration**
- **Lessons learned and best practices**

Considering that:

- At the late eighties, the Public Debt management, but especially the External Debt, had strong influence from the Central Banks.
- As a result of the late 1980s debt crisis, a reform process started both at the Institutional and Integrated Systems level transferring Public Credit management to the Finance Ministries.
- That functional and technological progress has been substantive in both Integrated Systems and Debt Management.

This presentation has as main objective:

To describe the design processes and integration development between PDMS and IFMIS, presenting the necessary conditions, lessons learned and best practices for an integration process.

PUBLIC FINANCE MANAGEMENT REFORM

Public Finance Management Reform

Regional Background

**ORGANIC LAW OF
FINANCE
MANAGEMENT
AND COTROL.**

**- ECUADOR -
Decree No. 1429
of 11-05-77**

**SIAFI. BRAZIL
Integrated Finance
Management
System(1986)**

**Treasury Single
Account(CUT)
Development**
for Treasury funds
managing,
Successfully transferred
experience to other
countries of the region.

-SIMAFAL-

**MODEL INTEGRATED
FINANCIAL
MANAGEMENT SYSTEM
FOR LATIN AMERICA**

**USAID/WORLD BANK/BID
(1989)**

**SIGMA PROJECT
BOLIVIA**

**INTEGRATED
MANAGEMENT AND
ADMINISTRATIVE
MODERNIZATION
SYSTEMS
(1989-1991).**

Public Finance Management Reform

Regional Background

The **greater impulse** of the **Public Finance Management reform**, takes place with the beginning of the process in **Argentina in the early 90s** and almost simultaneously in **Paraguay**, then **from the year 2000**, spread in **Chile, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, México, Nicaragua and the Dominican Republic**, among other countries.

Today, almost **all Latin American countries** have implemented or are implementing, totally or partially, public finance management reform processes.

In this context, **Argentina's** institutional strategy, as well as several conceptual proposals made, have served as reference for other governments, experiences that have enriched the new systems.

An example is the link developed in **1995/1996** between **DMFAS** and **SIDIF**, replicated in other IFMIS, enabling to improve the integration concept in other countries and regions.

Within the changes introduced in the Latin American reform processes, four relevant aspects linked to Public Debt Management can be identified:

- *Assumption of the Public Debt Management by Central Governments.*

The creation of a body at the same level as the Treasury, Budget and Accounting offices.

Introduction of the Contingencies within the regulations and public indebtedness management scope.

Harmonization and dissemination of a standard at subnational level in Federal countries.

INTEGRATED FINANCE MANAGEMENT INFORMATION SYSTEMS (IFMIS)

The IFMIS objectives are:

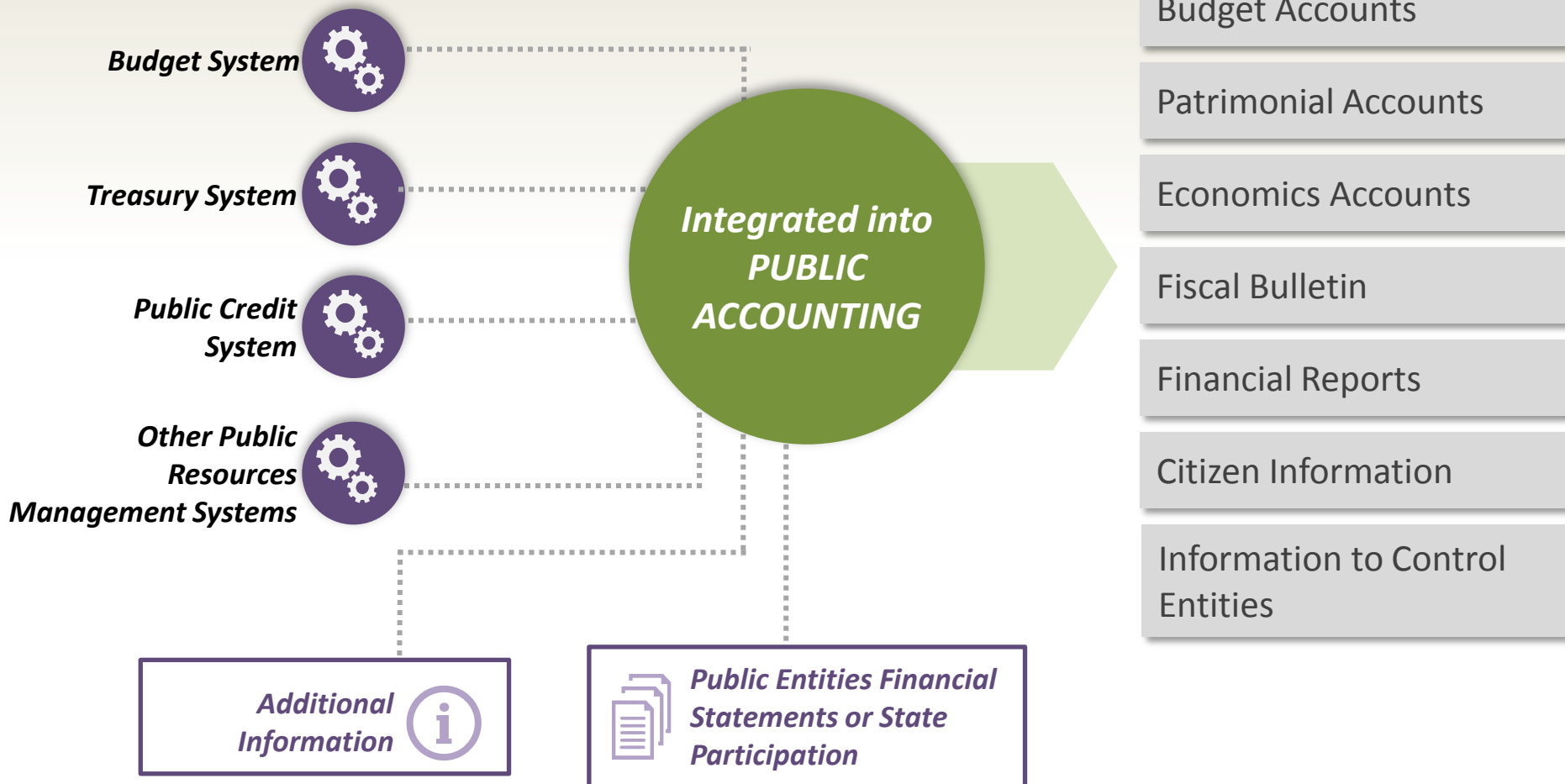
- **Computerize and automate the systems, subsystems and processes that comprise them.**
- **Automatically interconnect with other resource management systems, such as public investment and project management applications.**
- **Generate timely and reliable financial information for decision making, conducive to good and transparent fiscal management.**
- **Automatically produce general accounting processing records that have economic-financial impact on public property.**
- **Interrelate the control systems, in order to enhance their effectiveness.**
- **Enable and promote the public finance management transparency and contribute to a better citizen service quality.**

- The scope and functionality of the IFMIS are not uniform, taking into account different institutional structures, such as in Brazil, Colombia and Peru that have been integrated in a single organizational for cash and debt management coordination improvement.
- At a technological level, most of the region IFMIS are the result of a customized development of in house development.
- During the last decade, the utilization of web technology and the web has grown.
- In most cases the PDMS are kept as separate components with the necessary information exchange to achieve an integrated finance management system.
- **A typical example is the DMFAS system, which maintains its specific characteristics and has developed the ability to exchange information with other systems using web services.**

Integrated Finance Management System

Components – Sub systems

Public Finance Management System



Integrated Finance Management System

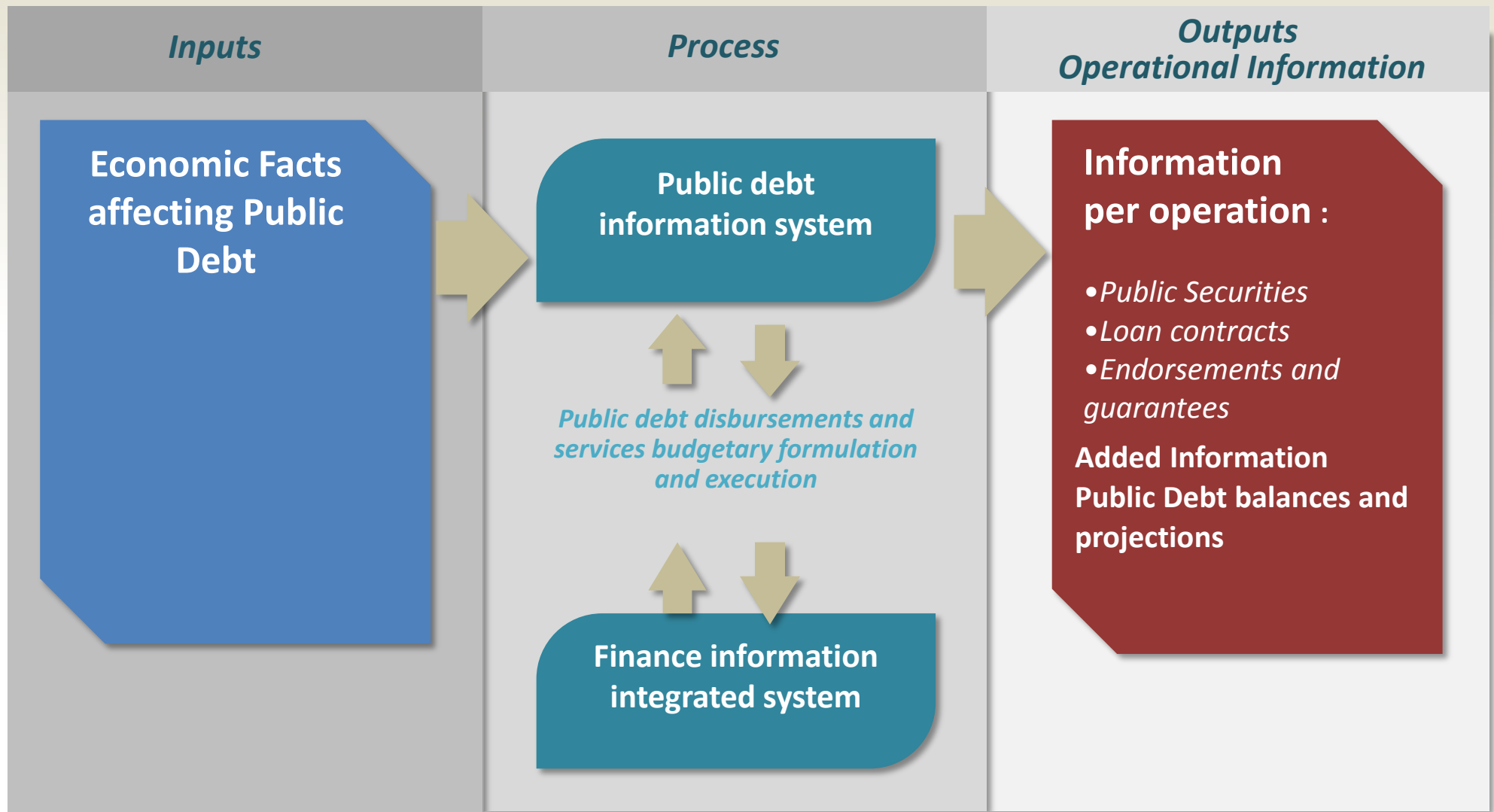
Public Debt Management Impact

Main positive impacts resulting from the IFMIS processes are:

- Finance management improvement by having appropriate information, which allows at each time the most appropriate selection of financial instruments that minimize the cost and risk of the debt portfolio
- Cash management improvement, reducing the need to issue instruments to finance short-term needs and being able to invest any surpluses.
- Operational risks decrease, with the consequent sovereign risk improvement.
- Active Debt Management, which implies "Programming, Ordering and Controlling" Debt services payments.

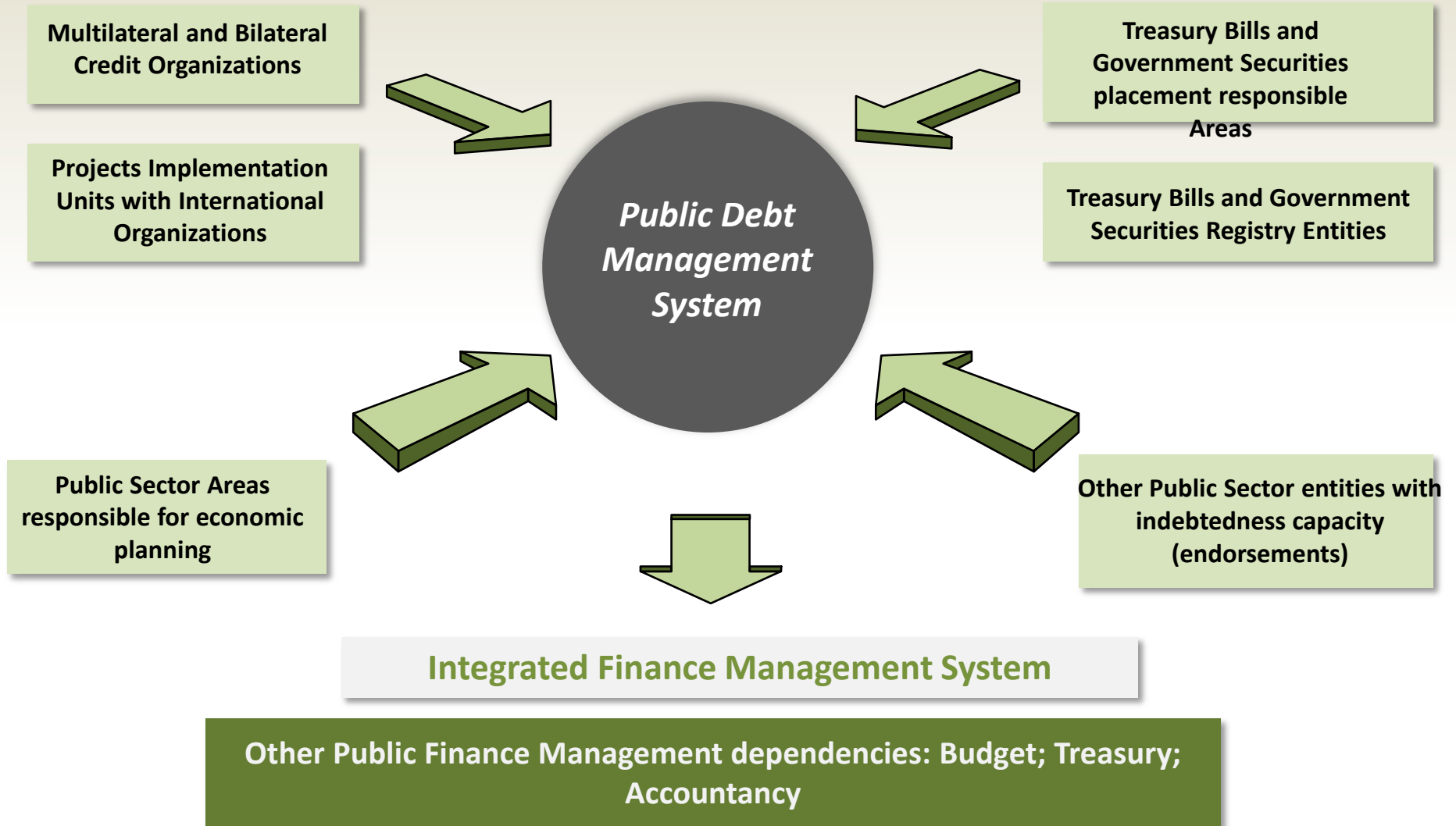
PUBLIC DEBT MANAGEMENT SYSTEMS (PDMS)

Public Debt Information System Scheme



PUBLIC DEBT MANAGEMENT SYSTEM CONCEPTUAL MODEL

Main information users and suppliers



Public Debt Management System

Distinctive Aspects

The Debt Management Systems are configured as a specific component because they contain the following distinctive aspects:

- **HORIZON:** While the IFMS work on an annual horizon, the debt systems contemplate the short, medium and long term.
- **CURRENCY:** The IFMS transactions are reflected in national currency while the Debt Systems work in multi currencies.
- **PROJECTIONS:** The Debt Management system has the capacity to calculate and project debt service obligations based on the contractual data and the received or projected operation disbursements, while the integrated system is basically a transactional system.

PDMS AND IFMIS INTEGRATION

Debt System and Integrated System Integration

For the **PDMS** to be part of the **IFMIS**, it is necessary to construct a conceptual framework, with the following **fundamental principles**:

Uniqueness: implies the unique data and transactions recording that make up the system in an integrated and efficient way

Integrity: the system include all Government's public debt operations

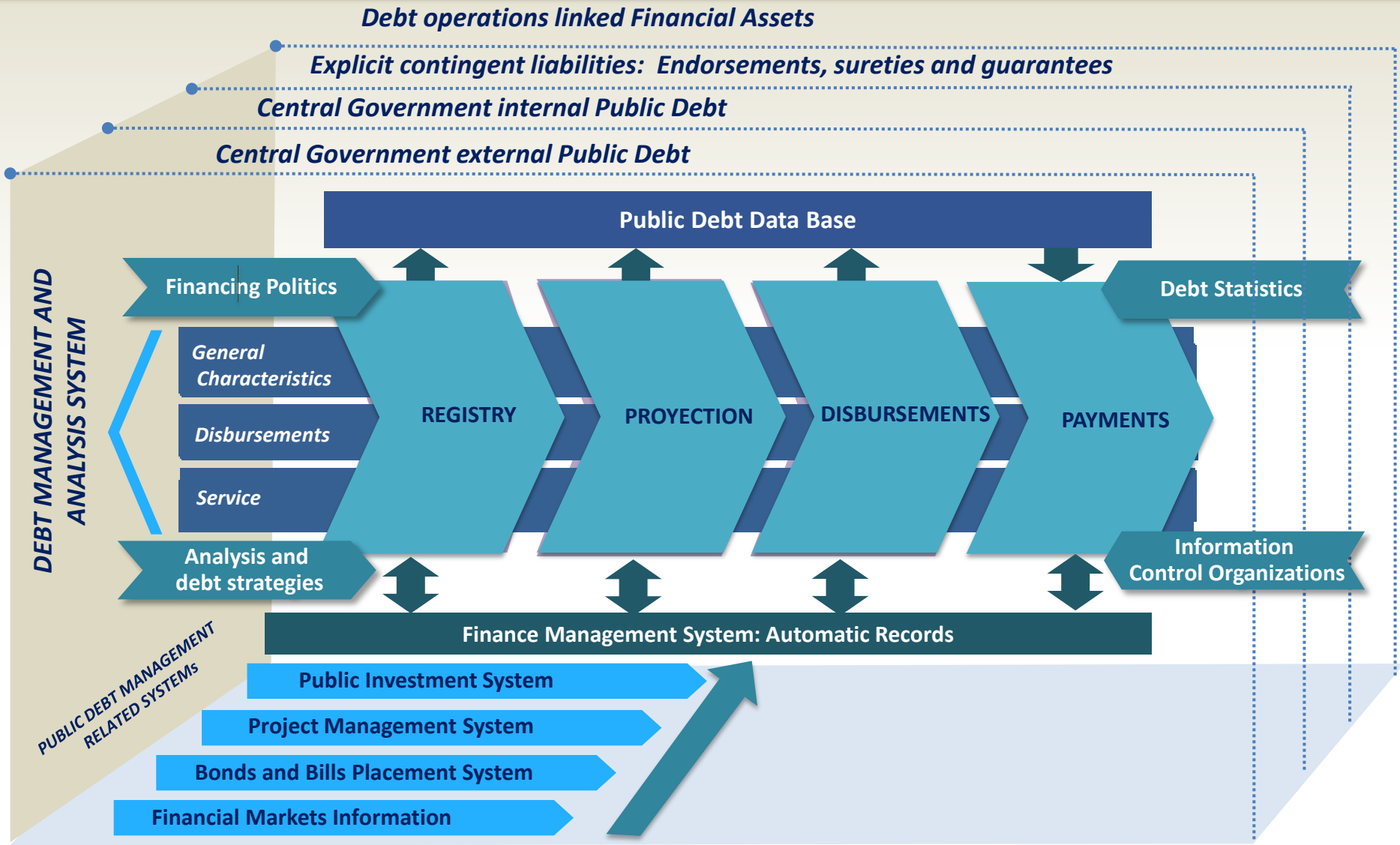
Punctuality: accomplishment in time all the Government's financial obligations

Accuracy: guaranteeing the processed information reliability, particularly those related with public debt services payments

Coherence: ensure the processed information consistency and linking with other related public resources Government administration areas

PUBLIC DEBT MANAGEMENT INTEGRATED TO FINANCE MANAGEMENT SYSTEM

SYSTEMIC VISION



PDMS WITH IFMS INTEGRATION

Main information flows



Debt System

Budget Formulation and Cash Programming

Debt Recording

Loan Disbursements and Bonds issuance

Debt Service payments projections

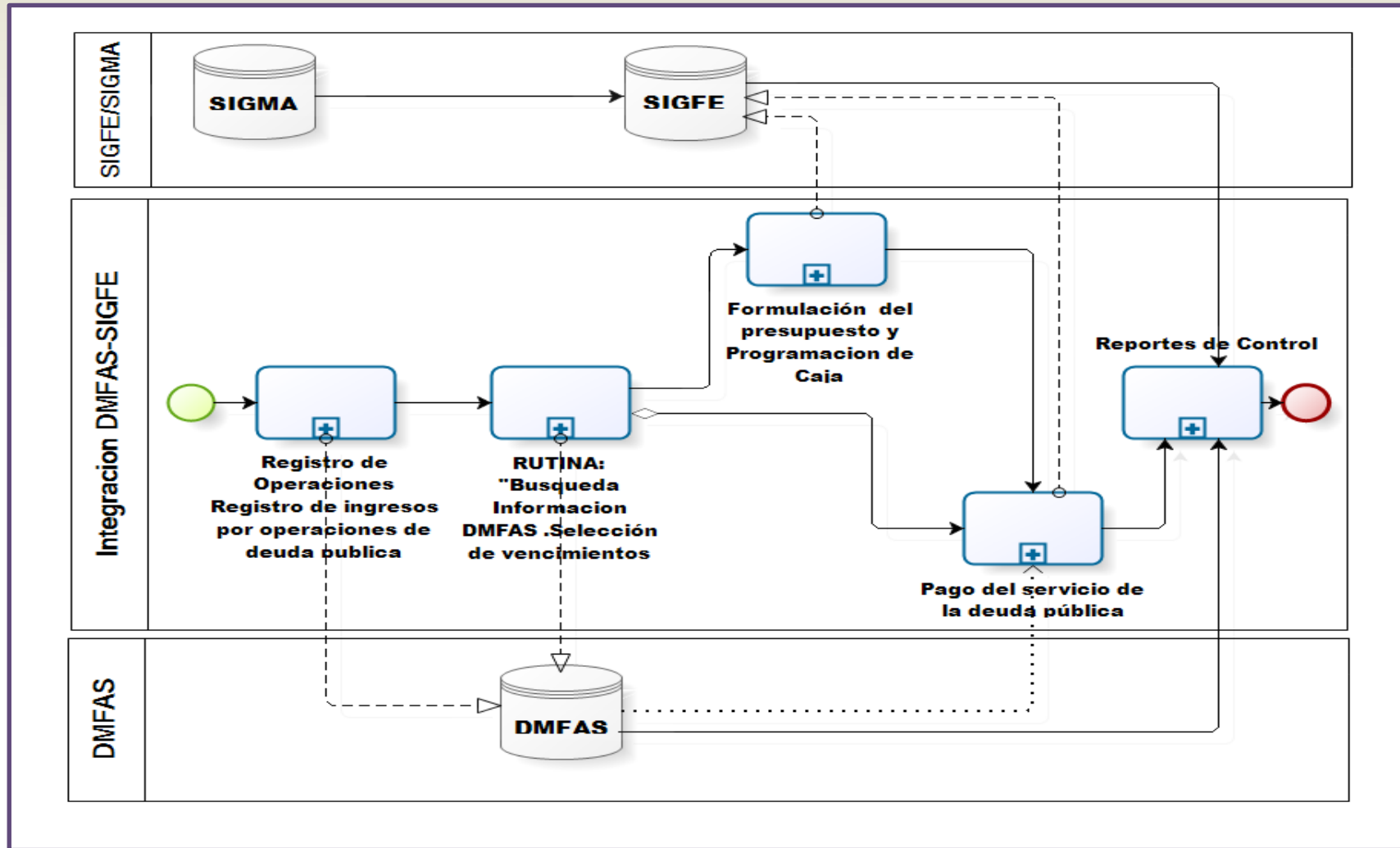
Public Debt service payment

Control Reports



Integrated System

DMFAS-SIGFE Integration – ANGOLA REPUBLIC EXAMPLE



IFMS WITH PDMS INTEGRATION LESSONS LEARNED AND BEST PRACTICES

The PDMS with the IFMS integration requires a set of conditions and strategic aspects that must be taken into account:

- **The firm decision of the political levels.**
- **The technical levels conviction that the process change will improve debt management at all aspects.**
- **The model design in accordance with the best practices and the User organizational culture.**
- **The project management and the implementation in phases**
- **The technological development strategy definition, tests and maintenance**
- **The Human Resources role for the structural changes success and the IFMIS implementation**

Lessons learned and best practices

Model design according to the best practices and the User organizational culture

The conceptual model is based on three fundamental pillars:

a) Institutional framework, philosophy and IFMIS structure understanding and main PDM problems detection

b) Central Government's public debt structure and particular characteristics deep understanding

c) Definition and functional design of the main modules and processes that make up the systems integration , taking into account the best practices in the system design applying the Work Flow technique for the best validation of each one of the public debt related operations.

Lessons learned and best practices

The project governance and management and its components in stages implementation

Among the variables that come into play for good governance and project management are :

a) Solid technical leadership and efficient project management

b) Inter-institutional coordination mechanisms creation,

c) Functional committees, that involve the final users in early stages,

d) Stages implementation strategy establishment, so that in the short term generate confidence and time for more complicated components

Variables that affect the stages implementation definition:

- **PDMS maturity and reliability**
- **IFMIS maturity.**
- **Technical team work capacity and the new tasks absorption possibility by debt analysts.**

Lessons learned and best practices

Technological development strategy , System testing and maintenance

Among the variables that enter for the good understanding and technical project operation are

a) The PDMS changes from being a statistical instrument to an accounting record application, so the system "Audit" and "Security" features particularly relevant.

b) Set up a local technical team trained to design and develop the integration programs. Part of the team should conduct the maintenance.

c) Train the local team in database and web services

d) Integrate the debt module business rules to the IFMIS

e) Create test conditions and define initial parameters

f) Plan the maintenance strategy for stability and the over time system performance.

g) Have very precise technical documentation on the integrated system new components

Lessons learned and best practices

The Human Resources role for the changes and the integrated system success

From the users view point and for a modern and efficient DMO and to successfully implement the reform process and systems integration, it must be accompanied by:

a) a change management strategy implementation through actions such as sharing experiences with similar projects leaders, generating stakeholders participation areas and outreach activities

b) a comprehensive and training plan that includes;
Necessary knowledge transmission
New technologies management skills development and public official's attitude towards the Reformation
Awareness

c) new integrated systems appropriation by the Central Government "line"
Success depends on debt managers becoming involved and "owning" new developments

d) decent wages existence and a "Nation Civil Service" administrative career
A properly committed and remunerated management are requirements for the reforms sustainability



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Thank you very much

Presents:

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