IFMIS Current Status, Challenges and Future Development

Submitted by: World Bank

Workshop on Treasury and Budget Reform
Lombok, Indonesia
2-3 July 2013

Asia-Pacific Economic Cooperation

Workshop on

Treasury and Budget Reform

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Lombok, Indonesia

July 2013

E-Government Practice
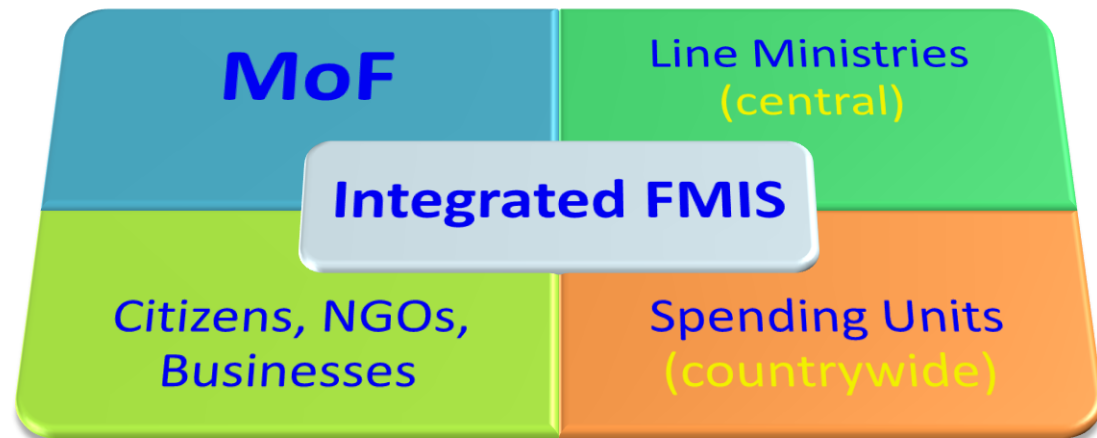**The World Bank**

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Definitions

▶ A **Financial Management Information System** (FMIS) can be broadly defined as a set of automation solutions that enable governments to plan, execute and monitor the budget.

▶ Whenever FMIS and other Public Financial Management (PFM) information systems (e.g. HRMIS/Payroll, Procurement) **share the same central database** to record and report all daily financial transactions, offering reliable consolidated results for decision support, performance monitoring and web publishing, they can be referred to as an 'integrated' FMIS (or IFMIS).

▶ IFMIS solutions are **rare in practice**, and it should not be used as a synonym for core FMIS functionality to avoid unrealistic expectations.

▶ Modern FMIS platforms help governments comply with domestic and international financial regulations and reporting standards, and **support decentralized operations through centralized web-based solutions** providing access to a large number of authorized budget users at all levels.

▶ In summary, FMIS solutions offer a great potential for increasing participation, transparency and government accountability.
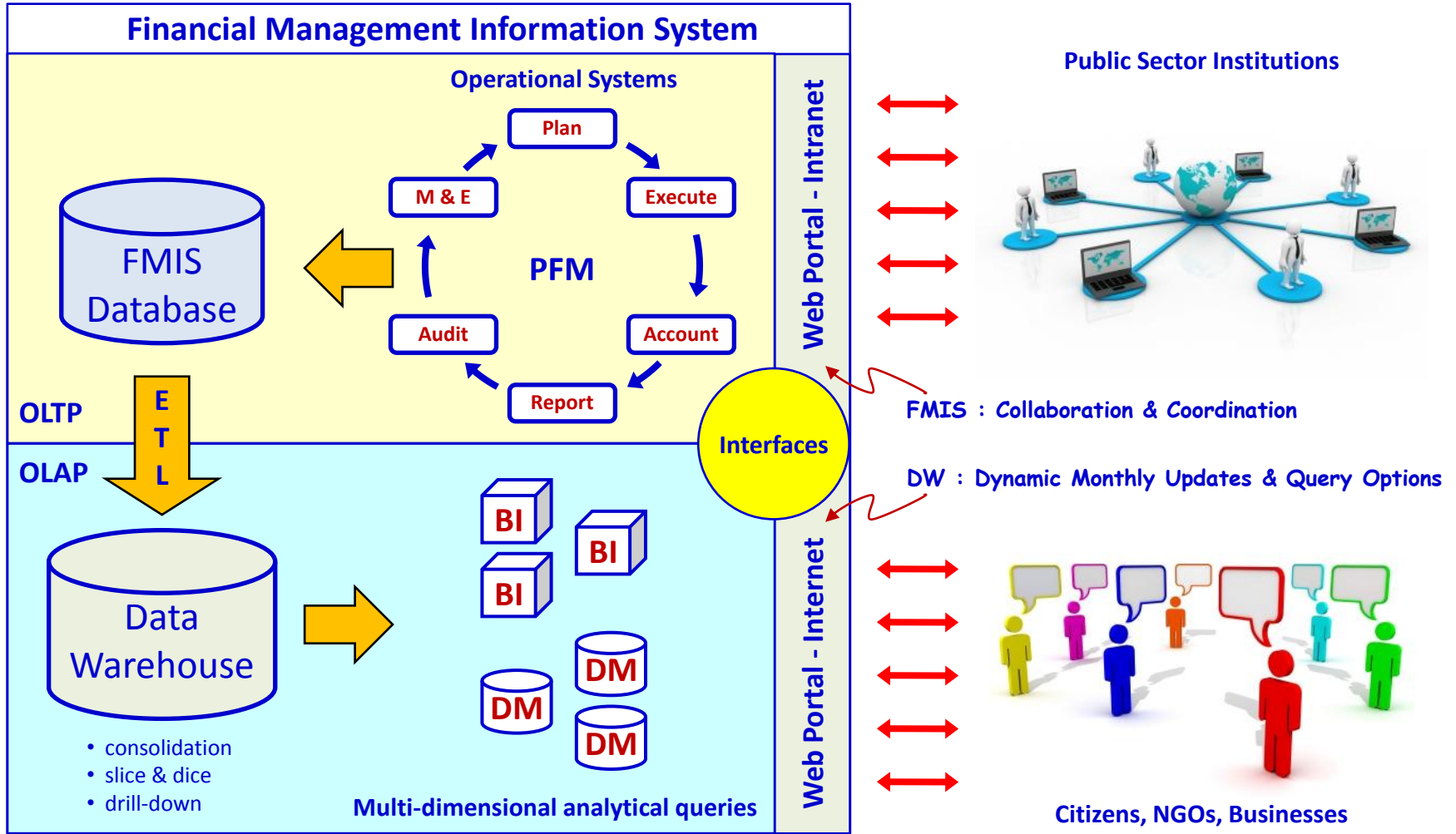
Transition to integrated FMIS

▶ In many economies, the **first-generation PFM reforms** concentrated on establishing well functioning Treasury/FMIS and Treasury Single Account (TSA) to solve operational/technical issues.

▶ **Next generation FMIS solutions** are being designed to combine PFM operational systems (OLTP) with powerful data warehouse capabilities and multi-dimensional analytical queries (OLAP) to assist in effective forecasting/planning, performance monitoring and decision support.

▶ There is a growing interest in the disclosure of public finance information from **"Open Data"** (to improve transparency, accountability, & participation).

New role of MoF >>>

Publisher of
Open Budget Data

MoF | Line Ministries (central)

Integrated FMIS

Citizens, NGOs, Businesses | Spending Units (countrywide)

Goal: Daily Recording & Reporting of Public Finance Data

Images: jscreationzs / FreeDigitalPhotos.net

OLTP : Online Transaction Processing   **OLAP** : Online Analytical Processing   **ELT** : Extract, Transform, Load   **BI** : Business Intelligence   **DM** : Data Mining

Challenge: Scope & Source of Public Finance Data
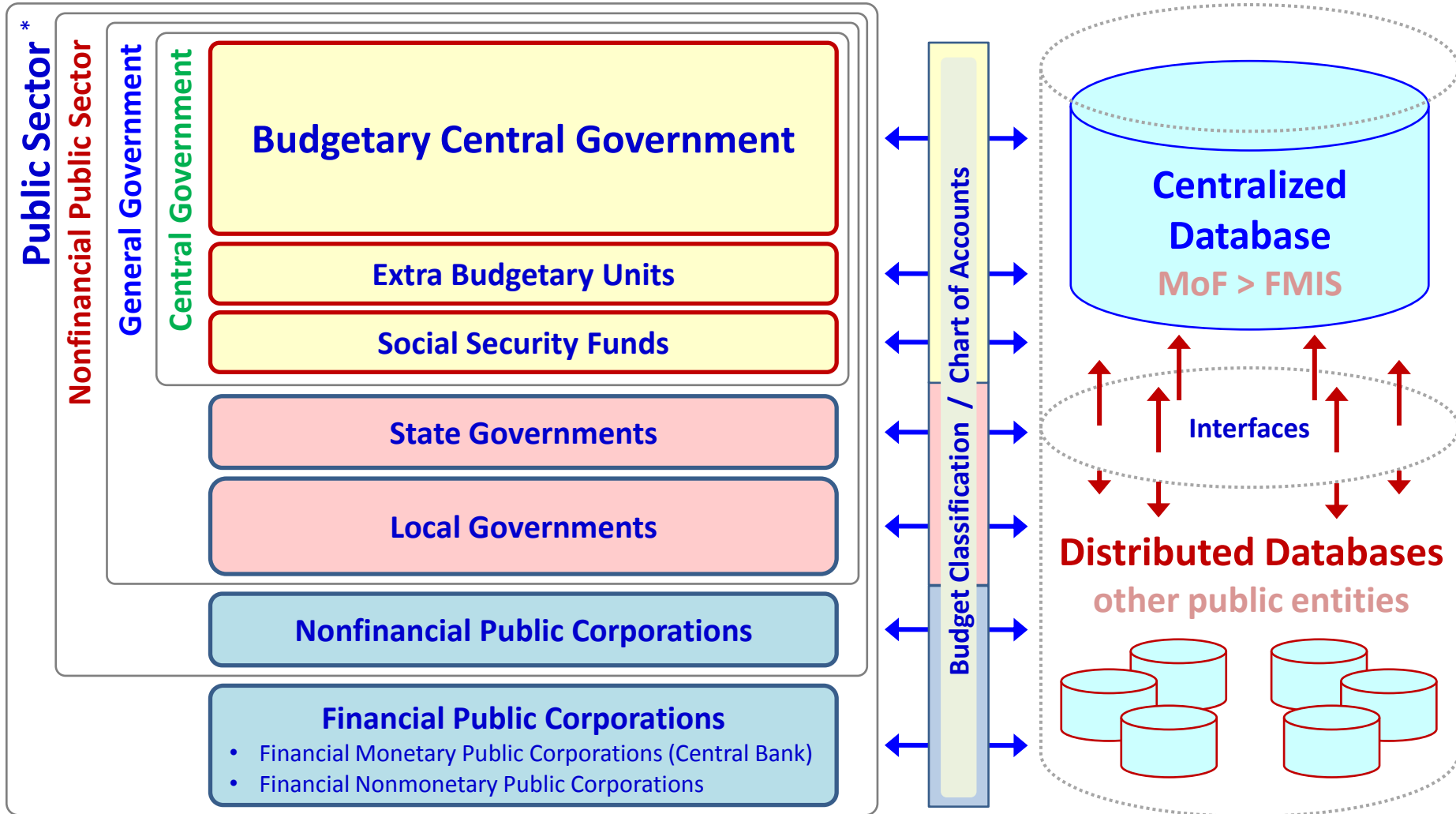
* Institutional structure of "Public Sector", as defined in the IMF Government Finance Statistics 2001 Manual

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FMIS > Open Data > Fiscal Transparency

▶ **Disclosure of public finance (PF) information to citizens through FMIS platforms can improve fiscal transparency, if the published budget data are accurate, timely, easily accessible, and meaningful to ordinary citizens.**

▶ **Open Data is generally defined as the government data which is accessible to the public (online) in editable (machine readable) format, without any restriction (free).**

▶ **Fiscal Transparency is defined as the ready availability of meaningful open data on fiscal policy and achievements to the public.**

▶ **Trust in Government is defined as the public's overall assessment of government's current entitlement to enforce its policy decisions, laws and regulations based on past performance, and the view of how government and its institutions are likely to act in the future.**

▶ **Fiscal transparency can improve trust in government, if the public interpret the motives for publishing the Open Budget Data positively, and the transparency is maintained for long periods, benefiting from reliable FMIS solutions.**
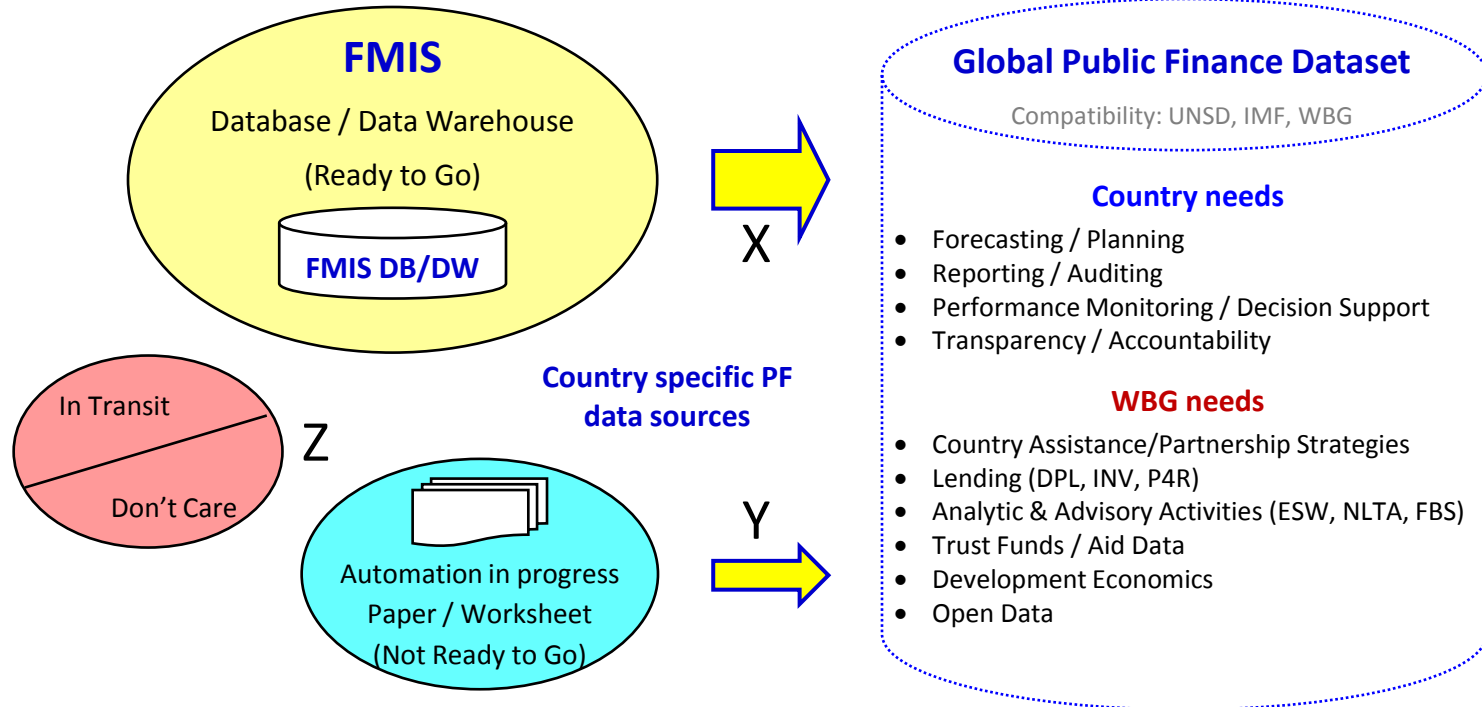
FMIS and Fiscal Transparency

▶ **Key information supporting fiscal transparency:**

- **Budget plans (including MTEF / Public Investment Plans)**
- **Budget execution results (revenues + expenditures)**
- **Procurement / Contracts**
- **Assets & Liabilities**
- **Budget performance reports**
- **Financial statements / Audit reports**

▶ **In order to ensure the reliability and integrity of Public Finance (PF) information published on the web sites of finance organizations or used as a basis for PFM diagnostic studies, relevant Open Budget Data should ideally be obtained from the FMIS / DW databases.**

▶ **Despite all efforts, designing robust FMIS solutions as the source of reliable open budget data, and measuring the effects of FMIS on budget transparency continue to be major challenges in many economies.**

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Source of Public Finance Data

FMIS

Database / Data Warehouse

(Ready to Go)

FMIS DB/DW

X

Global Public Finance Dataset

Compatibility: UNSD, IMF, WBG

Country needs

- Forecasting / Planning
- Reporting / Auditing
- Performance Monitoring / Decision Support
- Transparency / Accountability

WBG needs

- Country Assistance/Partnership Strategies
- Lending (DPL, INV, P4R)
- Analytic & Advisory Activities (ESW, NLTA, FBS)
- Trust Funds / Aid Data
- Development Economics
- Open Data

In Transit

Don't Care

Z

Country specific PF data sources

Automation in progress
Paper / Worksheet
(Not Ready to Go)

Y

Estimated distribution of economies by income for specific information sources of Public Finance (PF) data

Economies by income *	Number of Economies	X FMIS DB	Y Not ready	Z In transit	Fragile
Low-income economies ($ 1,005 or less)	36	11	12	13	17
Lower-middle-income economies ($1,006 to $3,975)	57	29	17	11	15
Upper-middle-income economies ($3,976 to $12,275)	52	31	13	8	2
High-income economies ($12,276 or more)	53	38	10	5	
Totals	198	109	52	37	34

* Source: WBG web site on "Country and Lending Groups".

Open Budget Data Challenges

▶ **A large number of countries publish Public Finance (PF) data regularly on the web. According to initial estimates (198 economies are being reviewed):**

1. **Automated PF data recording & reporting from a Database (DB)**
    (FMIS DB or Data Warehouse, if available)   >>> 109

2. **Manual/semi automated: Paper Forms / Worksheets >>> 52**

3. **Not interested in sharing PF data, or fragile states   >>> 37**

▶ **Most of the country specific PF datasets do not allow for comparisons and benchmarking.**

▶ **Publishing "Open Budget Data" from FMIS databases is not a common practice.**

▶ **Presentation of budget performance in a user friendly format (Citizen's Budget) is important to improve participation in the budgeting process.**

▶ **Integration of Government Procurement Systems with FMIS Procurement Modules is essential for monitoring the commitments and performance of the contracts and reporting the results.**

Budget Transparency

▶ Most public finance organizations publish routine reports on their websites. Some Ministries link their websites directly to the underlying FMIS database, allowing users to run queries, searches and define criteria to generate reports that meet their needs.

▶ FMIS can generate all budget and procurement related data at various levels of detail. In some countries where FMIS is not available, additional instruments can be used to present available data in a meaningful structure.

▶ The WBG has developed a methodology, BOOST, to facilitate the compilation of public expenditure data (collected from FMIS or other information systems) for analytical purposes.

▶ Governments are also using information technology to make public procurement more transparent. Procurement applications can be used to post procurement plans, consolidate shopping across agencies, advertise bidding and manage the contracting process. These initiatives bring immediate benefits in terms of reduced costs through efficiencies in procurement and by reducing the opportunities for corruption.

Country Specific Challenges

What are the key challenges in producing Open Budget Data?

▶ **Unification of Budget Classification / Chart of Accounts**

▶ **Improving BC / CoA segments to record & report all PF data with adequate disaggregation (capturing program/activity and sector/regional spending)**

▶ **Centralized Treasury Single Account (TSA) operations for daily monitoring of revenues and expenditures**

▶ **Simplification of PFM procedures and reporting requirements**

▶ **Capturing all PF transactions (on a daily basis), and consolidation of results (weekly/monthly) for accounting and reporting needs of all public sector**

▶ **Conversion of country specific PF data into IMF GFS or COFOG or other internationally accepted formats (bridge tables)**

▶ **Roles and responsibilities in producing and publishing PF data on the web (legal and administrative frameworks)**

▶ **Integrity and reliability of information systems and databases used for producing Open Budget Data**

Challenges in Transparency Initiatives

▶ **What do governments have to do to make information available?**

Commitment + Skills development + Technology platforms + Resources

▶ **What are the incentives for Gov to make information available?**

Civil society pressure / Development partner demands / Progressive units within the Government / Champions of reform

▶ **What are the constraints?**

Resistance from officials / Apathy / Resource constraints / Poor back-end systems making for poor data quality (lack of FMIS)

▶ **Governments can facilitate civil society and market-led innovations in the application of public financial information at little or no cost simply by providing access to data.**

Public Transparency Portal

Transparency Portal

Public Accounts Portal

Treasury Portal
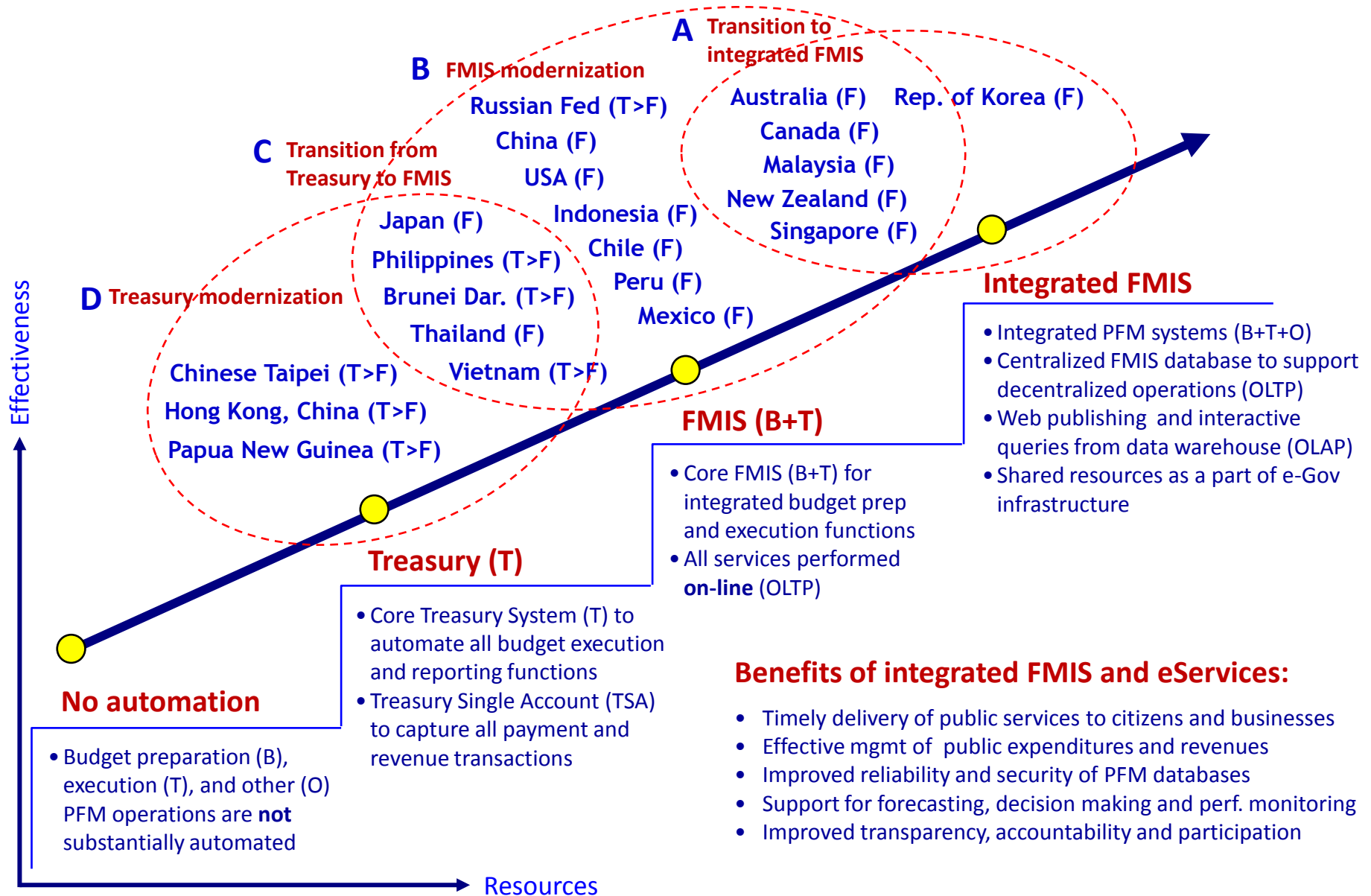
Chamber of Deputies Portal

Senate Portal

Budget Portal

Despite challenges, a large number of good practices are visible

Source:
Fiduciary Forum (May 2012): From the presentation of
Mr. Regis Cunningham on FMIS Experiences in Brazil

FMIS in APEC Economies

A Transition to integrated FMIS

B FMIS modernization

C Transition from Treasury to FMIS

D Treasury modernization

Russian Fed (T>F)
China (F)
USA (F)

Australia (F)   Rep. of Korea (F)
Canada (F)
Malaysia (F)
New Zealand (F)
Singapore (F)

Japan (F)
Philippines (T>F)
Brunei Dar. (T>F)
Thailand (F)

Indonesia (F)
Chile (F)
Peru (F)
Mexico (F)

Chinese Taipei (T>F)
Hong Kong, China (T>F)
Papua New Guinea (T>F)

Vietnam (T>F)

Effectiveness

Resources

Integrated FMIS
- Integrated PFM systems (B+T+O)
- Centralized FMIS database to support decentralized operations (OLTP)
- Web publishing and interactive queries from data warehouse (OLAP)
- Shared resources as a part of e-Gov infrastructure

FMIS (B+T)
- Core FMIS (B+T) for integrated budget prep and execution functions
- All services performed **on-line** (OLTP)

Treasury (T)
- Core Treasury System (T) to automate all budget execution and reporting functions
- Treasury Single Account (TSA) to capture all payment and revenue transactions

No automation
- Budget preparation (B), execution (T), and other (O) PFM operations are **not** substantially automated

Benefits of integrated FMIS and eServices:
- Timely delivery of public services to citizens and businesses
- Effective mgmt of public expenditures and revenues
- Improved reliability and security of PFM databases
- Support for forecasting, decision making and perf. monitoring
- Improved transparency, accountability and participation

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Launching in October 2013

Current status of publishing open budget data from FMIS

Group ▶	Current gov practices in disclosing OBD from FMIS	Economies	%E	Regions	%R
A	Highly Visible (extensive information)	24	12 %	16	10 %
	Argentina, Australia, Brazil, Colombia, Ecuador, El Salvador, Germany, Guatemala, India, Ireland, Rep. of Korea, Mexico, Netherlands, New Zealand, Nicaragua, Paraguay, Peru, Russian Federation, Singapore, Slovenia, Spain, Turkey, United Kingdom, United States of America				
B	Visible (significant information)	69	35 %	57	34 %
	Afghanistan, Albania, Armenia, Austria, Bahrain, Bangladesh, Belgium, Bhutan, Bolivia, Bosnia and Herzegovina, Bulgaria, Canada, Cape Verde, Chile, China, Croatia, Czech Republic, Denmark, Dominican Republic, Estonia, Finland, France, Gabon, Georgia, Ghana, Honduras, Hong Kong SAR, Iceland, Indonesia, Italy, Japan, Jordan, Kenya, Kyrgyz Republic, Latvia, Lebanon, Lithuania, Macedonia, Madagascar, Malaysia, Malta, Mauritius, Moldova, Morocco, Namibia, Nepal, Norway, Pakistan, Philippines, Poland, Portugal, Romania, Serbia, Slovak Republic, Solomon Islands, South Africa, Sri Lanka, Sweden, Switzerland, Tanzania, Thailand, Timor-Leste, Tonga, Uganda, Ukraine, Uruguay, Venezuela, Viet Nam, Zambia				
C	Limited Visibility (some information)	60	30 %	56	33 %
	Algeria, Andorra, Angola, Antigua and Barbuda, Azerbaijan, Bahamas, Belarus, Botswana, Burkina Faso, Cambodia, Chinese Taipei (Taiwan), Costa Rica, Côte d'Ivoire, Cyprus, Djibouti, Dominica, Egypt, Ethiopia, Fiji, The Gambia, Greece, Grenada, Guinea-Bissau, Guyana, Haiti, Hungary, Iraq, Israel, Jamaica, Kazakhstan, Kosovo, Lao PDR, Lesotho, Liberia, Luxembourg, Macao SAR, Malawi, Maldives, Mauritania, Micronesia, Mongolia, Mozambique, Nigeria, Oman, Panama, Papua New Guinea, Rwanda, Samoa, Saudi Arabia, Senegal, Sierra Leone, St. Lucia, Swaziland, Tajikistan, Trinidad and Tobago, Tunisia, United Arab Emirates, West Bank and Gaza, Yemen, Zimbabwe				
D	Minimal Visibility (minimal or no information)	45	23 %	39	23 %
	Barbados, Belize, Benin, Brunei Darussalam, Burundi, Cameroon, Central African Republic, Chad, Comoros, Congo, Congo, Dem. Rep., Cuba, Equatorial Guinea, Eritrea, Guinea, Iran, Kiribati, Korea Dem. Rep., Kuwait, Libya, Liechtenstein, Mali, Marshall Islands, Monaco, Montenegro, Myanmar, Nauru, Niger, Palau, Qatar, San Marino, São Tomé and Principe, Seychelles, Somalia, South Sudan, St. Kitts and Nevis, St. Vincent and the Grenadines, Sudan, Suriname, Syrian Arab Republic, Togo, Turkmenistan, Tuvalu, Uzbekistan, Vanuatu				
	Totals >	**198**		**168**	

Good Practices

Selection criteria

▶ **Timely publication:** A tradition of publishing consistent PF information through dedicated web sites regularly.

▶ **Visibility of FMIS:** Comprehensive information about underlying FMIS solution or data warehouse (DW) used for publishing PF information.

▶ **Dynamic query options:** Access to information for all revenues, allocations, and expenditures through user defined (dynamic) queries on FMIS databases or DW.

▶ **Open budget data:** Presenting a rich set of open budget data published from FMIS.

▶ **Reliability of PF data:** Visibility of system name/time stamp on published reports.

▶ **Presentation quality:** Presence of interactive and user friendly graphical interfaces to display PF data and provide adequate search/download options.

▶ **Effective use of open data:** Availability of meaningful open data on fiscal policy, budget performance, and achievements to the public (Citizen's Budget).

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Good Practices

Income Level	#	Government web sites selected to highlight some of the good practices
High Income	20	Australia, Austria, Chinese Taipei (Taiwan), Denmark, Estonia, Finland, France, Germany, Ireland, Japan, Rep. of Korea, Netherlands, New Zealand, Norway, Singapore, Slovenia, Spain, Sweden, United Kingdom, U.S.A.
Upper Middle Income	17	Argentina, Brazil, Chile, China, Colombia, Dominican Rep., Ecuador, Jordan, Malaysia, Mauritius, Mexico, Peru, Russian Fed., Thailand, Turkey, Uruguay, Venezuela
Lower Middle Income	12	Bolivia, Guatemala, El Salvador, India, Indonesia, Morocco, Nicaragua, Pakistan, Paraguay, Philippines, Viet Nam, Zambia
Low Income	4	Madagascar, The Gambia, Timor-Leste, West Bank and Gaza

Region	#	Government web sites selected to highlight some of the good practices
Africa	4	Madagascar, Mauritius, The Gambia, Zambia
East Asia and Pacific	13	Australia, China, Chinese Taipei (Taiwan), Indonesia, Japan, Malaysia, New Zealand, Rep. of Korea, Philippines, Singapore, Thailand, Timor-Leste, Viet Nam
Europe and Central Asia	15	Austria, Denmark, Estonia, Finland, France, Germany, Ireland, Netherlands, Norway, Russian Federation, Slovenia, Spain, Sweden, Turkey, United Kingdom
North and South America	16	Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Paraguay, Peru, Uruguay, U.S.A., Venezuela
Middle East and North Africa	3	Jordan, Morocco, West Bank and Gaza
South Asia	2	India, Pakistan

FMIS & OBD Group	#	Government web sites selected to highlight some of the good practices
A	24	Argentina, Australia, Brazil, Colombia, Ecuador, El Salvador, Germany, Guatemala, India, Ireland, Rep. of Korea, Mexico, Netherlands, New Zealand, Nicaragua, Paraguay, Peru, Russian Federation, Singapore, Slovenia, Spain, Turkey, United Kingdom, U.S.A.
B	26	Austria, Bolivia, Chile, China, Denmark, Dominican Republic, Estonia, Finland, France, Indonesia, Japan, Jordan, Madagascar, Malaysia, Mauritius, Morocco, Norway, Pakistan, Philippines, Sweden, Thailand, Timor-Leste, Uruguay, Viet Nam, Venezuela, Zambia
C	3	Chinese Taipei, The Gambia, West Bank and Gaza

Thank You..

Research and Outputs Courtesy of:

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Public Sector and Governance Unit
Poverty Reduction and Economic Management (PREM) Network
World Bank

http://www.worldbank.org/publicfinance/fmis