

**For Greater Public Finance Management Integration,  
Transparency & Confidence:**

# **Development, Operation and Future of FMIS in Korea**



**Ministry of Strategy and Finance**

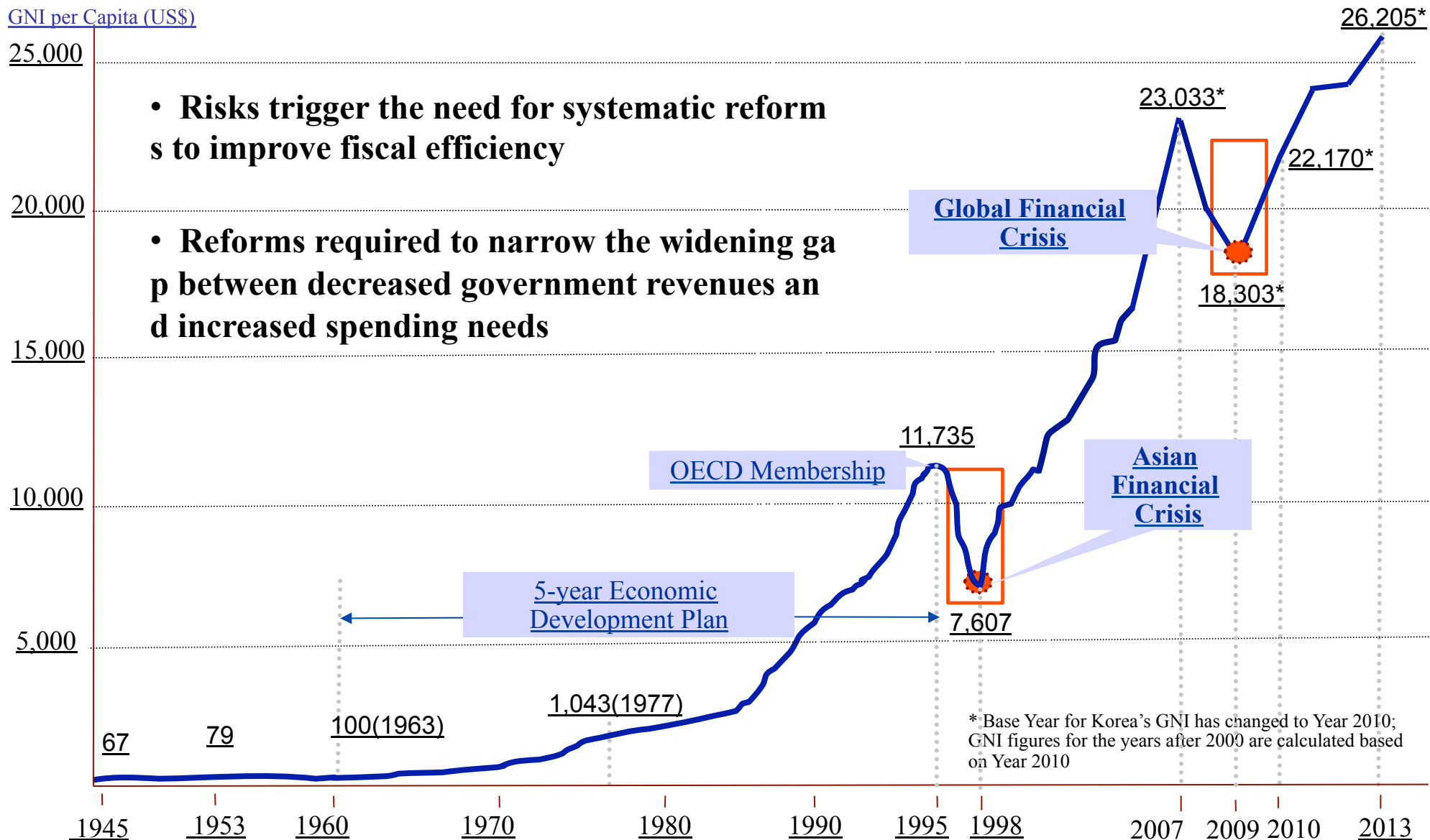
**Republic of Korea**

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# I – 1. Impetus for Reform: 1997 & 2008 Financial Crises

- Risks trigger the need for systematic reforms to improve fiscal efficiency
- Reforms required to narrow the widening gap between decreased government revenues and increased spending needs



## I – 2. Aftermath of Financial Crises and Other Prevailing Trends

### 1. Increased Demand for Fiscal Efficiency & Transparency

- Increased need for fiscal spending to buttress and stimulate the slowing economy
- Decreased fiscal revenues
- Efficiency and transparency required to close the fiscal deficit gap

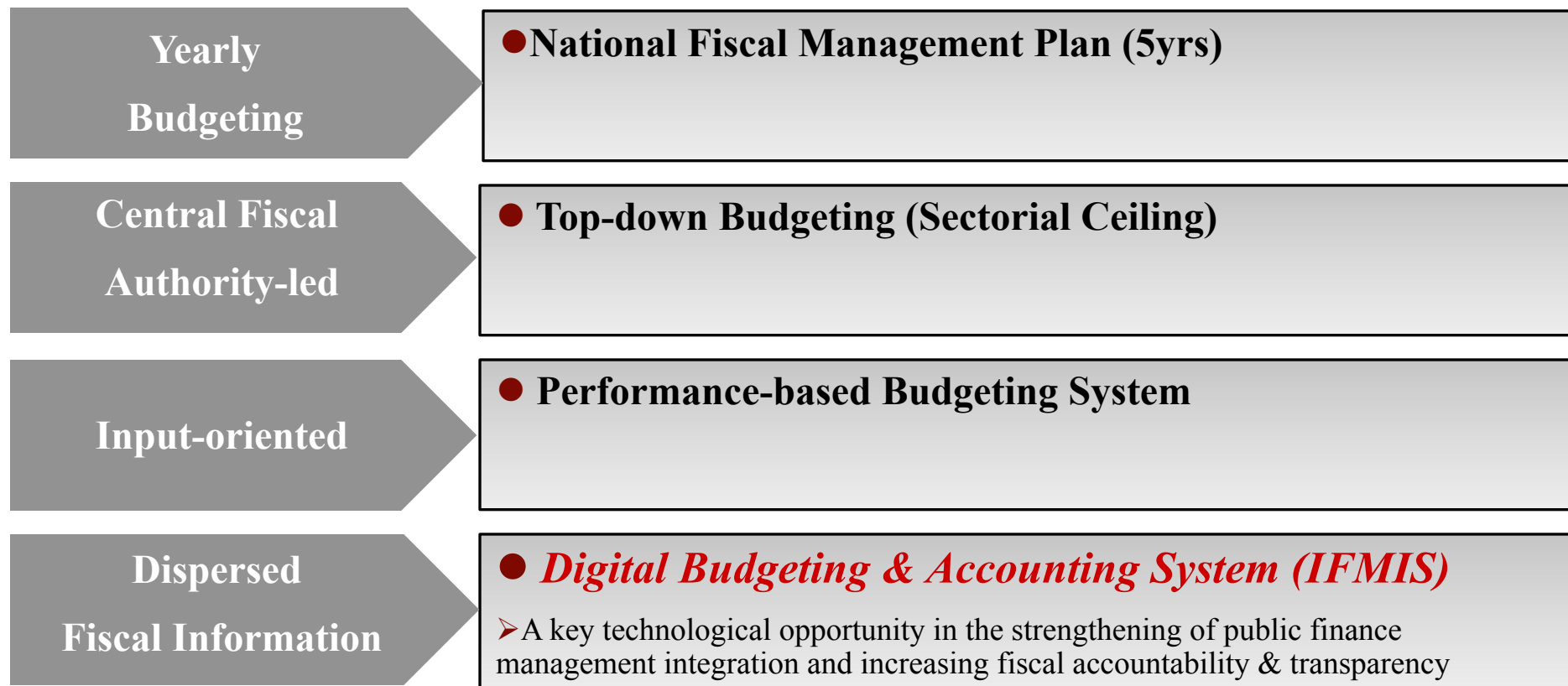
### 2. Socio-Economic Changes

- Low fertility rate and aging population
  - Fertility rate: 6.0 (1961) → 2.1(1982) → 1.18 (2013)
  - % of the population over 65:  
7.2 (2000) → 10.7 (2009) → 14.4 (2019 estimate)
  - ⇒ Possible slowdown in economic growth engine
  - ⇒ Growing demand for public spending (social pension, education, welfare)

### 3. Following the Global Trends in the Fiscal Management Environment

- Changes in budgeting
  - From control to coaching
  - Budgeting process more transparent and less tightly controlled by central government
- Adoption of accrual accounting

### I – 3. Four Key Fiscal Reform Initiatives



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## II – 1. Brief History of Korea’s e-Government

	1980s	1990s	2001-2002	2003-2012	2013
Stage	Inception	Foundation	Launch & Diffusion		Smart Gov't.
Event	<b>Government 1.0</b> Computerization of Administrative System	Information Promotion	<b>Government 2.0</b> 11 Initiatives for e-Government <b>31 Roadmap PJ for e-Government</b>		<b>Government 3.0</b> <b>Expansion of Integration &amp; Connection</b>
Achievements	Building 5 National Basic Information Systems (NBIS)  Act on Computer Network Expansion and Usage Promotion (1987)	Building foundation for ICT  Framework Act on Informatization Promotion (1995)	Act on e-Government (2001)	Laying the groundwork for linking & integrating multiple government department and agencies  Master Plan for National Informatization (2008)	Principles of Openness, Sharing and Cooperation  Initiating the future e-Government blueprint  Official Information Disclosure Act (enforced in March, 2013)

## II – 2. Development of FMIS

### Brief History of FMIS Development

- 2004~2005
  - Establishment of integrated Fiscal Management Information System (IFMIS) was set in the National Agenda Meeting
  - Launched a joint study project named “Path toward Successful Introduction of Program Budgeting in Korea” with WB
  - To establish IFMIS, consecutively drew up
- 2006
  - System development (Cost: \$60M)
  - Open test
- 2007
  - System launch
- 2014. 4
  - **67,895 users**
  - **364,431 cases daily**
  - **5.7 trillion won daily (\$5.5 billion)**

#### BSP, BPR/ISP

	Details
BSP (Business Strategy Planning)	• With analysis of policy environments, demonstrates the objective and major strategy of fiscal innovation
BPR (Business Process Reengineering)	• Optimize and streamline the existing procedure in accordance with the information system to maximize the adoption effect
ISP (Information Strategy Planning)	• Computerization of given work process



## II – 3. Resistance & Solutions

### Three Major Obstacles

#### Opposition

- Local governments and the Ministry of Education were against the idea of disclosing and integrating their financial information
  - Concerns over possible undermining of their autonomy

#### Competition

- Two ministries competed fiercely to have control of the FMIS
  - Competition between MOFE and MPB as these two ministries were formerly in charge of existing FMIS (each ministry controlled NaFIS and FIMsys, respectively)

#### Resistance

- Users of newly adopted FMIS were reluctant to adapt themselves to the new system
  - In the early 2000's, users already went through the process when the Korean government first introduced NaFIS and FIMSys
- Strict internal control process built in the new FMIS made it even harder for users to become familiarized with the system

### Solutions

Allowed to maintain own systems but required to submit financial information to be consolidated

Placed FMIS under control of MPB while letting MOFE to be in charge of certain parts<sup>1)</sup>

Provided effective user education throughout the years

1) The competition eventually waned when those two ministries merged into one in 2008

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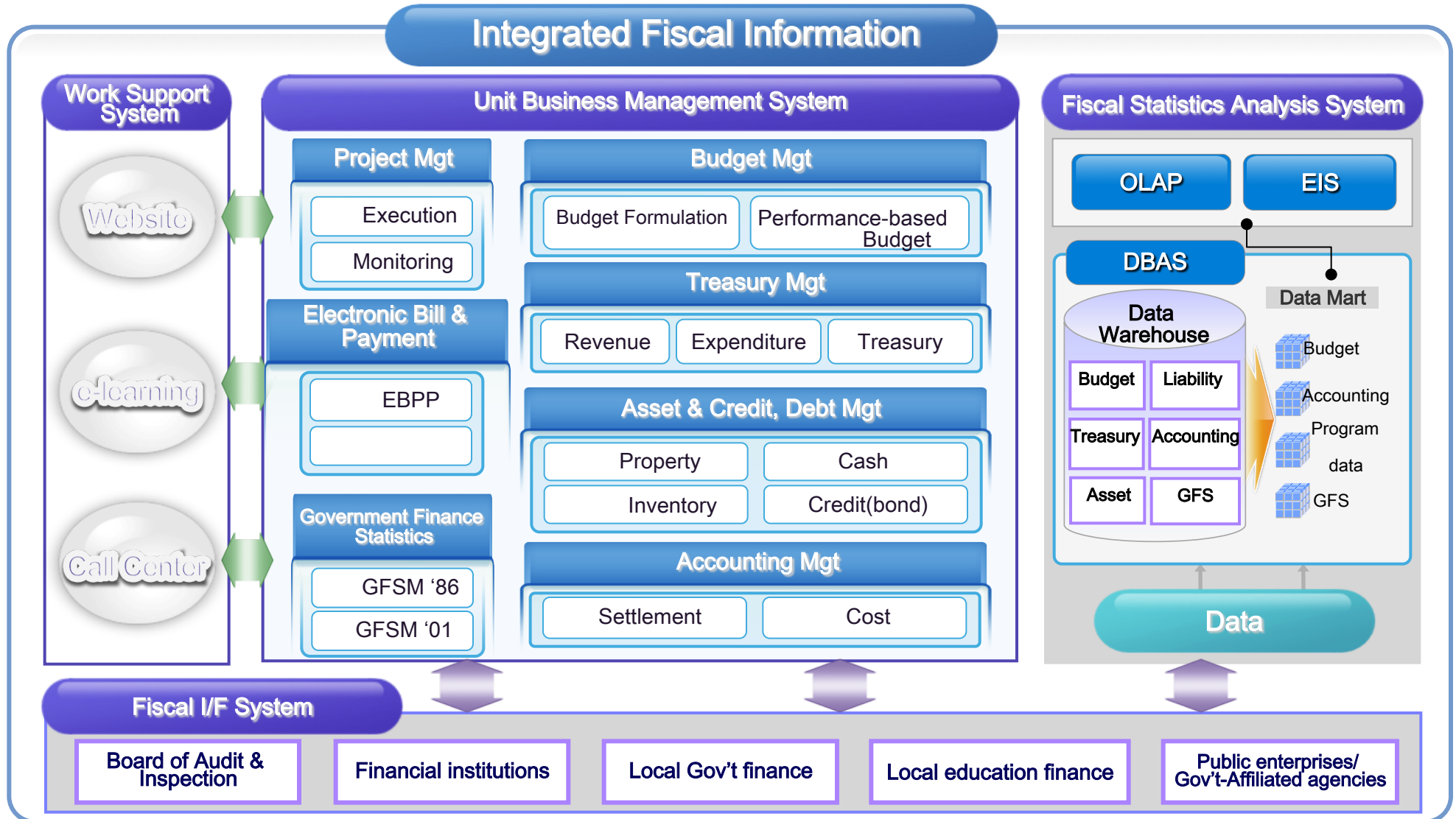
**III. Operation of FMIS**

**IV. Main Achievements**

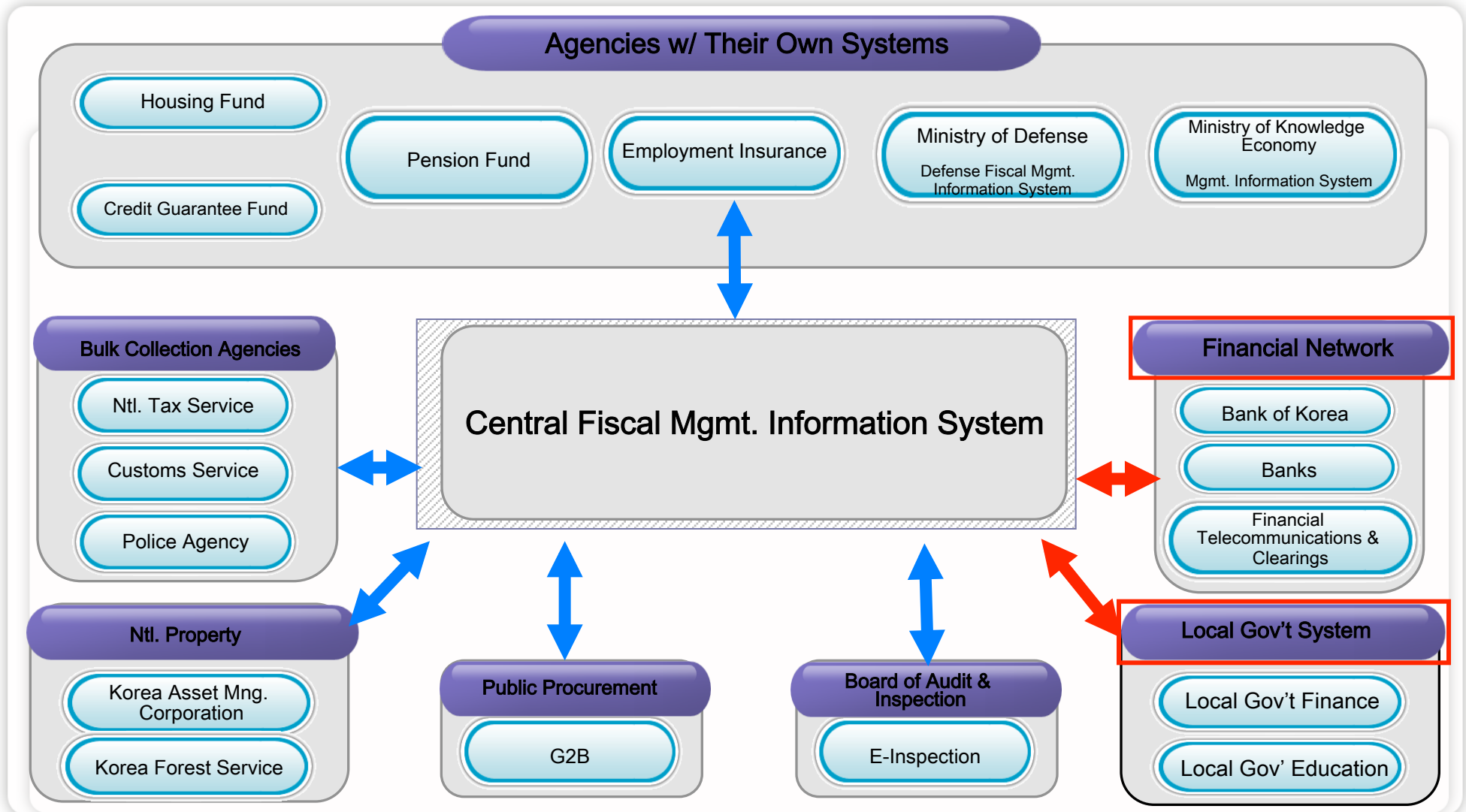
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# III – 1. Brief Overview of FMIS Mechanism

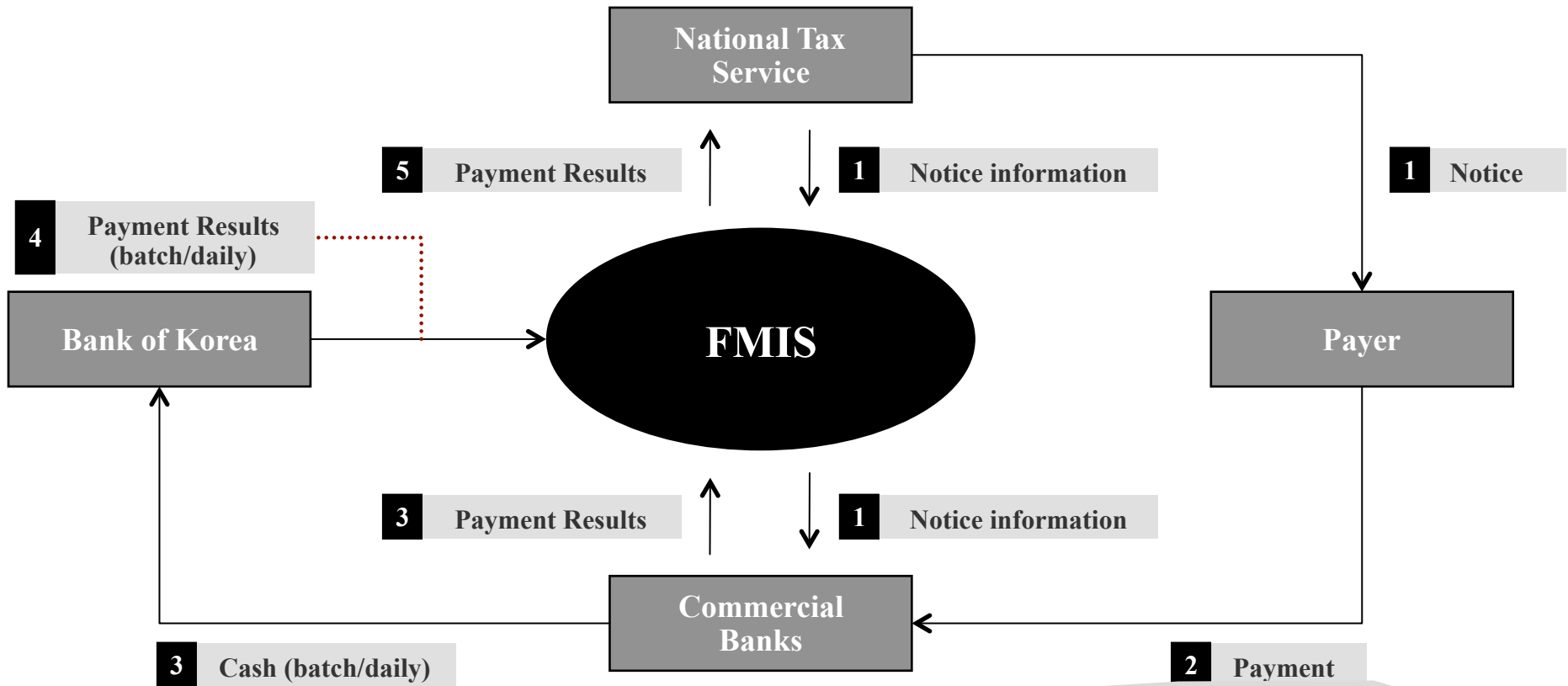


## III – 2. FMIS’s Interface with External Fiscal Systems



### III – 3. EBPP system enhances convenience and transparency of payments

<Work Flow of National Tax Collection>

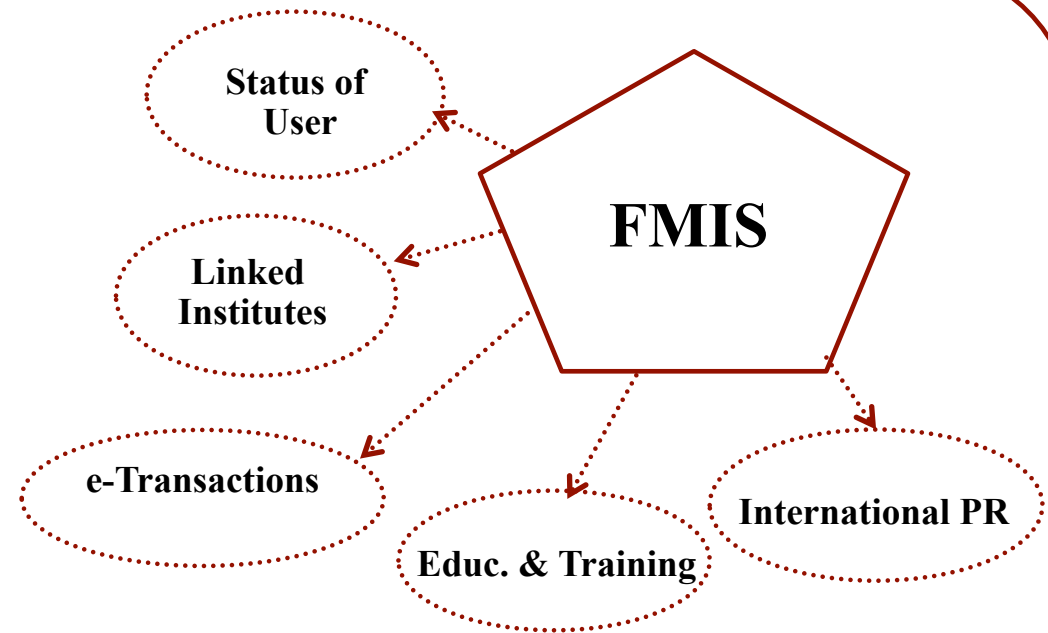


- EBPP(Electronic Bill Presentment and Payment) allows payers to choose among various means of payment including:
  - E-banking, ATM(Automated Teller Machine)
  - Money is automatically transferred from commercial banks to the treasury account, eliminating potential threat of fraud

## III – 4. Status of FMIS

### As of 2014

- **Status of Users : 67,895 users**  
(including 53 central offices, several local governments, public institutes)
- **Interface: 45 institutes, 63 systems**  
with **14,543 daily users,**  
**364,431 cases/day**
- **e-Transactions: 5.7 trillion** won per day  
(**\$5.5 billion**)
- **Education & Training Program:** on-site education, regular training, online training



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## IV – 1.1 Accrual Accounting

### Adoption of Accrual-based System

#### Before

- **Cash-based Accounting**
- **Single-entry Bookkeeping**

➤ Difficult to see a holistic picture of national finance

#### After

- **Accrual-based Accounting System**
- **Double-entry Bookkeeping**

➤ Allows policy makers to :

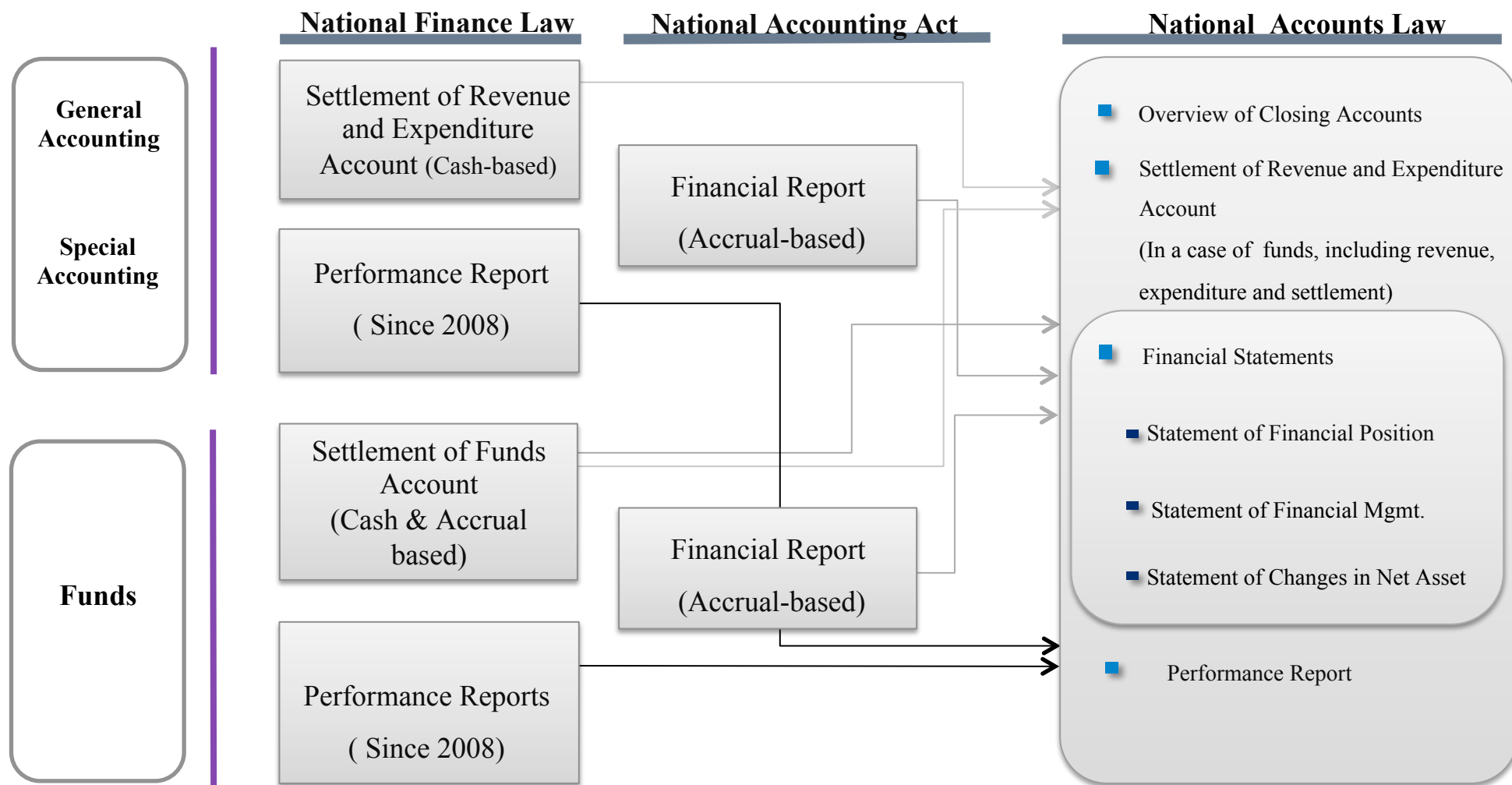
- identify areas of problem or status quo in fiscal expenditure
- see the current status of local governments and other public sector entities more comprehensively



## IV – 1.2 Accrual Accounting Adoption Details

<p><b>Central Gov.</b></p>	<ul style="list-style-type: none"> <li>✓ Introduced accrual-basis accounting since FY09 (Trial Period FY09-10)</li> <li>✓ National Financial Report: Submitted to National Assembly since FY11               <ul style="list-style-type: none"> <li>✓ Revenue &amp; Expenditure Reports (cash-basis)</li> <li>✓ Consolidated Financial Statements (accrual-basis)</li> <li>✓ Performance Reports</li> </ul> </li> </ul>	<p>National Accounting Act</p>	<p>Ministry of Strategy and Finance</p>
<p><b>Local Gov.</b></p>	<ul style="list-style-type: none"> <li>✓ Implemented accrual accounting since FY07 ( Trial period FY03-06)♪</li> <li>✓ Submits F/S to local councils with CPA review opinions attached♪</li> </ul>	<p>Local Finance Act</p>	<p>Ministry of Security and Public Administration</p>
<p><b>Public Institutions</b></p>	<ul style="list-style-type: none"> <li>✓ Introduced IFRS (FY11 for public corporations, and FY13 for quasi-governmental institutions)</li> <li>✓ Submits F/S to the MOSF with CPA audit opinions attached</li> <li>✓ MOSF submits CFS to National Assembly</li> </ul>	<p>Act on the Management of Public Institutions</p>	<p>Ministry of Strategy and Finance</p>

## IV – 1.3 Flow Charts of National Closing Statement (as enforced under National Accounting Act since Jan. '09)



## IV – 1.4 Result of National Closing Accounts in FY 2012

Ending Balances for National assets and Liabilities were 1,580 and 902 trillion won, respectively. Net assets amounted to 678 trillion won in total.

(Unit: trillion won)

Item	‘2012 (A)	‘2011 (B)	Difference (C=A-B)	% (C/B)
<b>Total Assets(a)</b>	<b>1,580.4</b>	<b>1,525.0</b>	<b>55.4</b>	<b>3.6</b>
I. Current Assets	267.7	265.5	2.2	0.8
II. Investment Assets	516.7	483.0	33.7	7.0
III. General Tangible Assets	500.1	492.9	7.2	1.5
IV. Infrastructure	288.1	274.5	13.6	5.0
V. Intangible Assets	1.2	1.0	0.2	20.0
VI. Other Non-current Assets	6.6	8.1	△1.5	△18.5
<b>Total Liabilities(b)</b>	<b>902.1</b>	<b>773.5</b>	<b>128.6</b>	<b>16.6</b>
I. Current Liabilities	86.8	82.0	4.8	5.9
II. Long-term Borrowing Debt	318.7	294.8	23.9	8.1
III. Long-term Allowance Debt	472.1	374.8	97.3	26.0
-Pension Allowance Debt	436.9	342.1	94.8	27.7
-Severance Allowance Debt	30.5	28.8	1.7	5.9
-Others	4.7	3.9	0.8	20.5
IV. Other Non-current Liabilities	24.5	21.9	2.6	11.9
<b>Net Assets (a-b)</b>	<b>678.3</b>	<b>751.5</b>	<b>△73.2</b>	<b>△9.7</b>

## IV – 1.5 Result of Revenue & Expenditure Closing Accounts in FY12♪

(Unit : trillion won)

Item♪	2011♪			2012			Year on Year (D-B)♪
	Budget (A)♪	Settlement (B)♪	Difference (B-A)♪	Budget (C)♪	Settlement (D)♪	Difference (D-C)♪	
I. Total Revenue♪	314.4♪	323.0♪	8.7♪	343.5♪	341.8♪	△1.7♪	18.8♪
1. Tax♪	187.6♪	192.4♪	4.7♪	205.8♪	203.0♪	△2.8♪	10.6♪
2. Non-tax Revenue ♪	24.5♪	24.0♪	△0.5♪	28.3♪	25.3♪	△3.0♪	1.3♪
3. Funds♪	102.3♪	106.5♪	4.2♪	109.5♪	113.3♪	3.8♪	6.8♪
※ Non-revenue & expenditure <sup>1</sup> ♪	-♪	0.2♪	0.2♪	-♪	0.1♪	0.1♪	△0.1♪
II. Total Expenditure♪	309.1♪	304.4♪	△4.6♪	325.4♪	323.3♪	△2.1♪	18.9♪
1. General Accounting♪	170.4♪	168.5♪	△1.9♪	179.4♪	178.3♪	△1.5♪	9.8♪
2. Special Accounting♪	45.9♪	44.3♪	△1.6♪	48.3♪	47.0♪	△1.3♪	2.7♪
3. Funds♪	92.7♪	90.0♪	△2.7♪	97.3♪	95.8♪	△1.5♪	5.8♪
※ Non-revenue & expenditure <sup>2</sup> ♪	-♪	1.6♪	1.6♪	-♪	2.2♪	2.2♪	0.6♪
III. Consolidated Fiscal Balance (I - II)	5.3♪	18.6♪	13.3♪	18.1♪	18.5♪	0.4♪	△0.1♪
IV. Social Security Funds Balance	30.3♪	32.1♪	1.7♪	32.4♪	35.9♪	3.5♪	3.8♪
V. Financial Management Balance (III-IV)♪	△25.0♪	△13.5♪	11.5♪	△14.3♪	△17.4♪	△3.1♪	△3.9♪

1. operating profit of extra funds in national consolidated accounts

2. e.g.) grants to local government, etc.

Note : Figures for Difference and Balance categories may not add up from previous columns and rows due to rounding.

## IV – 2. Implementation of Performance-Based System

### Improved Budget Execution & Performance Monitoring

#### Before

▪ **Limited evaluation of budget execution outcomes**

➤ Only central government offices monitored and evaluated for performance

➤ Fiscal execution monitoring results only reviewed at year-end and applied to next year's budget planning

▪ **Yearly Budget Execution Plan**

➤ Prone to inefficient project management practices, wasteful spending and poor project results

#### After

▪ **Project-level performance-based budgeting**

➤ Local governments, quasi-government organizations, and public funds all linked to dBrain

➤ Scope (# projects): 23 (2013) → 2196 (2014)

➤ Convenient, easy budget execution monitoring in real-time through Performance Information (PI) Board

➤ necessary corrective adjustments can be made within the fiscal year

▪ **Budget execution schedule broken down monthly**

➤ up-to-date execution realization rate (expressed as % of scheduled amount)

➤ execution realization rate

+ realization rates for pre-determined performance indicators

= overall performance score for a project

➤ prevents inefficient project management (project execution appropriately spaced out throughout the year)

## IV – 3. Enhanced Transparency

### User Convenience with Transparency

#### Before

- Closed & One-way System
- Unavoidable double input
- Face-to-face submission of Document for Procurement
- Subsidy and payment fraud
- Limited open data with no feedback

#### After

- Interactive Open System
- Single input
- On-line Bidding and Payment System for Procurement
- Reduced number of accounting fraud
- All-out Open Policy: the system helps boost transparency of national financial management.
  - Providing financial information to the National Assembly & BAI

## IV – 4. Improved User Experience

### User Satisfaction

#### Before

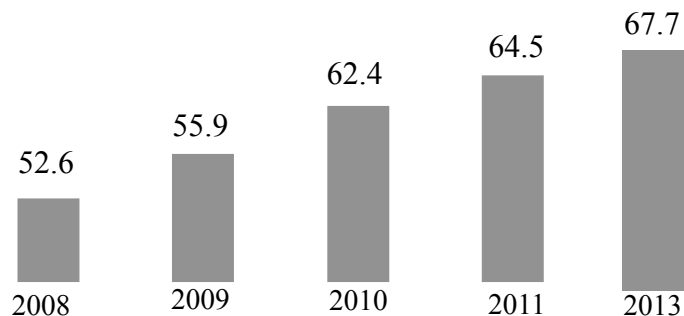
- Users had appealed inconvenience in using separated systems of each organization.
- Too much time consumed in order to complete work by following work process.

#### After

- Most users express greater satisfaction in working through FMIS
  - e.g) Reduction of working time
- FMIS helps secure more work efficiency.
- User satisfaction has been enhanced.

### Service Quality Index

User Satisfaction Rate<sup>1)</sup> (%)



- 1) **User Satisfaction Rate is the result of survey conducted by the Korea Institute of Public Administration (KIPA).**  
 :This survey includes the items such as Frequency of Access (gaining 3.93 points out of a possible 5 points), Recognition of Work Range via FMIS (3.73 points), Processing Most of Works only via FMIS (3.14 points), Reduction of Work Burden (3.25 points), Systemization of Work Process (3.56 points) and Reduction of Expenditure (3.41 points), etc.

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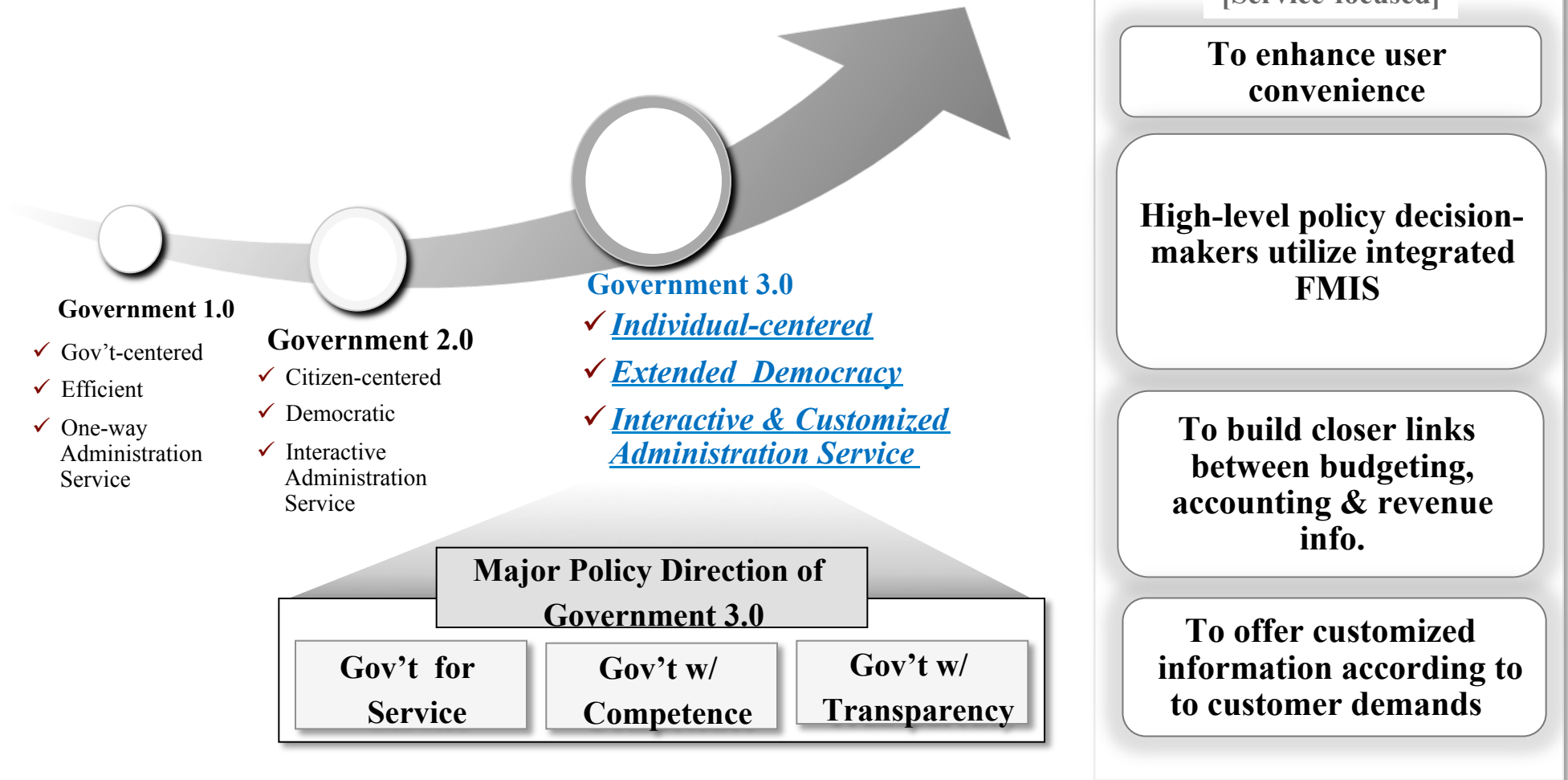
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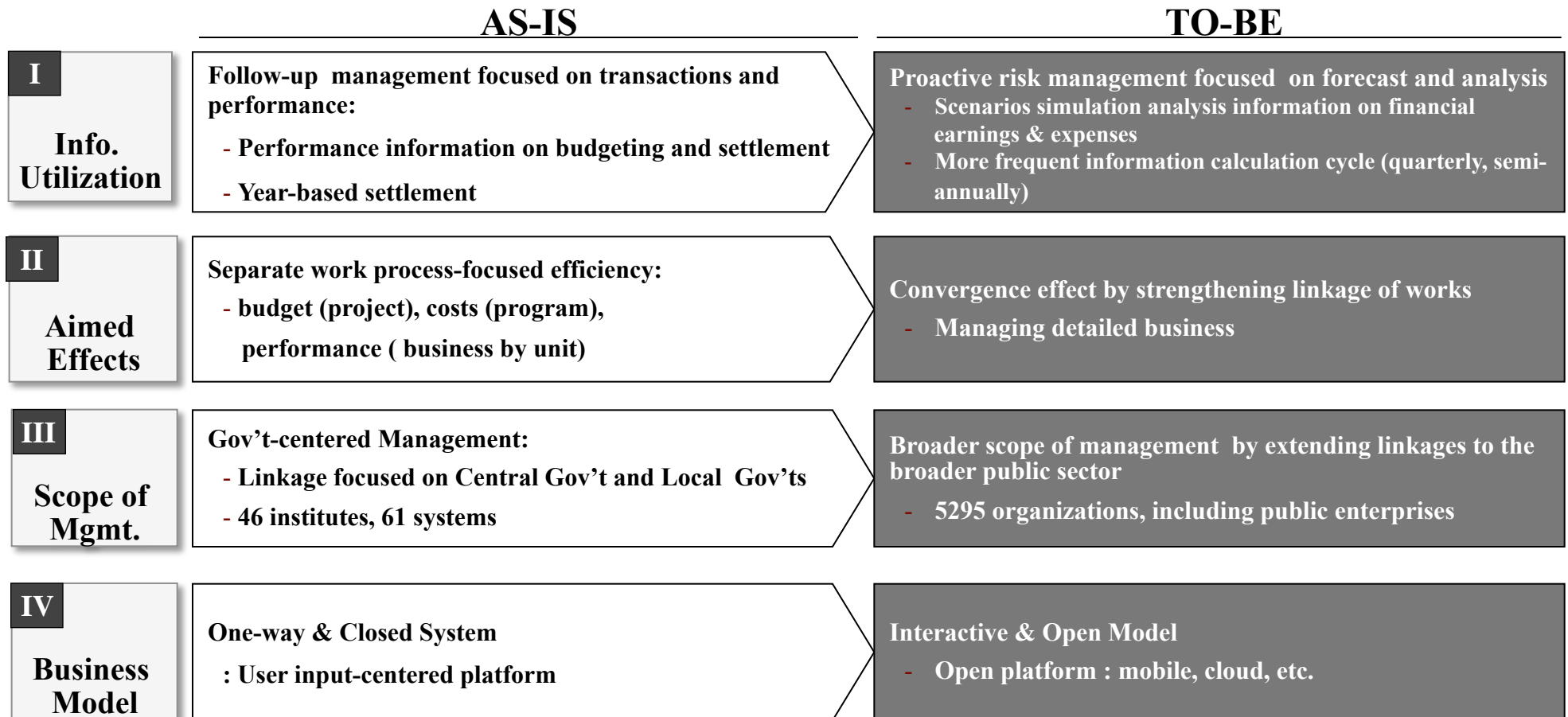
## V – 1. Recent Movements of Information Sharing System

- Major policies of Korean government have shifted to openness, sharing, communication and cooperation-focused policies.



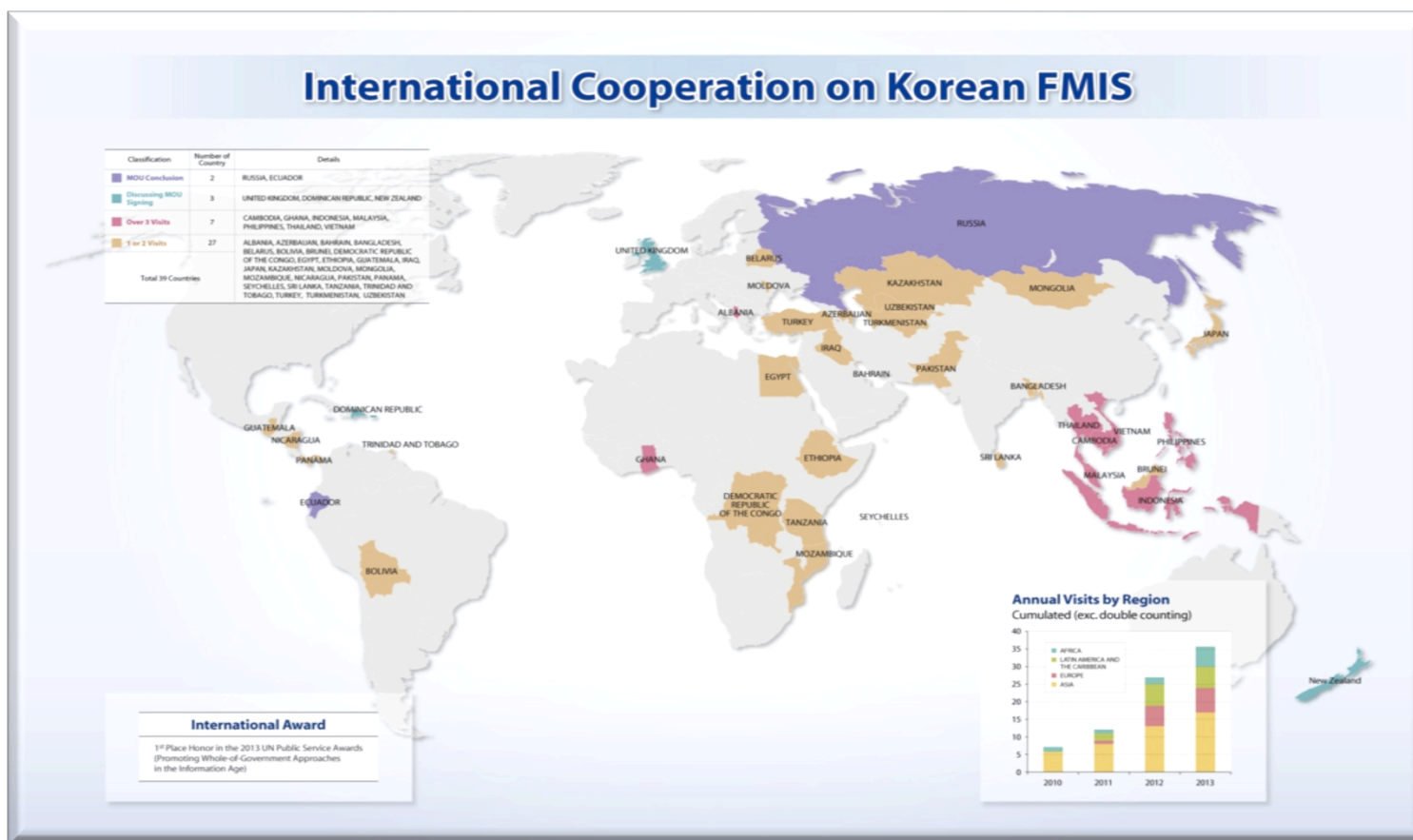
## V – 2. Comparison of Current System and Upcoming System

- FMIS in the future would have more strengthened linkages with other systems and tightened information security system. The system would also be equipped with service which is focused on enhancing information utilization of citizen and work optimization.



## V – 3. Close International Cooperation on dBrain

- MOU conclusion (2): Russia, Ecuador
- Study Visit: 38 countries
- **1<sup>st</sup> Place honor in the 2013 UN Public Service Awards (Promoting Whole-of-Government Approaches in the Information Age)**



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## VI. Conclusions

### System Reform

- ❖ Emphasis on long-term perspective rather than short-term
- ❖ Aligning working-level officials and experts to establish an effective accrual accounting system and FMIS

### Preemptive Measures

- ❖ Preparing measures to persuade interested ministries and civil servants concerning the introduction of reformed measures and new system
- e.g.) -Modification of relevant laws  
-Training programs for government officials

### Convincing the Public

- ❖ Pursuing active PR through news agencies to convince relevant parties of the need for a new FMIS
- e.g.) To elicit consensus on the need for new reform

**dBrain System (FMIS)**

*Thank you very much  
for your attention!*

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