



Digital Budget and Accounting System

– Integrated National Fiscal Information System

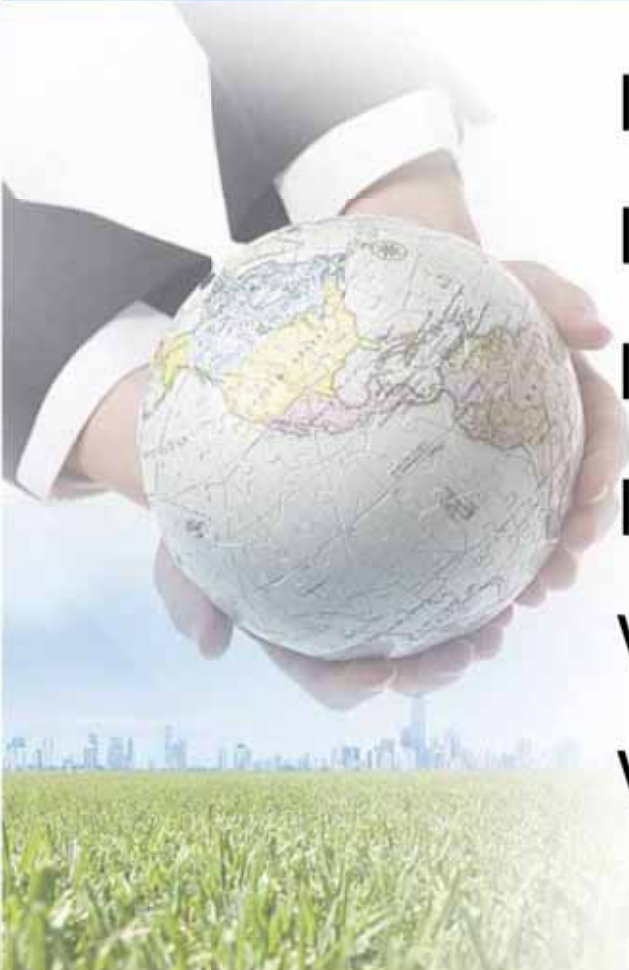


Ministry of Strategy and Finance
Republic of Korea



CONTENTS



- 
- A pair of hands in a white shirt and dark suit jacket holding a globe of the Earth. The background shows a green field and a city skyline under a blue sky.
- I. Introduction
 - II. System Features
 - III. Fiscal Operation system of Korea
 - IV. Components and Functions
 - V. Operation and Maintenance
 - VI. Future Plans



Introduction



Title : Digital Budget & Accounting System

- Abbreviation : DBAS (**D**igital **B**udget & **A**ccounting **S**ystem)
- Slogan : dBrain (Core Staff that helps operate fiscal activities)

Integrated Fiscal Information System designed to systemically manage whole national fiscal cycle

- Deals with all fiscal activities of central government from budget formation, execution, treasury management(revenue/expenditure) to accounting and settlement
- Reflects Program Budget system and accrual-based / double-entry book keeping accounting
- Connects fiscal information among central and local governments, related public agencies.

① Improve inefficiency of fiscal management system focused on controlling inputs

- Annual budget oriented → Mid-term fiscal plan
- Divided by each Account and Fund → Consolidated fiscal operation
 - National Fiscal Management Plan(NFMP), Top-down Budgeting
 - Strategic allocation of resources, Sustainable fiscal management
- Input and Control oriented → Result and Performance oriented
 - Program Budgeting, accrual based accounting, performance management
 - Fully utilizing feedbacks of fiscal data

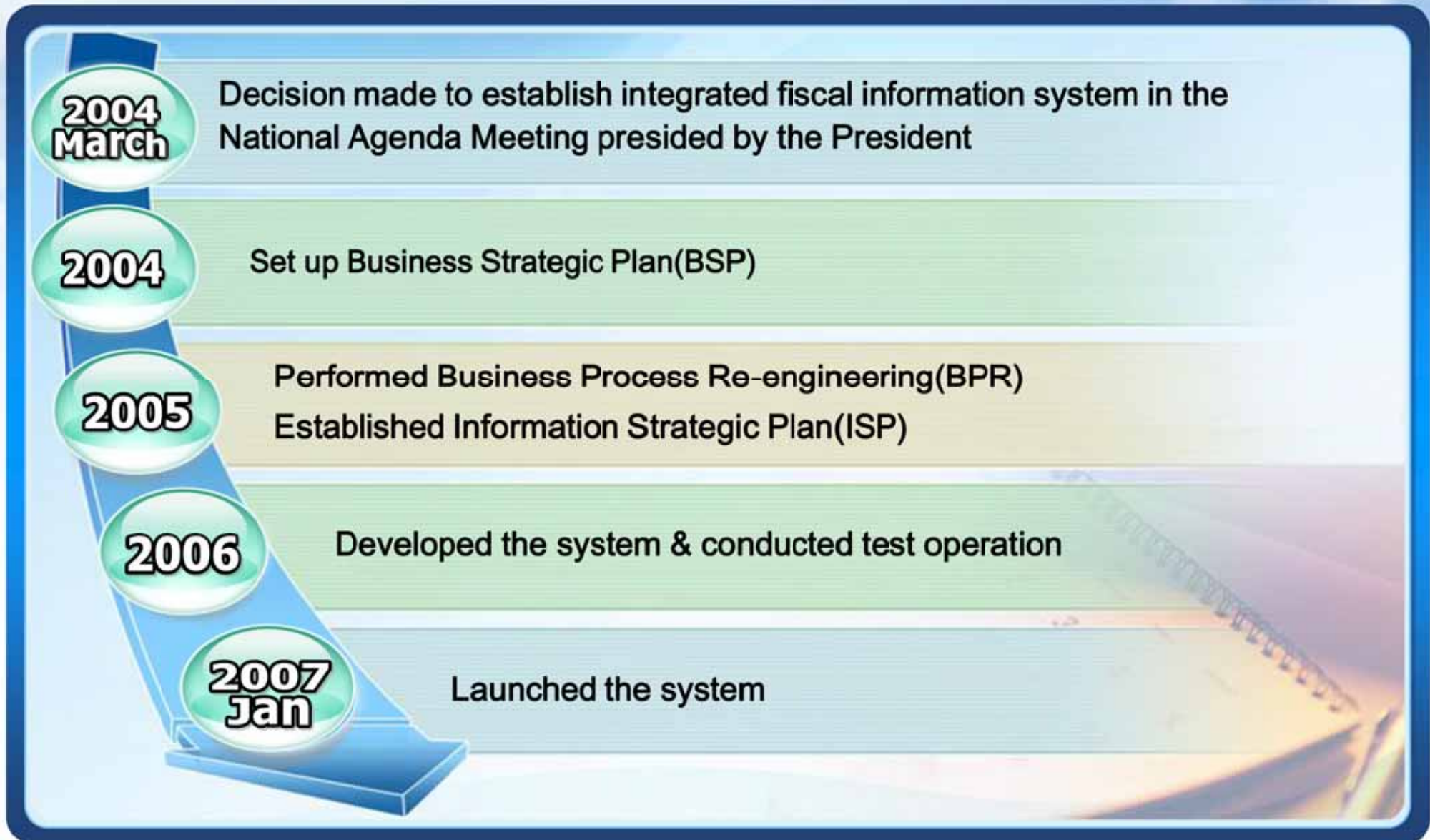


Fiscal management framework based on performance
(Introducing the idea of management and competition
to national finance)

② Establishing Integrated Fiscal Information System

- Integration of formerly separated Accounting(Treasury) and Budget system
- Asset&Inventory Mgmt, Credit&Debt Mgmt systems included in the system
- Integrated Database with Local Government systems, Bank of Korea, Financial Clearing institute, Tax&Customs system, Procurement system, other Financial systems already established before DBAS







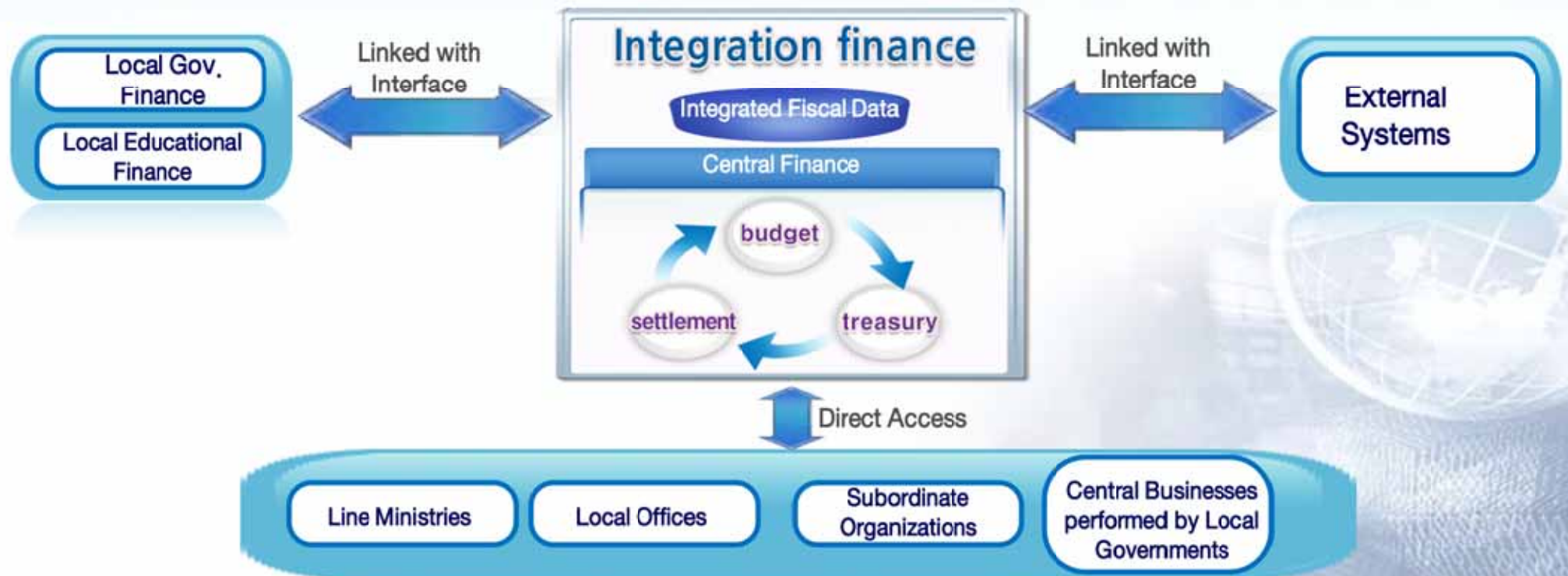
System Features



II. System Features

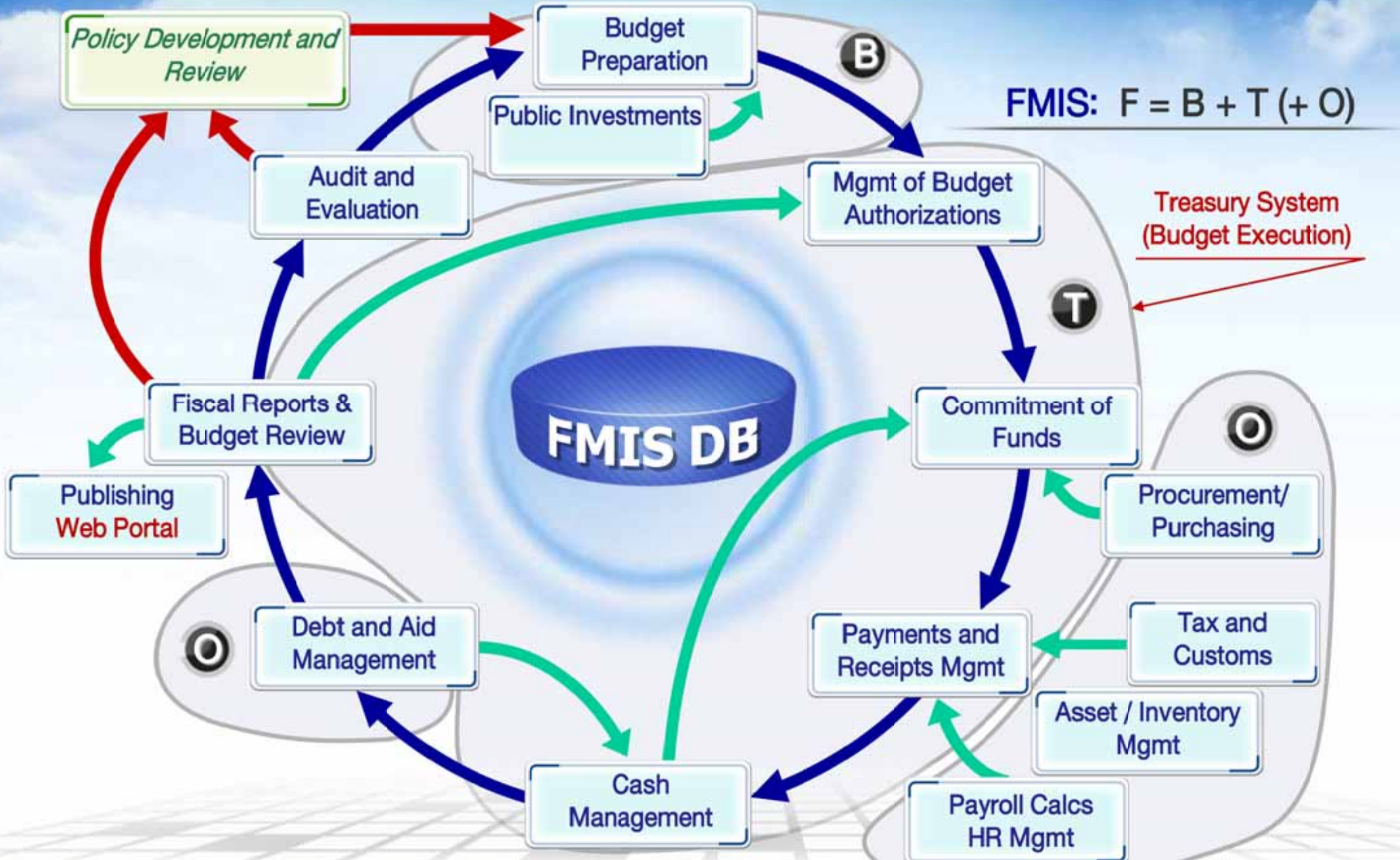
1. Integrated National Fiscal Information System

- Connects whole phases of national(central) fiscal activities
 - From Budget formation, execution, Treasury management, Revenue & Payment, Asset & Inventory Management to Accounting
- Integrated fiscal information
 - Integrates central government (including affiliated agencies and local offices), local government systems, local education systems, and other external systems.





What is FMIS? (World Bank)



Comparison table of Reference model VS DBAS

※ Integrated National Fiscal Information System

Classification	Function	DBAS unit systems
B	Budget Preparation	Budget Mgmt
	Public Investment	Project Mgmt (Investment plan)
		Budget Mgmt. (National Fiscal Management Plan)
T	Mgmt of Budget Authorizations	Budget Mgmt.(Allocation)
	Commitment of Funds	Payment and EFT(Electronic Funds Transfer)
	Payments and Receipts Management	Revenue and EBPP(Electronic Bill Presentment and Payment) system /Payment Mgmt.
	Cash Management	Fund Mgmt.
	Fiscal reports and Budget Review	Accounting/Settlement Mgmt.
		Project Mgmt., Statistics Analysis Sys.
O	Procurement & Purchasing	Linking Sys.(with e-Procurement system)
	Tax & Customs	Linking Sys.(with Tax&Customs system)
	Asset/ Inventory Management	Asset/ Inventory Mgmt.
	Payroll Calculation & HR management	Linking Sys.
	Debt & Aid management	Credit&Debt Mgmt.
	Audit & Evaluation	Linking Sys.(with e-Audit system)
	Web Publishing	Home page

II. System Features

2. Based on Project management system

- Connecting every level of fiscal works in real time such as : budget formation and execution, fund-asset-debt management, accounting and settlement, etc.
- Every fiscal activities are connected with Project Management system



II. System Features

3. Locally Developed Software(LDSW)

- Directly planned and developed the system in accordance with standards for system development methodology
 - by performing BSP, BPR, ISP in order
- Reflected Korea' s fiscal environment such as finance systems and business processes



- Can easily respond to changing systems and business processes
- Can swiftly modify and rectify existing functions
- Lower cost for additional development and maintenance
- Convenient user support



Fiscal Operation system of Korea



III. Fiscal Operation system of Korea

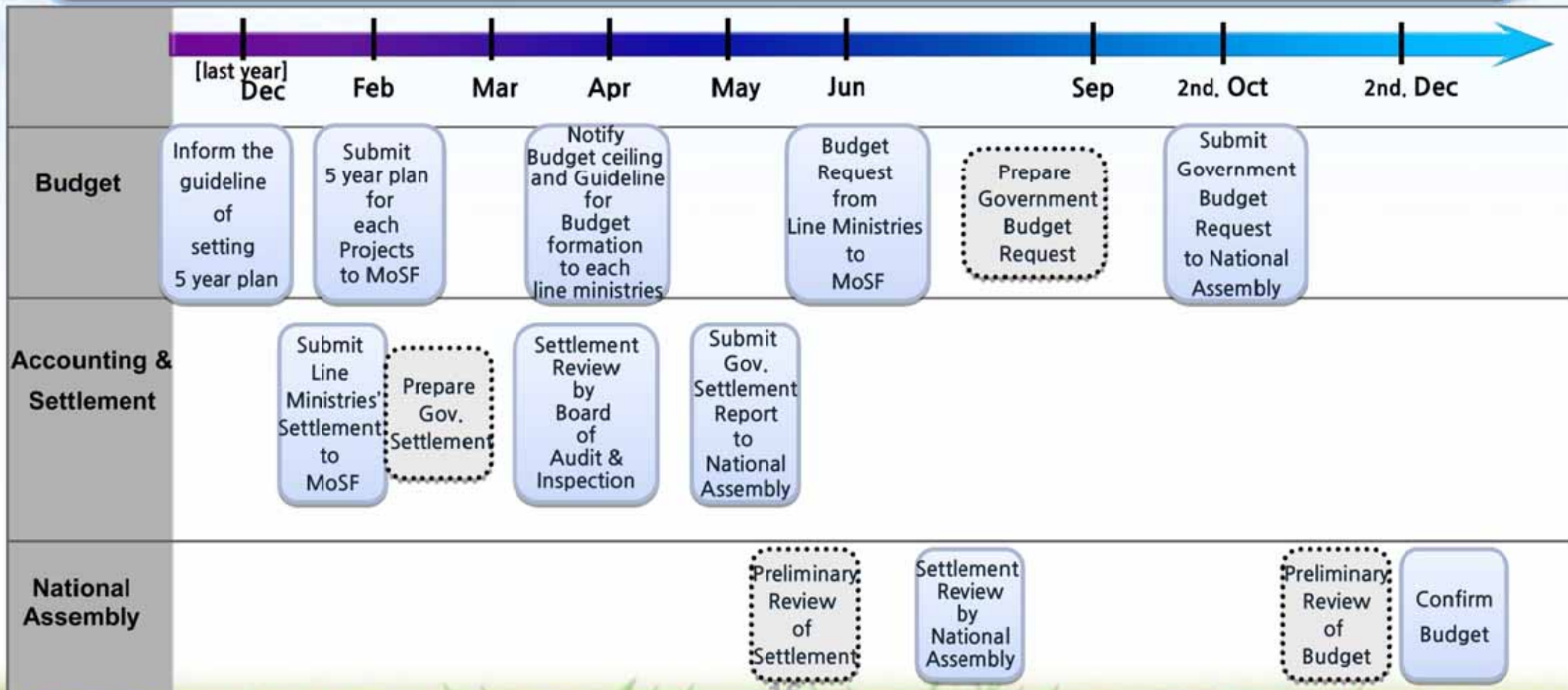
1. Budget and Accounting system

- **Fiscal Year : January 1 ~ December 31**
- **Budget institution**
 - National Fiscal Management Plan
 - Program Budgeting
 - Top-down Budgeting system
- **Accounting·Settlement institution**
 - Budget accounting(Cash basis) - Budget Settlement
 - Financial accounting(Accrual basis) - Financial Settlement

III. Fiscal Operation system of Korea

2. Fiscal Operation Calendar of Korea

- Inform the limit of expenditure, guideline of budget formation → Request and Adjustment → Submit budget proposal to The National Assembly → Budget deliberation and resolution





IV

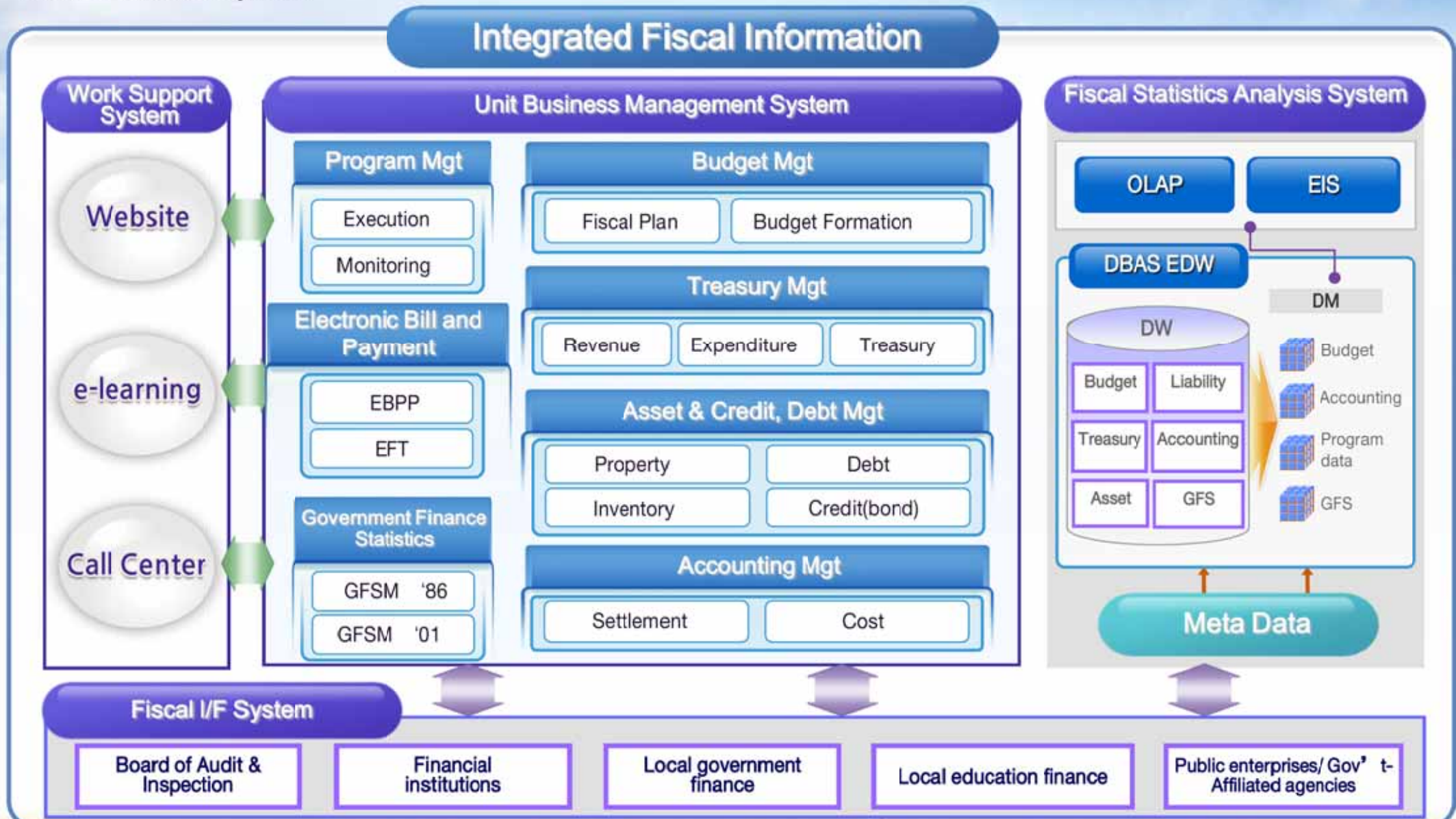
Components and Functions



IV. Components and Functions

1. Outlay of Composition

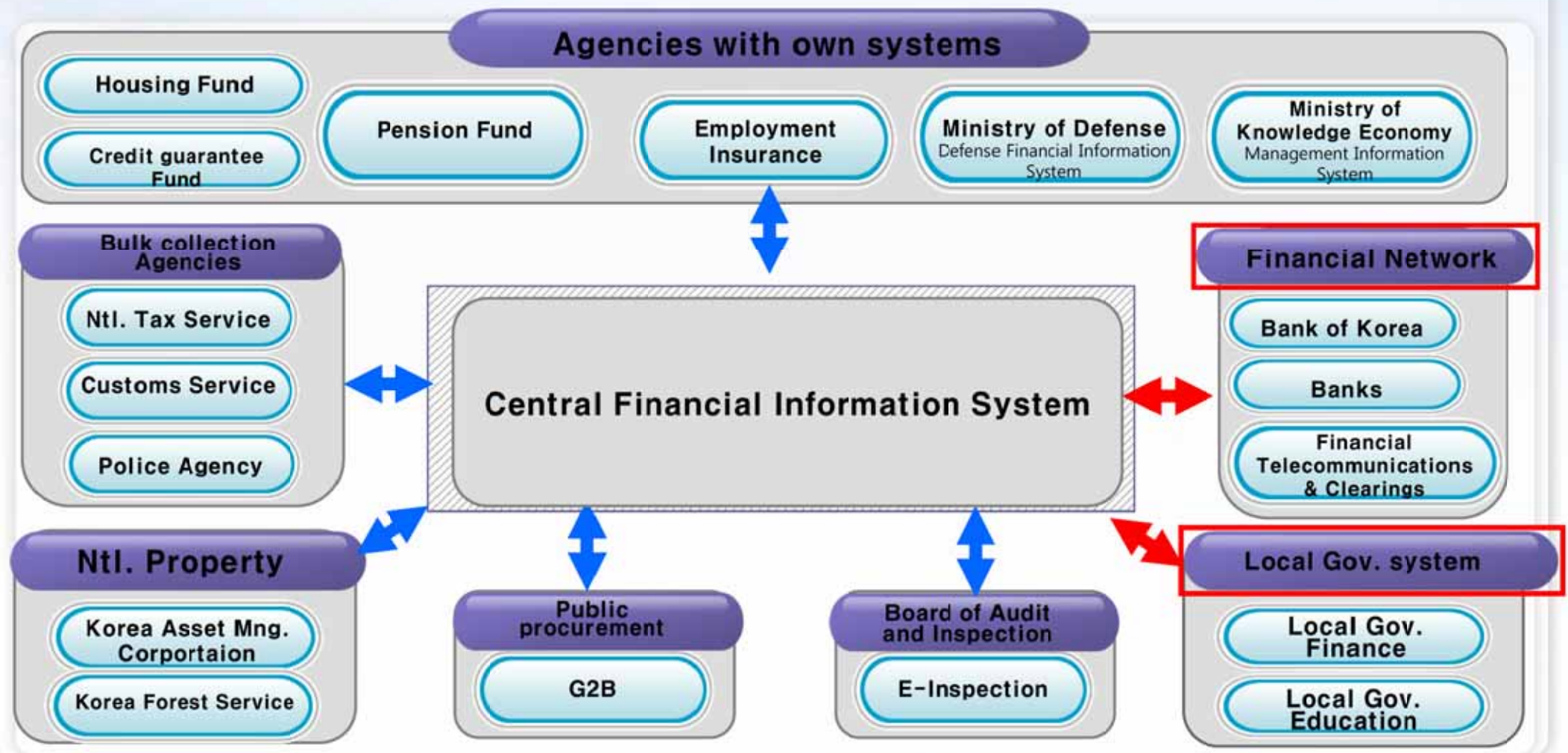
Approximately 20 sub-systems (Project Management/ Budget/Accounting/Statistical Analysis, etc) and external interface system.



IV. Components and Functions

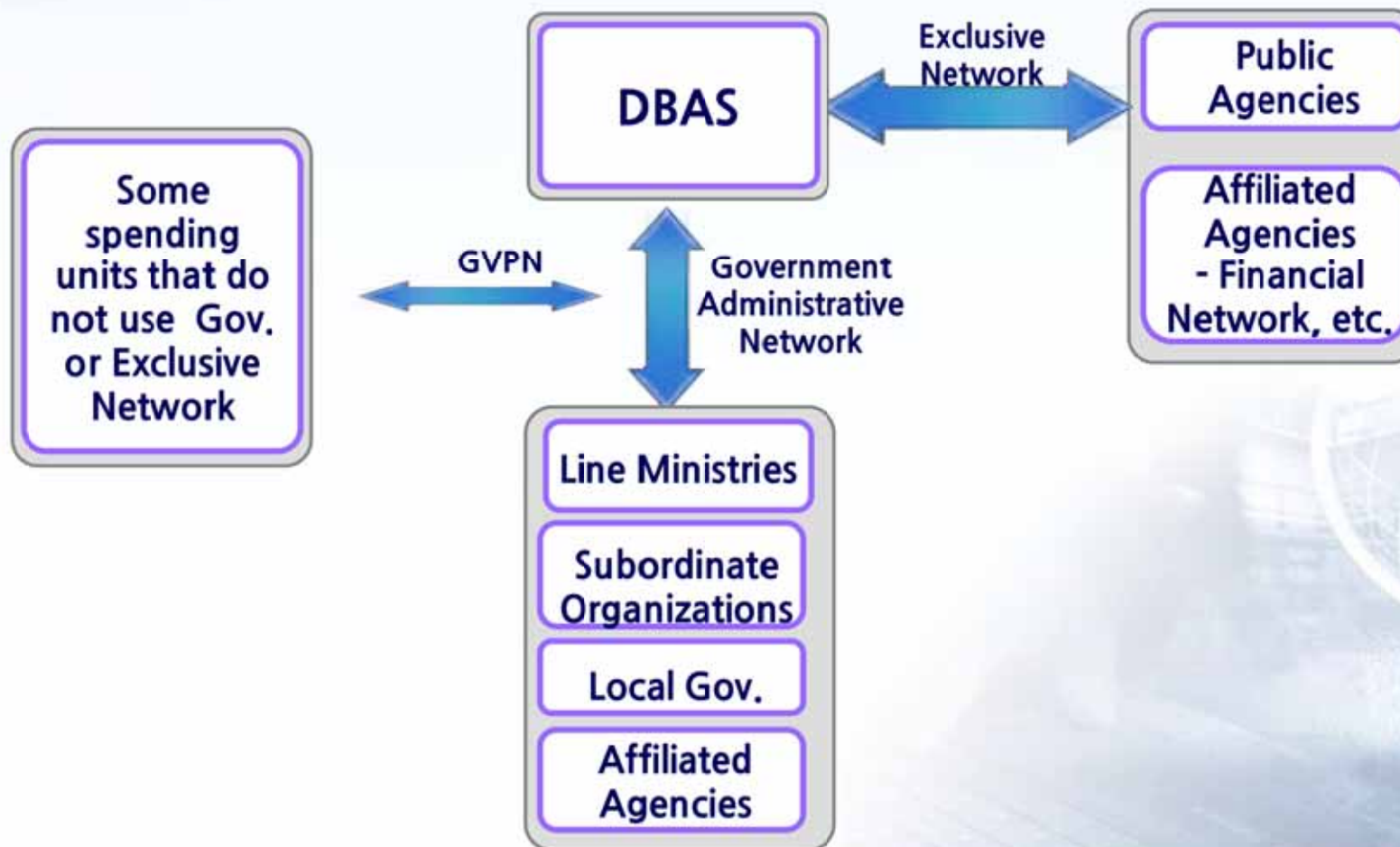
<Interface with External systems>

- DBAS connects with related systems to integrate financial informations
- Autonomous Local Gov., Separate fiscal systems, Collection(tax&customs) Org., Financial Network, Etc.



IV. Components and Functions

<Network>



IV. Components and Functions

<Web- Portal>

- Portal through which all the Ministries, Subordinate Organizations and their Local offices access dBrain

IV. Components and Functions

<Web- Portal>

- [To Do] -> Access to each Unit system

The screenshot displays the 'Digital Budget & Accounting System' web portal. At the top, there is a navigation bar with tabs for 'progress', 'Project management', 'Budget formation', 'Budget execution', 'Payrolls', 'Investment', and 'Fund Plan'. Below this, a user profile section shows the date '2011.08.24 (수) 장승희 미현석' and options for 'Favorite' and 'My work'. A left sidebar lists various system functions such as 'Program management', 'Budget formation', 'Budget execution', 'Investment program', 'Fund plan', 'Revenue', 'Expenditure', 'National property', 'Inventories', 'Procurement', 'Accounts settlement', and 'Favorites list setting'. The main content area features a search and filter section with fields for 'fiscal year' (set to 2012), 'field', 'unit program', 'Ministry' (set to 10, Ministry of Strategy and Finance), 'Sector', and 'Project'. A large dropdown menu is open on the right side of the main area, listing various administrative and financial functions including 'Treasury management', 'Fund Surplus management', 'Foreign borrowing', 'Loan', 'Domestic borrowing', 'Public Fund Operation', 'Treasury status', 'Revenue', 'Expenditure', 'National Asset', 'Inventory', 'Procurement (contract)', 'Credit', 'Debt', 'Accounting & Settlement', 'Cost', 'Government Financial Statistics', 'EBPP (Electronic Bill)', 'EFT (Electronic Funds Transfer)', 'Statistical analysis', 'Electronic Approval', 'Authorization and Offices', 'Base (Key) information', and 'Template'. At the bottom of the main area, there is a checkbox for '노드확장여부' and a warning message in Korean regarding user permissions and system access.

IV. Components and Functions

2. Project Management

- Manage Life-Cycle of fiscal project from register, formation, allocation, expenditure, management of its assets and debts, to termination of the project

Project management system portal

Project Mgt System

1

Lifecycle management

Register project

Budget

Credit, Debt

Treasury

Settlement

Asset

Cost

Termination

Request

2

Unit systems

Budget,

Treasury,

Asset,

Debt,

Accounting

System,

etc.

Program Info

Program Basic Info

Budget

Treasury

Performance

Debt

Settlement

Cost

Asset

Approval

3 Project Monitoring

1

Management of registration, operation and termination of Projects

2

Manage Projects

- Investment Plan
- Budget Formation and Execution
- Asset management
- Accounting and Settlement

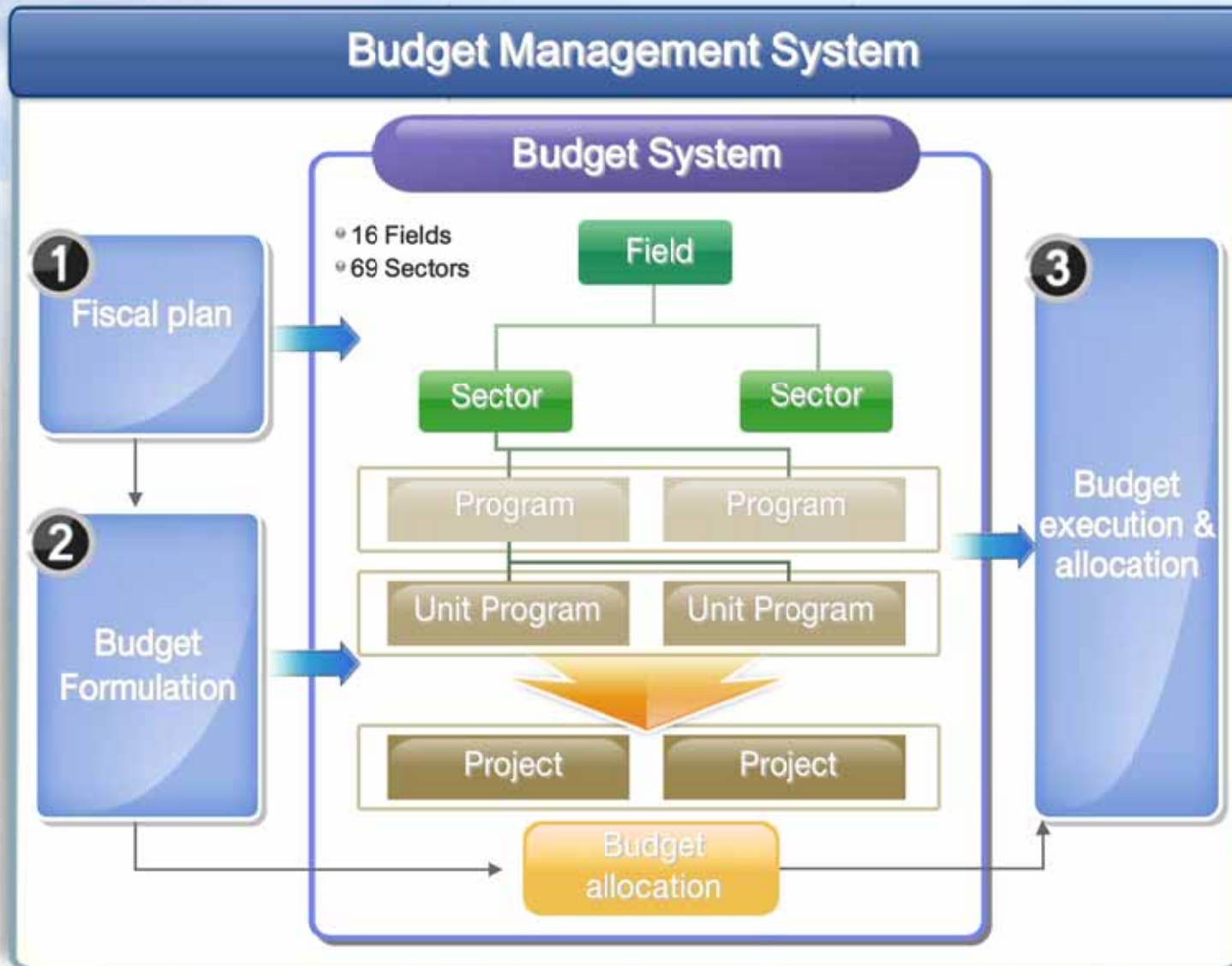
3

Monitoring Program Information

IV. Components and Functions

3. Budget Management System

- Establishing mid-term fiscal plan by budget management system
- Formulation and management of yearly budget

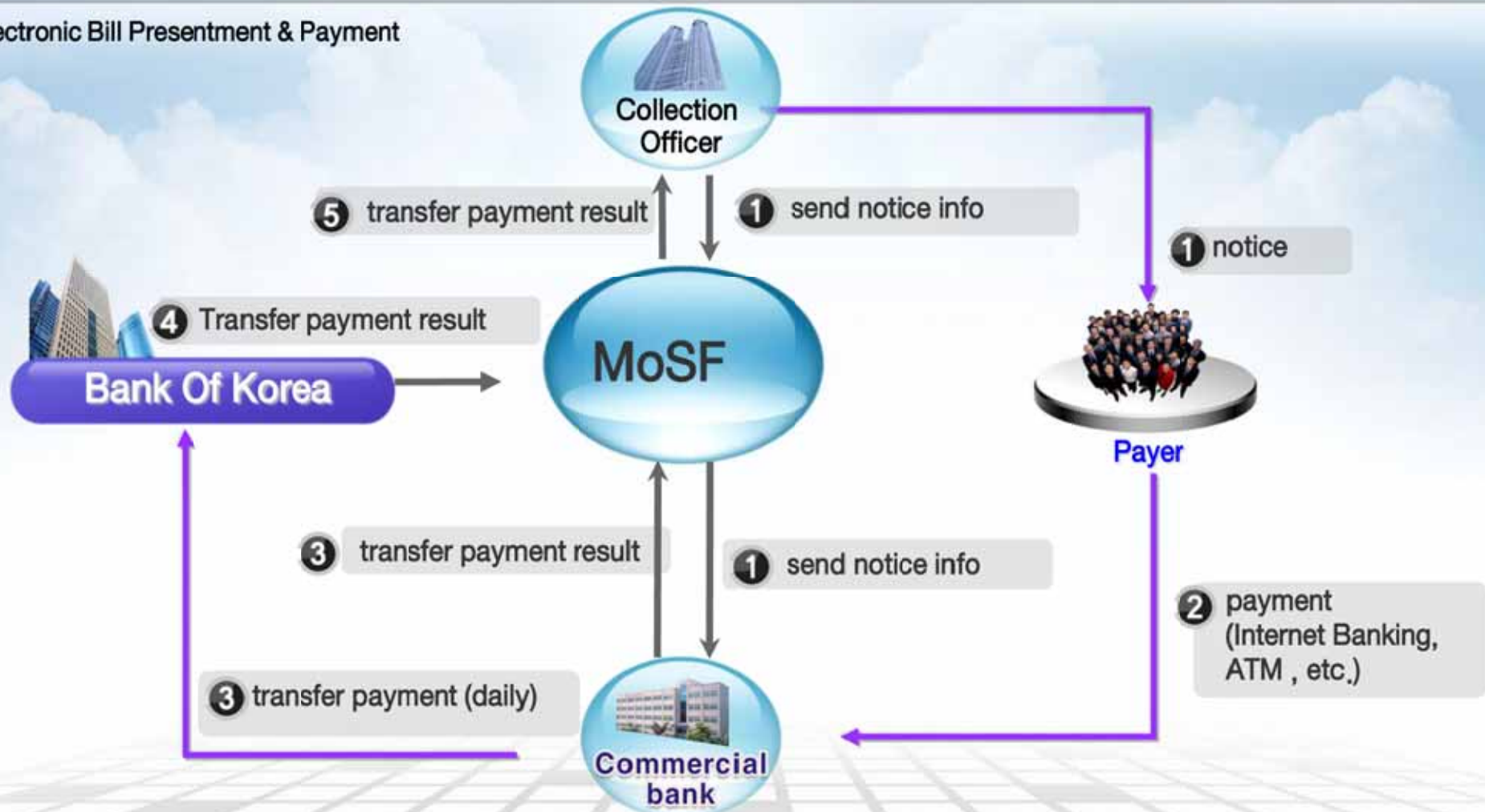


- 1** Establishing mid-term fiscal plan
 - National Fiscal Management Plan
- 2** Yearly Budget Formation
 - Gov. Budget Request
- 3** Budget allocation, execution
 - Periodic allocation :
quaterly
 - Occasional allocation

IV. Components and Functions

- Collecting agency notifies payer, and transfers summary information of notice to dBrain system.
- Payer pays tax by Internet Banking or visiting banks, etc.
- Commercial bank checks and receives noticed payment, and sends results to dBrain through EBPP system

*EBPP : Electronic Bill Presentment & Payment

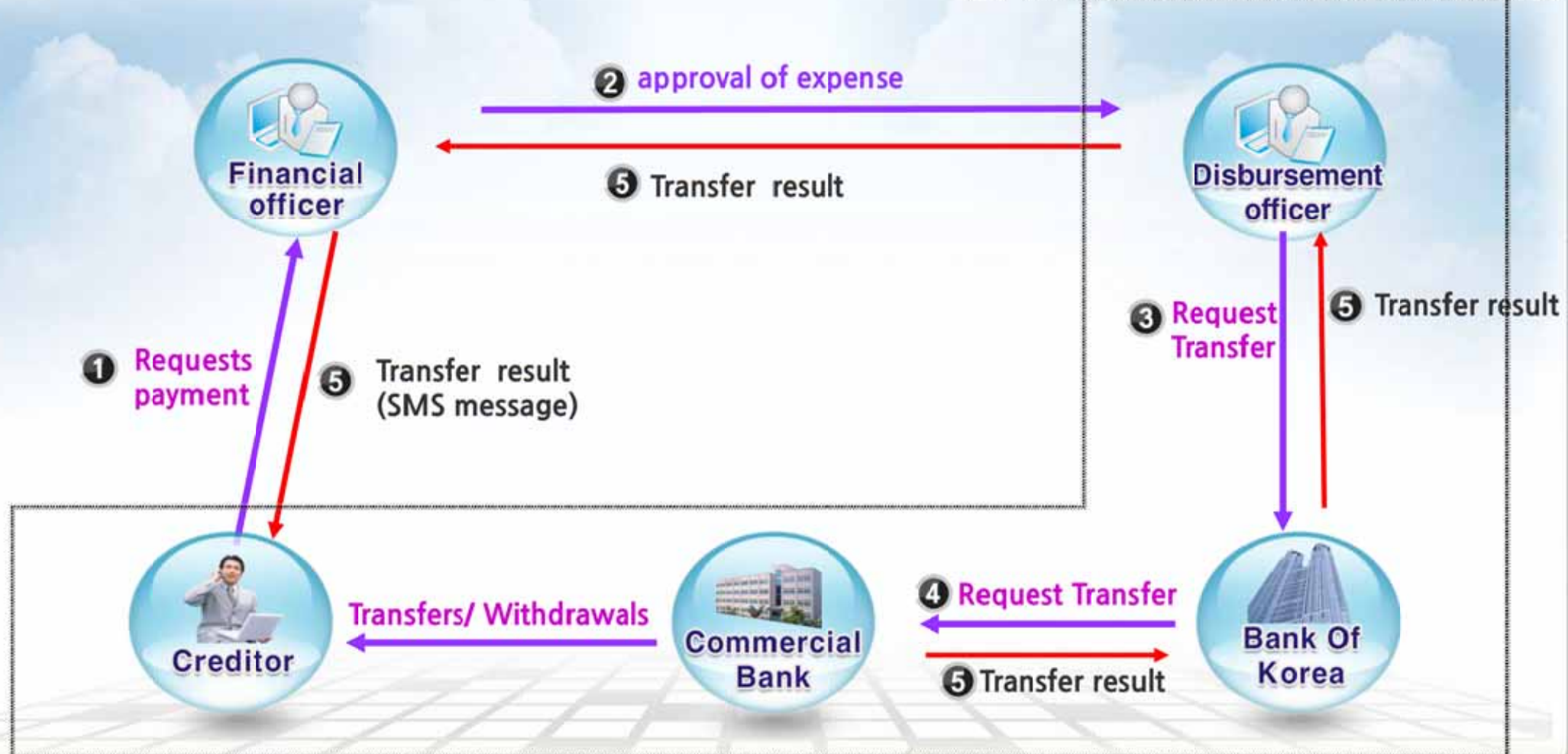


IV. Components and Functions

5. Payment / EFT

- Creditor requests payment for service or goods by internet
- Government internally approves the expense, and demands the Bank of Korea to transfer funds to creditor's account
- Bank of Korea sends the fund-transfer result to dBrain in real-time

• EFT : Electronic Funds Transfer



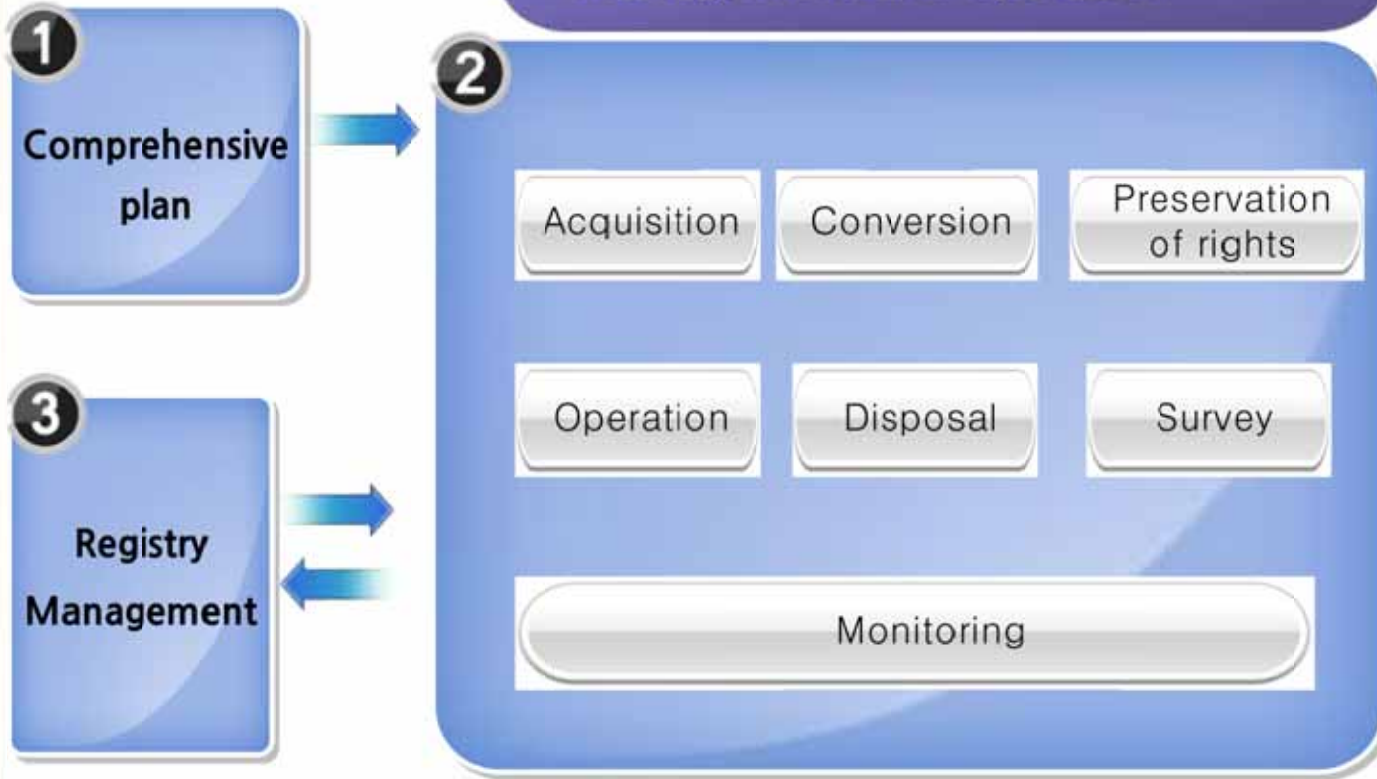
IV. Components and Functions

6. Asset Management

- Function : Comprehensive asset plan, asset management, operation, registry management
- Linked with other sub systems or external systems : Revenue / Expenditure, G2B, Onbid system

Asset management system

Management and operation



1 Comprehensive plan

2 Operation and Management - by plan

3 Registry management

IV. Components and Functions

7. Accounting/ settlement

- Automatic journalizing and management of overall section report
- Two-track Settlement : Budget settlement and Finance settlement
- Same Accounting software used by all spending units

Accrual basis of accounting

Accrual basis

Cash transaction

transaction

- Collection
- Approval of expenditure
- Acquisition of assets
- disposal of assets
-

Cash basis of accounting

Cash payment

Non-cash transaction

Fluctuation of assets and debt

- Change assets
- Transfer assets
-

Settlement modification

- reserve fund
- depreciation
-

Automatic journalizing module

Budget Settlement

List of Revenue and Expenditure

General Ledger

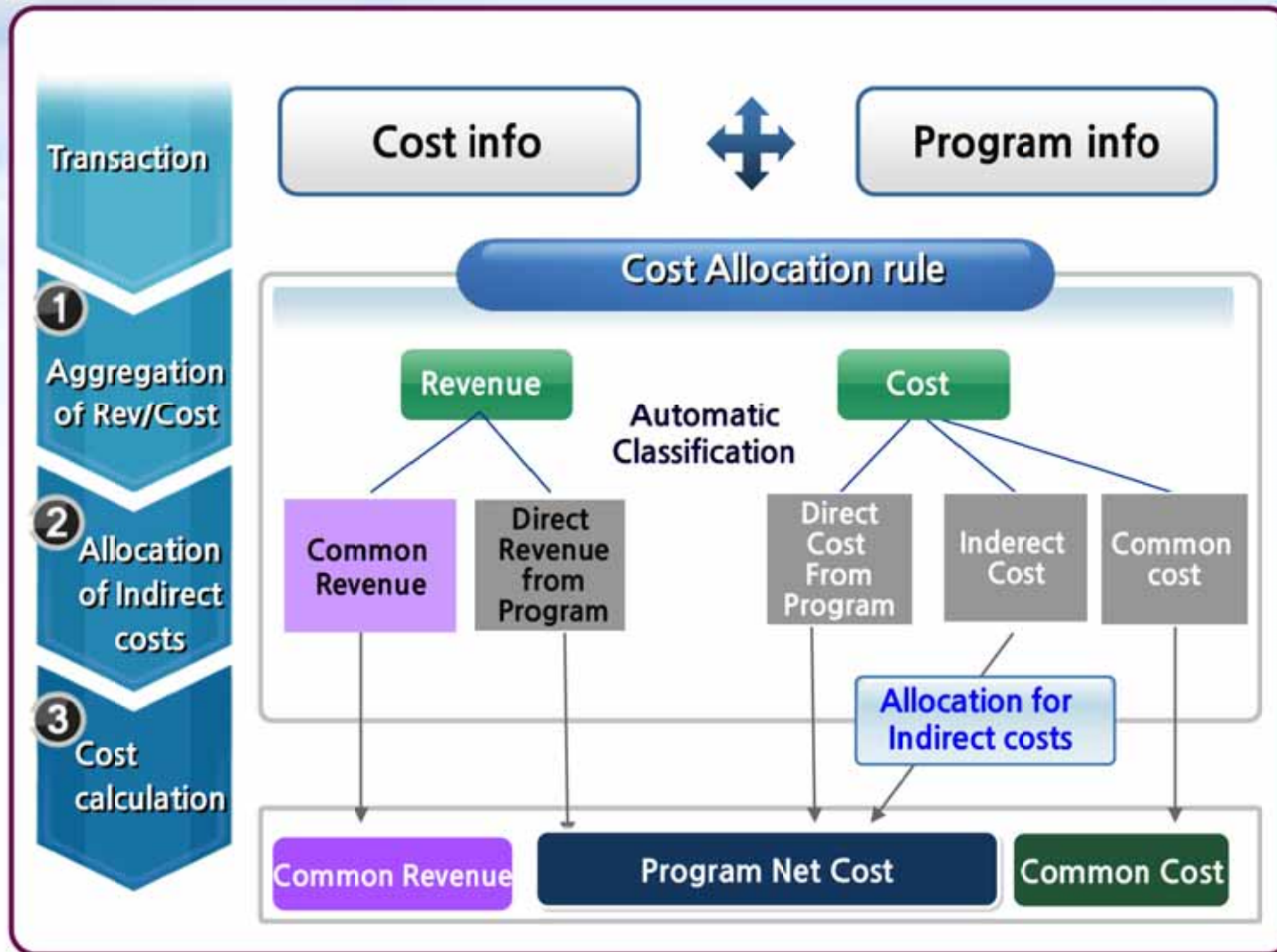
Finance settlement

- 1 Automatic journalizing
- 2 Record on Accounting Books in real-time
 - Revenue/Expenditure book
 - Journal
 - General Ledger
 - Subsidiary Ledger by Info. Items
 - Trial and Balance
- 3 Two-track settlement
 - Budget Settlement
 - Program Settlement
 - Attached specifications
 - Financial Settlement
 - Statement of Fiscal Operation
 - Statement of Fiscal Status
 - Notes
 - Required Supplementary Info.
 - Attached specifications

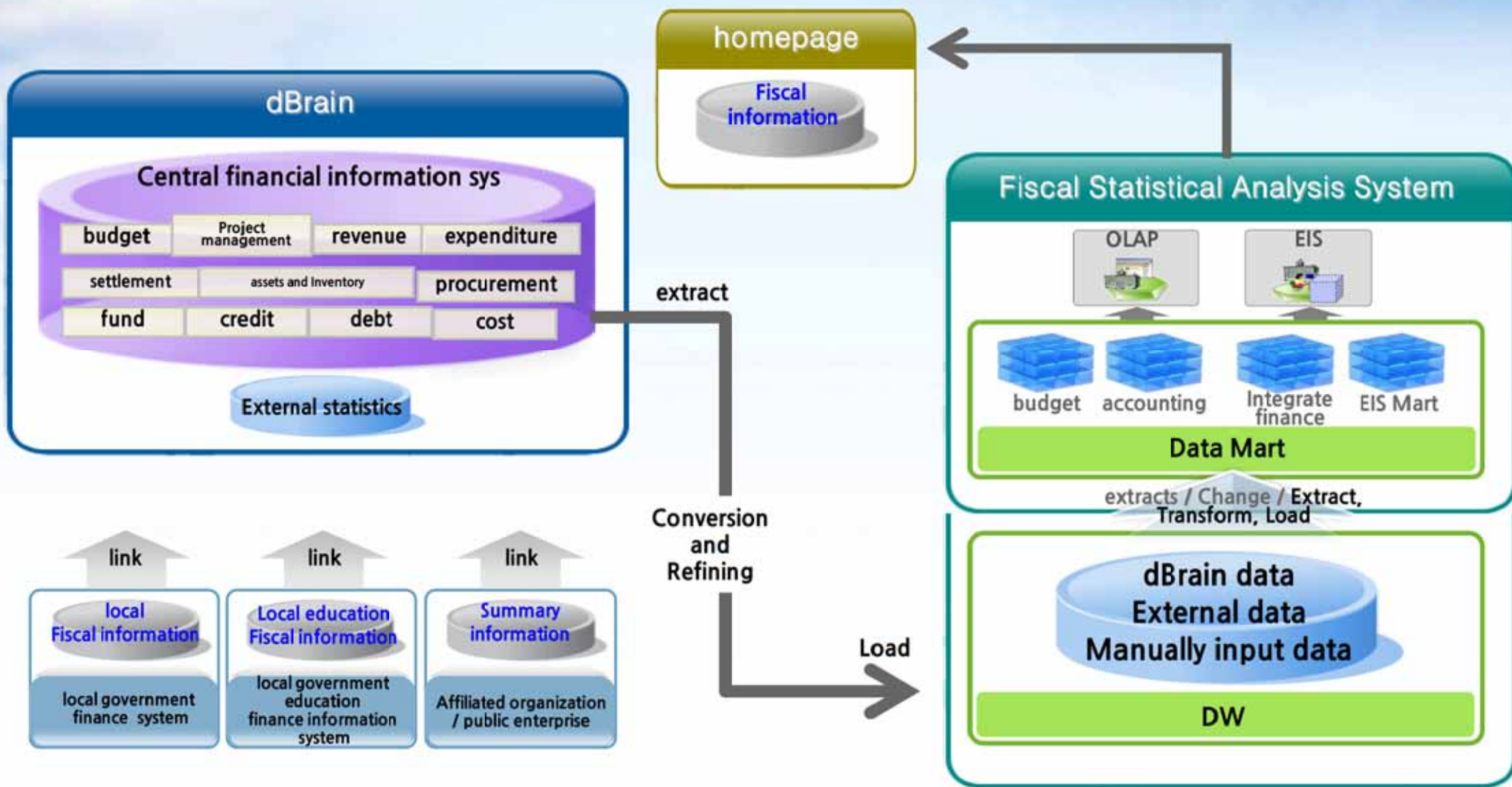
IV. Components and Functions

7. Accounting/ settlement

- Automatic classification and allocation of costs



- 1 Classify transactions cost informations in real time
- 2 Allocating indirect costs according to rules
- direct cost, personnell expenses, area, etc.
- 3 Support various types of reports
- by projects



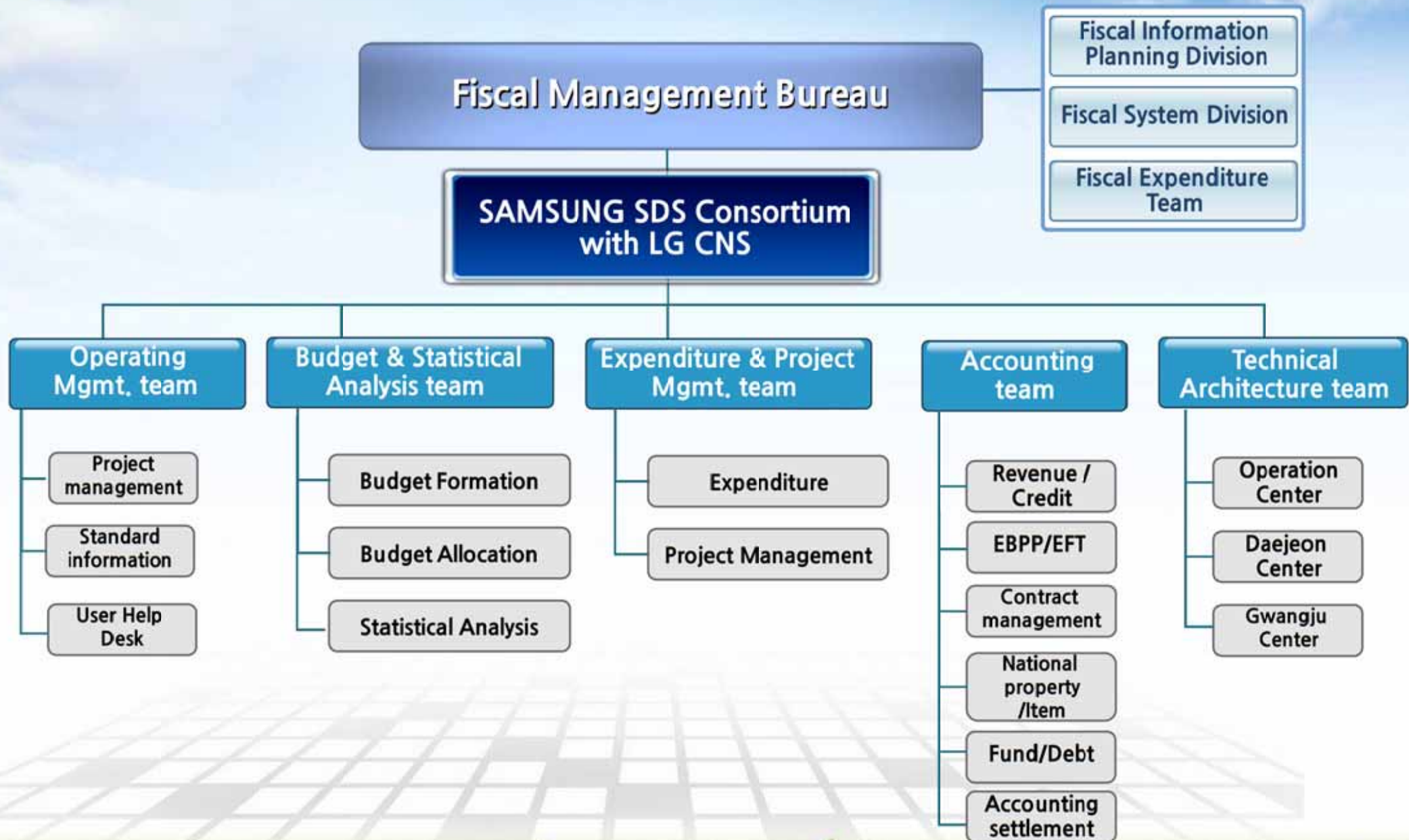


Operation & Maintenance



V. Operation and Maintenance

Organization Chart



V. Operation and Maintenance

Users

• User organizations and Users

Organization	User	Authorized Role	Function
Line Ministries (including Subordinate Organizations)	Officers in charge of Fiscal operations : Budget, Treasury, Accounting , etc.	CFO, Project Manager, Collection officer, Financial officer, Disbursement officer, Accounting officer, Asset Manager,etc.	Budget, Revenue · Payment, Cash · Asset · Debt, Accounting · Settlement
Public Agencies	Personnel Entrusted with Central Gov. business	Collection officer, Financial officer, Disbursement officer, Asset Manager	Revenue · Payment, Asset
Local Govs.	Officers Entrusted with Central Gov. business	Collection officer, Financial officer, Disbursement officer, Asset Manager	Revenue · Payment, Asset

V. Operation and Maintenance

● Number of users : 58,302

- budget : 11,345
- project management : 49,233
- revenue, expenditure : 38,257
- asset, inventory : 38,966

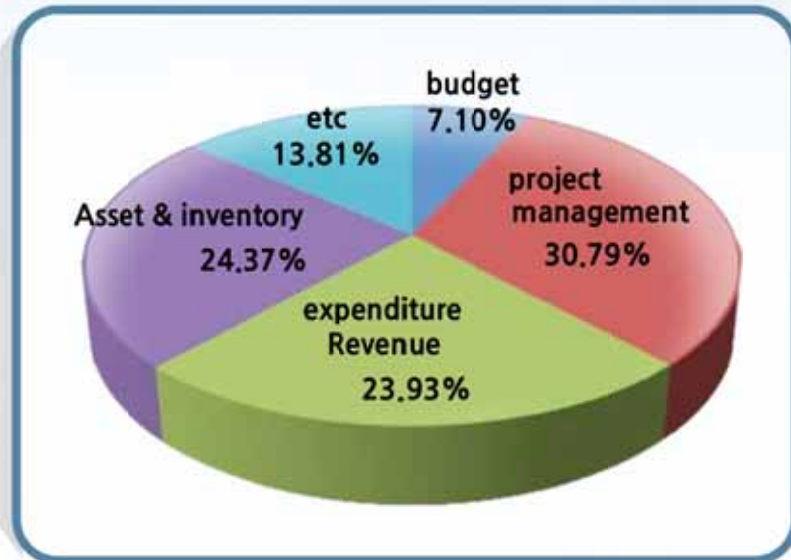
● Transactions processed(2010)

- 300,000 transactions by 14,000 users per day
- payment about 4.6 trillion won(4.3 billion dollar) on a daily basis

● Support for users(2010)

- user support center : 257 calls/day
- Q&A : 101 answers/day

※ level of user satisfaction : 52.6 point(2008) → 55.9 (2009) → 62.4 (2010)



V. Operation and Maintenance

Main Fiscal Information from centralized database

Class	Cycle
Revenue Status	Daily, Monthly, Yearly
Expenditure Status	Daily, Monthly, Yearly
National Asset Status	Daily, Monthly, Yearly
National Credit Status	Daily, Monthly, Yearly
Debt Status	Daily, Monthly, Yearly
Integrated Fiscal Balance Report	Monthly, Yearly
Gov Settlement	Yearly



VI

Future Plans



VI. Future Plan

- Develop performance management system(2011)
- Improve analysis system and forecasting(2011~)
 - Data Mining, Simulation, etc.
- Improve cost management system
 - ABC(Activity Based Cost) management





Thank you.