



SAP Finance
Knowledge Transfer Sessions
PS Knowledge Transfer

Agenda

- 🌀 Overview
- 🌀 Module 1: SAP System Landscape
- 🌀 Module 2: Financial Accounting (FI)
- 🌀 Module 3: Controlling (CO)
- 🌀 Module 4: Project Systems (PS)
- 🌀 Module 5: Learning Activities
- 🌀 Review and Summary

Course Learning Objectives

- Upon completion of this course, you should be able to:
 - List SAP Modules with emphasis on FI,CO and PS
 - Knowledge of key data elements between STARS and SAP

Benefits of the SCEIS SAP Financial System



- Integrated system
- Real-time queries and reports
- Documents can be parked
- Drill down capabilities
- Direct postings
- Real time reporting
- Postings to one ledger

Key Changes



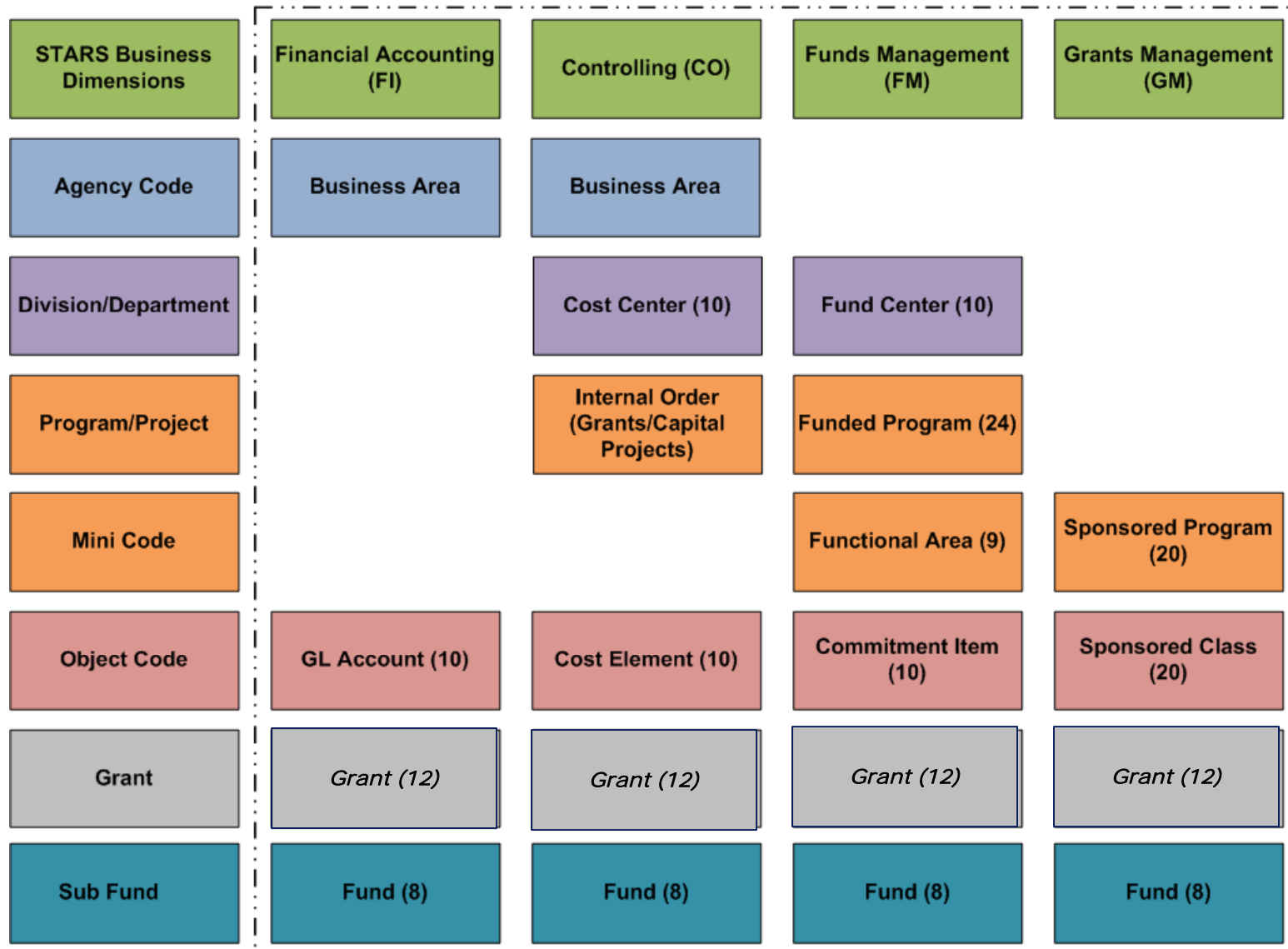
- One system (no longer an agency system and STARS)
- Results are posted immediately to balances
- Consistent financial system among agencies

Master Data Overview

- Most FI transactions will require the following SAP Master Data Items to be entered:

SAP	STARS
Cost Center (CO)	Department
Functional Area	Agency / Mini code
Fund (FM)	Sub-fund
G/L Account (GL)	Object Code
Grant (GM)	Project/Phase
Business Area (FI)	Agency

SCEIS FI Data Structure & Integration





Module 1: SAP System Landscape

Module 1 Learning Objectives

- Upon completion of this module, you should be able to:
 - Define key terms and concepts.
 - Describe the SAP modules and how they interact with the finance modules.
 - Explain what each Finance (FI) module does.

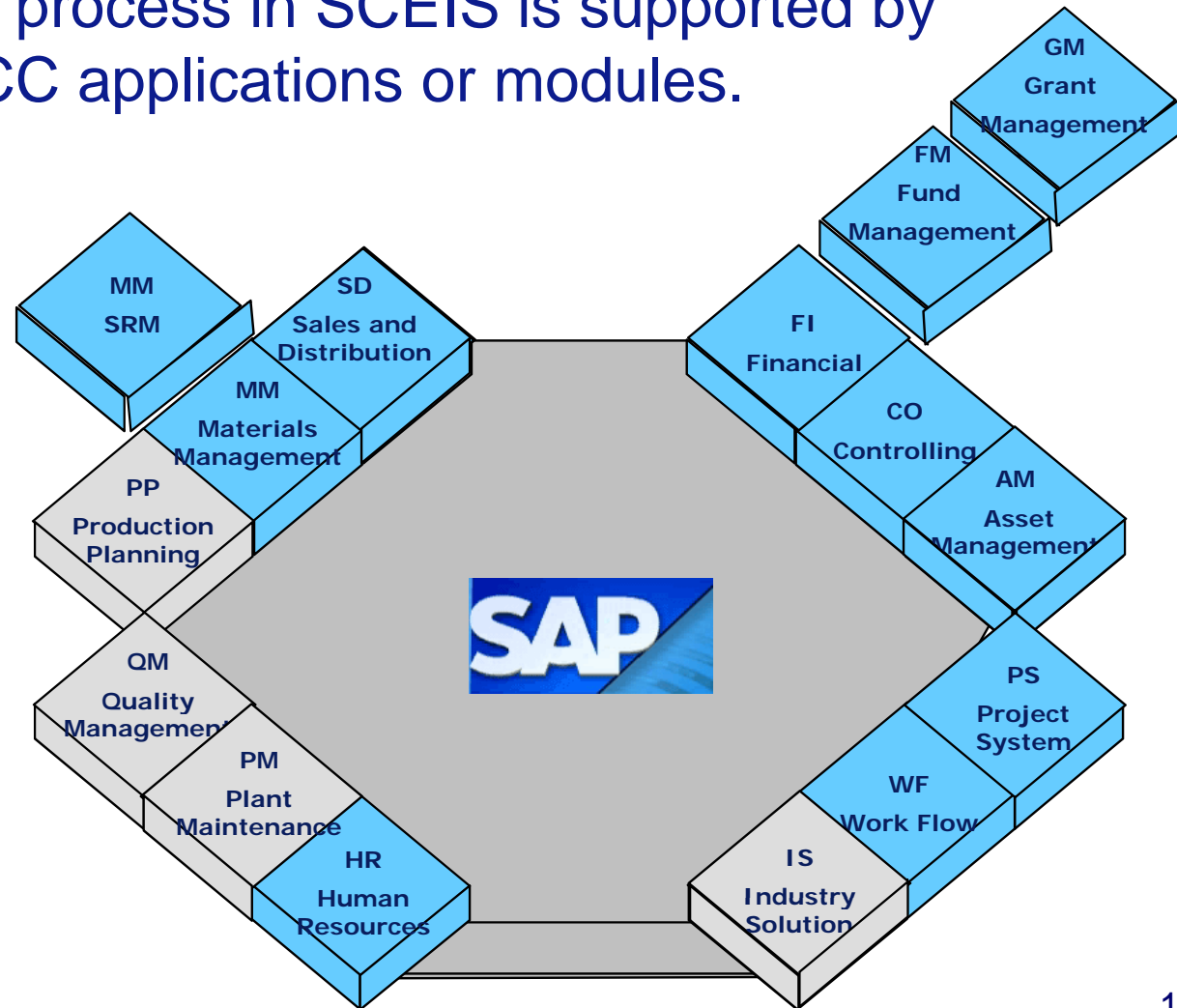
Key Terms and Concepts

- Master Data
- Transactional Data



SAP Modules

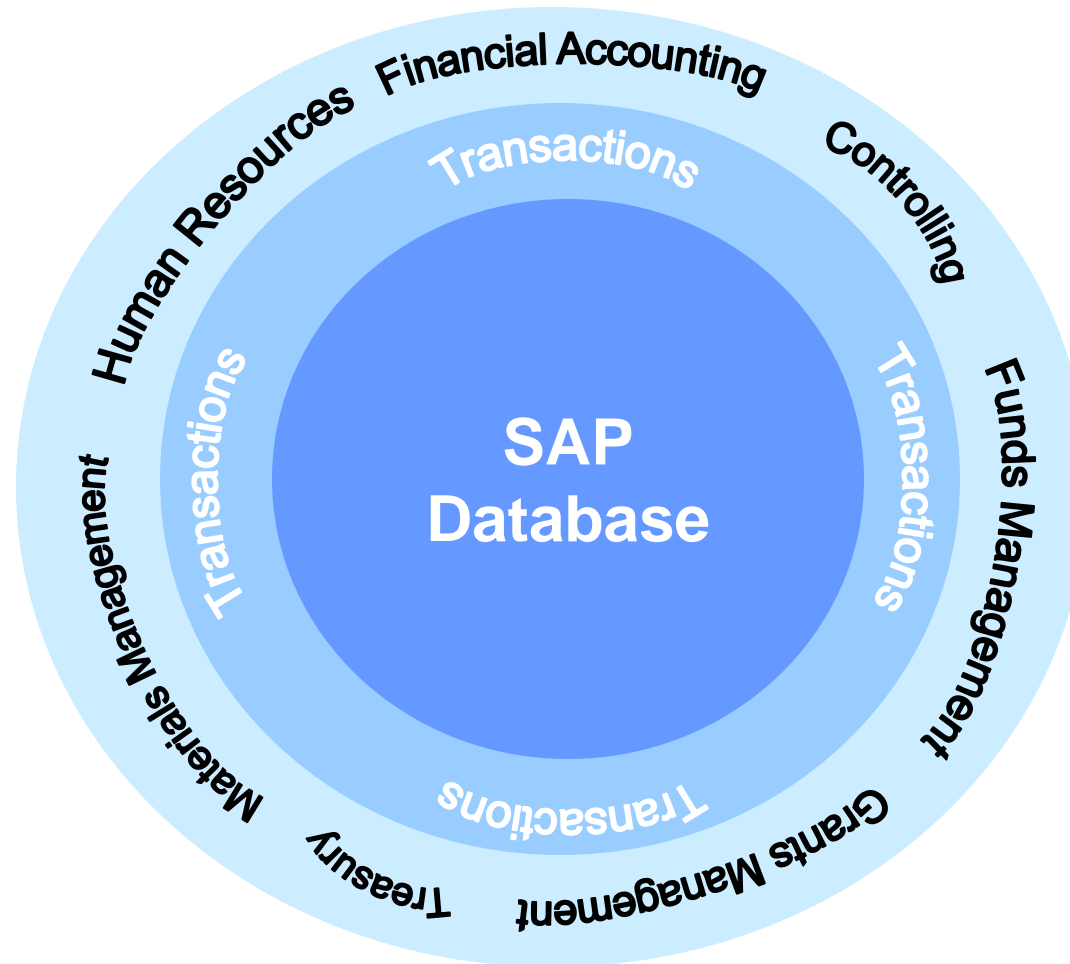
- Every business process in SCEIS is supported by one or more ECC applications or modules.
- ECC is the underlying technology upon which the individual SAP components or modules are built.



SAP Modules, cont.

- All the SAP modules are tightly interlinked and feed data to one another.
 - Data entered in one module are available to all modules.
 - Data are available for display or print immediately after entered.

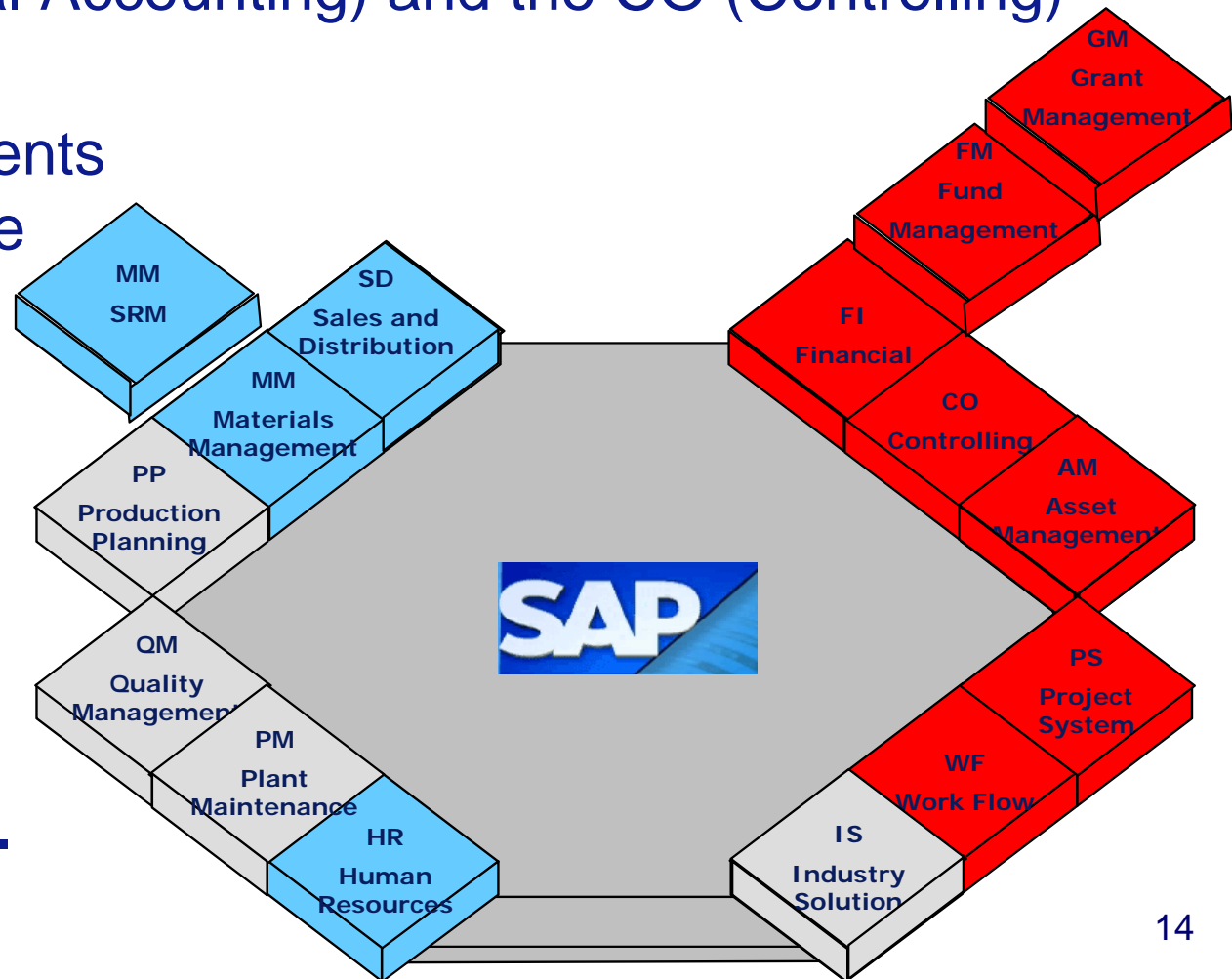
SAP Modules, cont.



Financial Modules Overview

- Finance and Accounting functions are primarily practiced in the FI (Financial Accounting) and the CO (Controlling) Modules.

- These components of SAP ECC are independent applications, but most data in these modules are fed automatically from the others.



Financial Modules Overview, cont.

- The Financial Accounting (FI) Module represents the Financial General Ledger, Accounts Payable, Accounts Receivable and Assets sub-modules.
- It is primarily used for external financial statement reporting, vendor payments and credit / collection and receivables management activities.
- FI is made up of several sub-modules that will be used by the State:
 - The **General Ledger (G/L)** is the Financial Book of Record.
 - **Asset Management (AM)** manages assets and their depreciation.
 - **Treasury (TR)** accounts for payments and receipts of cash.
 - **Accounts Payable (AP)** manages vendor invoices.
 - **Accounts Receivable (AR)** manages customer billing.

Controlling (CO) is used:

- For internal reporting and planning.
- Internal orders, cost centers and cost elements collect and categorize costs.
- Costs can be allocated within CO without affecting other modules.
- Information flows from FI to CO through cost elements.

CO may be used for cost reporting and managerial decision making analysis. This is the module to use in determining the cost of a program or project (direct and indirect). CO includes Project Systems.

Module 1 Summary

- You should now be able to:
 - Define key terms and concepts.
 - Describe the SAP modules and how they interact with the finance modules.
 - Explain what each finance module does.



Module 2: Financial Accounting

Module 2 Learning Objectives

- Upon completion of this module, you should be able to:
 - Define key terms and concepts.
 - Identify each sub-module within FI.
 - Describe the account code structure terminology
 - Identify FI master data.
 - Explain how AR, AP and AM elements affect each module.

Key Terms and Concepts

- 🌀 **Chart of Accounts**
- 🌀 **Business Area**
- 🌀 **General Ledger Account**



Key Terms and Concepts

- **Asset Class**
- **Cost Element**
- **Cost Center**

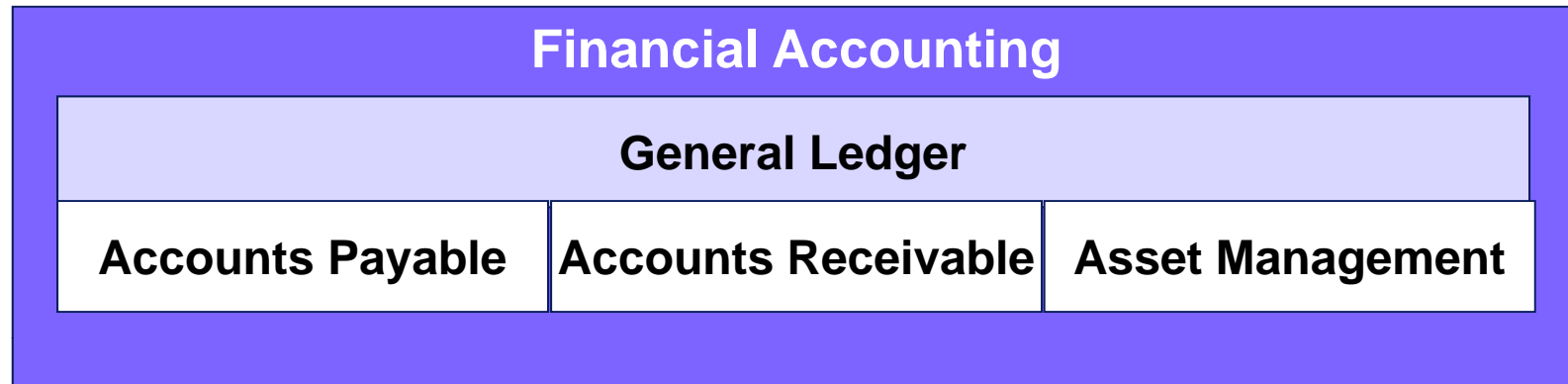


Key Terms and Concepts, cont.

- ④ **Cost Center**
- ④ **Internal Order/Project Systems (WBS)**
- ④ **Posting Key**
- ④ **Document Type**



Financial Accounting Overview (FI)

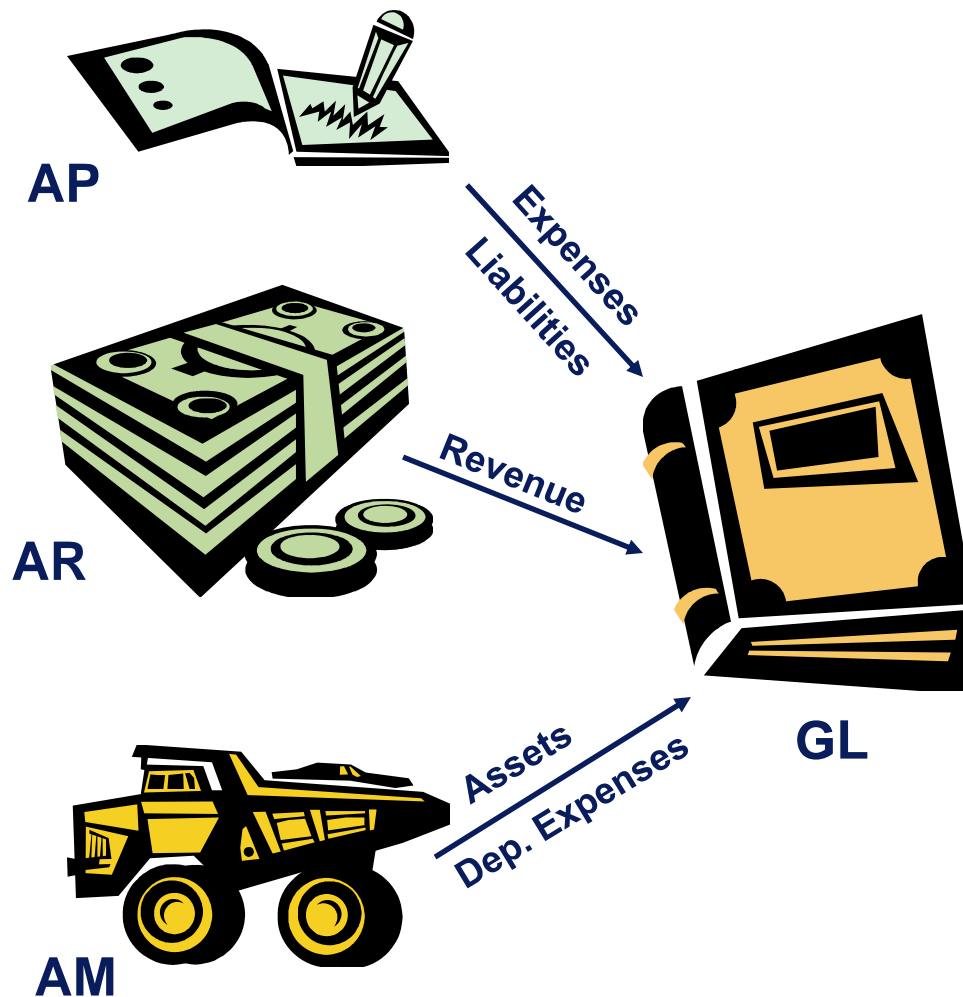


- Financial Accounting is composed of the general ledger and the AP, AR and AM sub-modules:
 - AP is used to pay vendors.
 - AR is used to bill customers.
 - AM is used to track and depreciate assets.
- Financial Accounting is focused on the accounting required for external reporting requirements.

FI – General Ledger

- ④ The base application in Financial Accounting (FI) is the general ledger.
- ④ All business transactions with financial implications are collected in FI-GL.
- ④ The general ledger serves as a complete record of all business transactions. It is the centralized, up-to-date reference for the rendering of accounts.
- ④ It can be updated:
 - automatically from other SAP modules;
 - using manual GL posting documents; or,
 - through rollups from subsidiary ledgers.

Integration with Financial Accounting



- General ledger contains a complete record of financial postings at a summary level.
- Most financial postings are generated through sub-ledgers, which store detailed information.
- Sub-ledgers are tied to the general ledger through the Chart of Accounts.

Module 2 Summary

- You should now be able to:
 - Define key terms and concepts.
 - Identify each sub-module within FI.
 - Identify FI Master data.



Module 3: Controlling

Module 3 Learning Objectives

- Upon completion of this module, you should be able to:
 - Define key terms and concepts.
 - Explain the purpose of the CO module and its relationship with the other modules.
 - State the master data elements within the CO module.
 - Explain the purpose of Project Systems and Work Breakdown Structure (WBS)
 - Explain how this module interfaces with the other Finance (FI) modules.

Key Terms and Concepts

- ④ Controlling Area
- ④ Company Code



Key Terms and Concepts

Cost Element

Key Terms and Concepts

- **Cost Center**
- **Internal Order**
- **Work Breakdown Structure**



Controlling Module (CO)

☉ Controlling is :

- Focused on internal monitoring and control.
- Internal orders, Project Systems, cost centers and cost elements collect and categorize costs.
- Managerial (cost) accounting.

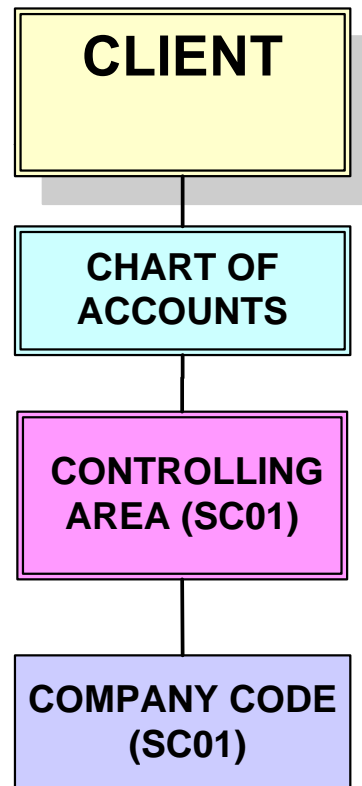
☉ Includes cost allocation functionality.

CO Master Data

- SAP organizational units for financial records are company codes and controlling areas:
 - FI uses company code
 - CO uses controlling area
- A company code defines an independent accounting entity for which P&L, balance sheet, and trial balance can be generated.
- Every financial-based transaction entered in SAP ECC needs a company code designation.
- The State of South Carolina is using only one controlling area and one company code: **SC01**.

CO Master Data, cont.

SCEIS has created the correct organizational structures in place to support your management accounting processes.



CO Master Data, cont.

- ④ Master data is entered into the system once and shared across modules.
- ④ Master data remains unchanged over an extended period of time and contains information that is used in the same manner over and over again.
- ④ The CO modules use the following types of master data to perform management accounting:
 - Cost Centers
 - Internal orders
 - Work Breakdown Structures (PS)
 - Primary cost elements
 - Secondary cost elements

CO Master Data-Cost Center

- ④ Cost centers are master data objects that represent a business area's organizational structure. They can be posted to directly, cleared to/from orders and assessed or allocated to/from other cost centers.
- ④ You will need a cost center if:
 - There is an individual who is responsible for the cost and plan.
 - You want to assign an employee to this level.
 - You want to allocate cost out to other cost centers.
 - You have to receive cost from other cost centers.
 - The cost center represents a long-term, stable component of your reporting structure.

CO Master Data-Cost Center, cont.



- SCEIS Cost Centers are 10 alphanumeric characters used to represent the agency and program office.

The screenshot shows the SAP Standard Hierarchy for Cost Centers Display. The interface includes a menu bar (Standard Hierarchy, Edit, Goto, Extras, Settings, System, Help), a toolbar, and a main display area. The main display area shows a hierarchy of cost centers as of 01/01/2007. The hierarchy is as follows:

- TOT_SC01 (TOTAL STATE OF SOUTH CA...)
 - ECA0000010 (CG ADMINISTRATION SERVL...)
 - EDA0000010 (ADMINISTRATION)
 - TOT_E120 (TOTAL OFFICE OF COMPTR...)
 - TOT_R200 (TOTAL DEPARTMENT OF IN...)
 - R200000010 (AGENCY DIRECTOR)
 - R200_AD (ADMINISTRATION AND STRA...)
 - R200A00000 (ADMINISTRATION DEPUTY D...)
 - R200A00010 (ACCOUNTING/FINANCE/TAX...)
 - R200A00011 (INFORMATION TECHNOLOGY)
 - R200A00012 (HUMAN RESOURCES)
 - R200_FS (FINANCIAL SERVICES)
 - R200_CS (CONSUMER SERVICES / GE...)
 - R200_MS (MARKET SERVICES)
 - TOT_H710 (TOTAL WILL LOU GRAY OPP...)
 - TOT_H870 (TOTAL SC STATE LIBRARY)
 - TOT_E160 (TOTAL OFFICE OF STATE TR...)
 - TOT_F270 (TOTAL OFFICE OF THE STAT...)

The cost centers R200A00000 and R200A00010 are highlighted with a red box. The table below shows the details for these cost centers:

Standard Hierarchy	Name	Activation status	Person respon...	Company code
TOT_SC01	TOTAL STATE OF SOUTH CA...			
ECA0000010	CG ADMINISTRATION SERVL...	■	John Doe	SC01
EDA0000010	ADMINISTRATION	■	TBD	SC01
TOT_E120	TOTAL OFFICE OF COMPTR...			
TOT_R200	TOTAL DEPARTMENT OF IN...			
R200000010	AGENCY DIRECTOR	■	TBD	SC01
R200_AD	ADMINISTRATION AND STRA...			
R200A00000	ADMINISTRATION DEPUTY D...	■	TBD	SC01
R200A00010	ACCOUNTING/FINANCE/TAX...	■	TBD	SC01
R200A00011	INFORMATION TECHNOLOGY	■	TBD	SC01
R200A00012	HUMAN RESOURCES	■	TBD	SC01
R200_FS	FINANCIAL SERVICES			
R200_CS	CONSUMER SERVICES / GE...			
R200_MS	MARKET SERVICES			
TOT_H710	TOTAL WILL LOU GRAY OPP...			
TOT_H870	TOTAL SC STATE LIBRARY			
TOT_E160	TOTAL OFFICE OF STATE TR...			
TOT_F270	TOTAL OFFICE OF THE STAT...			

CO – Internal Order

- Internal orders track the costs for:
 - SPIRS Projects
 - Non-SPIRS Projects
 - Approved Disasters
 - Budgetary Programs
- Internal orders are cost objects that collect costs of a single event

Internal Order Types	Number Range
Non-SPIRS	10000000 – 29999999
Grants	Agency Determined
Approved Disasters	98000000 - 98999999
SPIRS	99000000 - 99999999

CO/PS Why Project Systems ?

- Project System is a complex module designed to manage large, multi-year projects, especially capital-type projects that require settlements to assets under construction.
- Internal orders are designed for simpler, shorter-term operational jobs.

CO/PS Why Project Systems ?

- **Examples:** The following are examples of the different types of jobs and projects, and the applicable functionality that should be used.

Type of Job / Project SAP Functionality to be Used

- | | |
|---|--------------------------------|
| – Move Users to a New Floor | - CO Internal Order |
| – Research project | - CO Internal Order |
| – Create Inventory Forms for Subsequent Consumption | - CO Production Order |
| – Repair Building Cabling | - CO Internal Order (PM Order) |
| – Warranty Work on New Facility | -CO Internal Order (PM Order) |
| – Repair Cracks in Street | - CO Internal Order (PM Order) |
| – Improve a Building Roof | - PS Project |
| – Build a New Facility | - PS Project |
| – Build a New Street | - PS Project |

CO/PS – Work Breakdown Structure

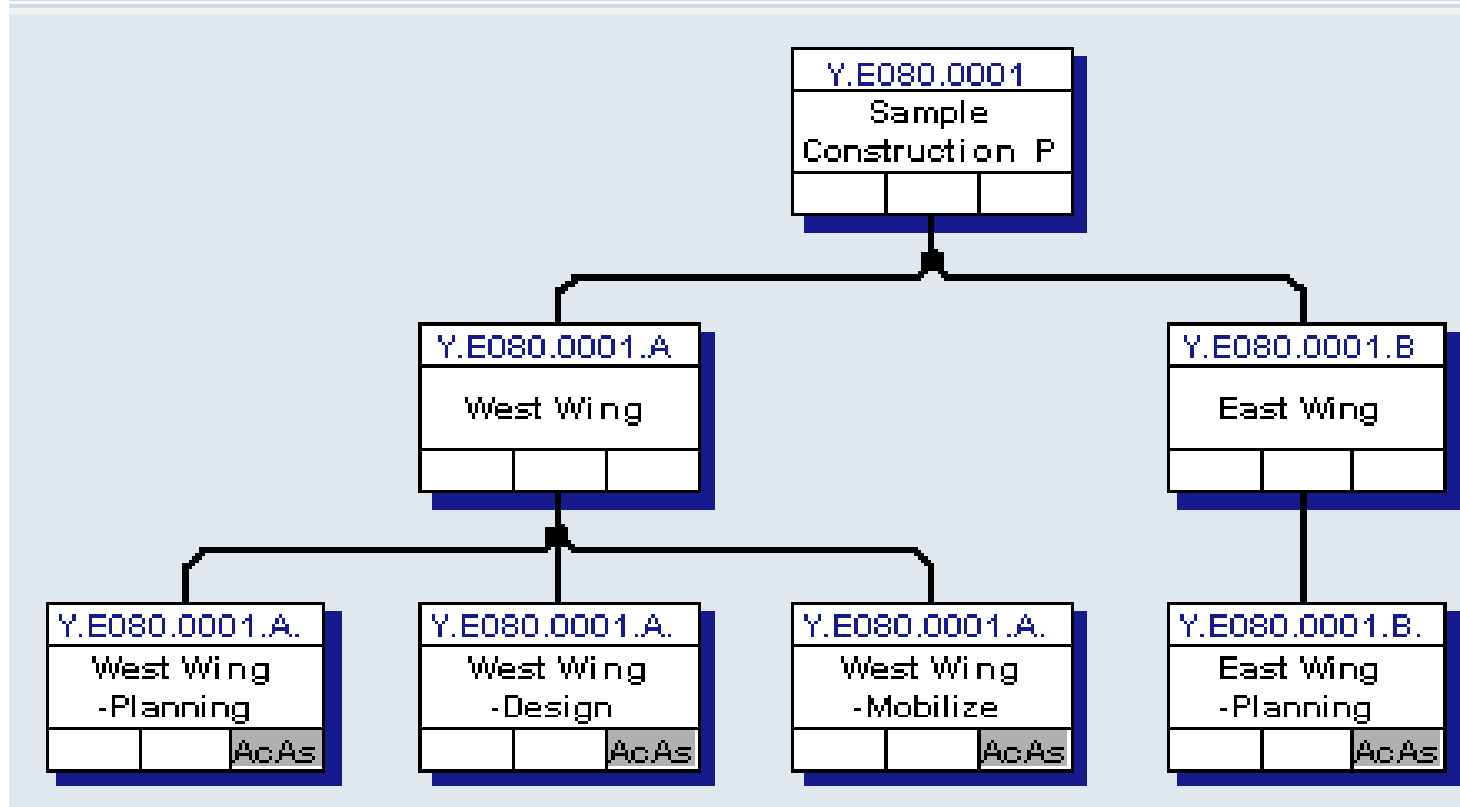
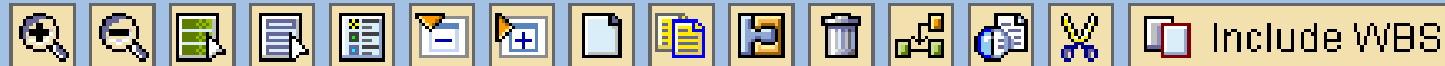


- WBS elements tracks the costs for complex long-term projects.
- WBS elements are arranged in a hierarchies to reflect the work activities of the project
- Expenditures are captured at the lowest WBS level.

CO/PS – Work Breakdown Structure

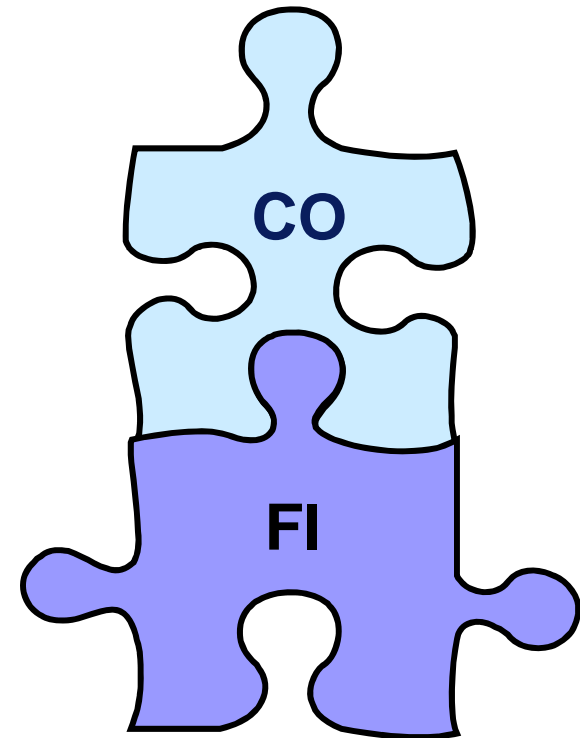


Project Builder: Hierarchy Graphic



FI/CO Integration

- Equivalent cost element for each general ledger expenditure and revenue account.
- Controlling documents are generated automatically from revenue & expenditure financial postings.
- Internal orders or WBS from project systems are entered on financial postings to collect costs.
- Internal orders or WBS from project systems and cost centers are tied to business areas in FI.



Module 3 Summary

- You should now be able to:
 - Define key terms and concepts.
 - Explain the purpose of the CO module and its relationship with the other modules.
 - State the master data elements within the CO module.
 - Explain the purpose of Project Systems and Work Breakdown Structure (WBS)
 - Explain how this module interfaces with the other finance modules.



Module 4: Project Systems

Module 4 Learning Objectives

- Upon completion of this module, you should be able to:
 - Define key terms and concepts in PS
 - Identify the basic structure and function of the PS module.
 - Describe the hierarchy structure terminology.
 - Explain how this module interacts with the other modules.

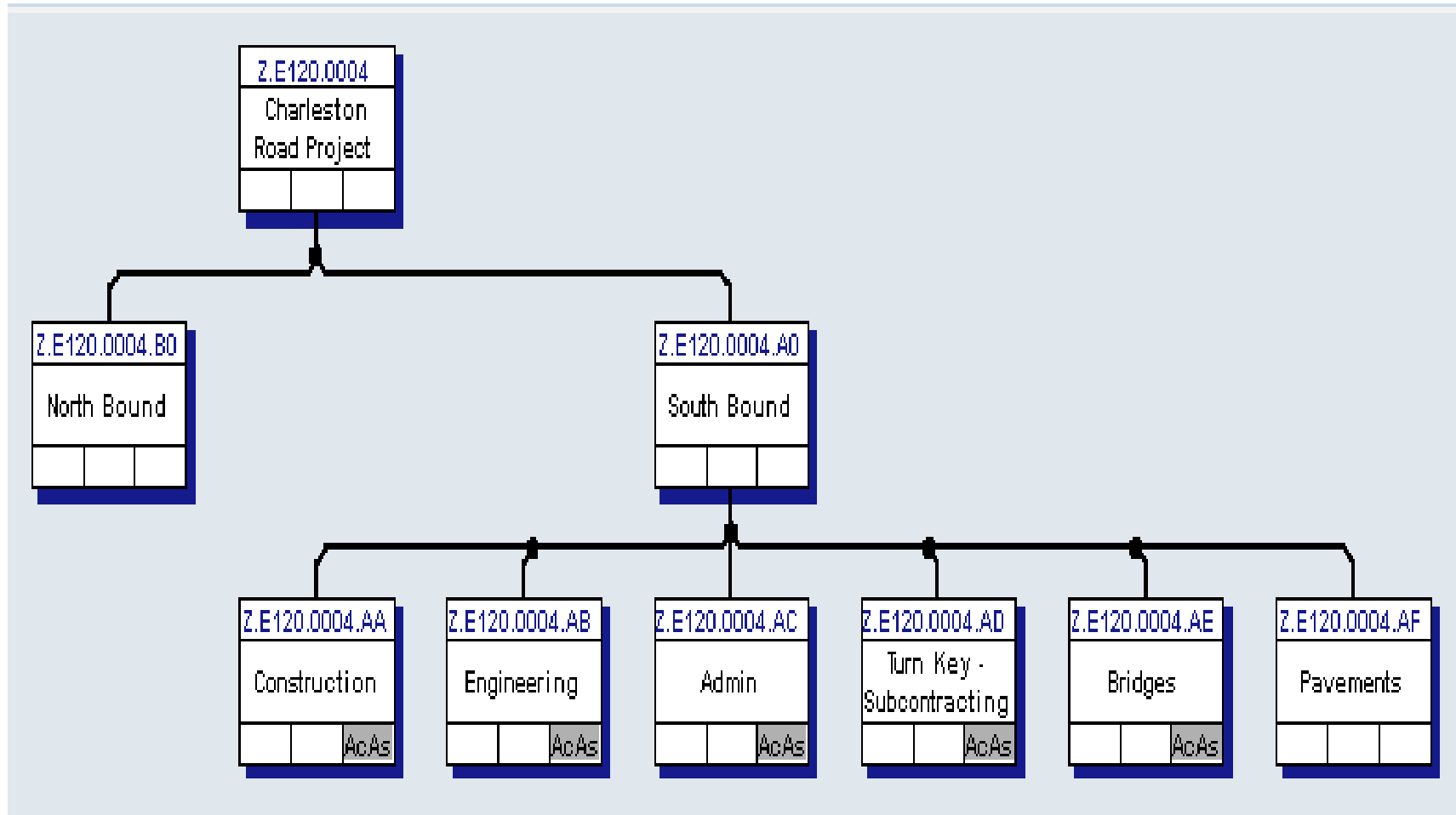
Key Terms and Concepts

- ④ **WBS (Work Breakdown Structure)**
- ④ **Project Structure**
- ④ **Levels**
- ④ **Parent Child relationship**



Work Break Down Structure

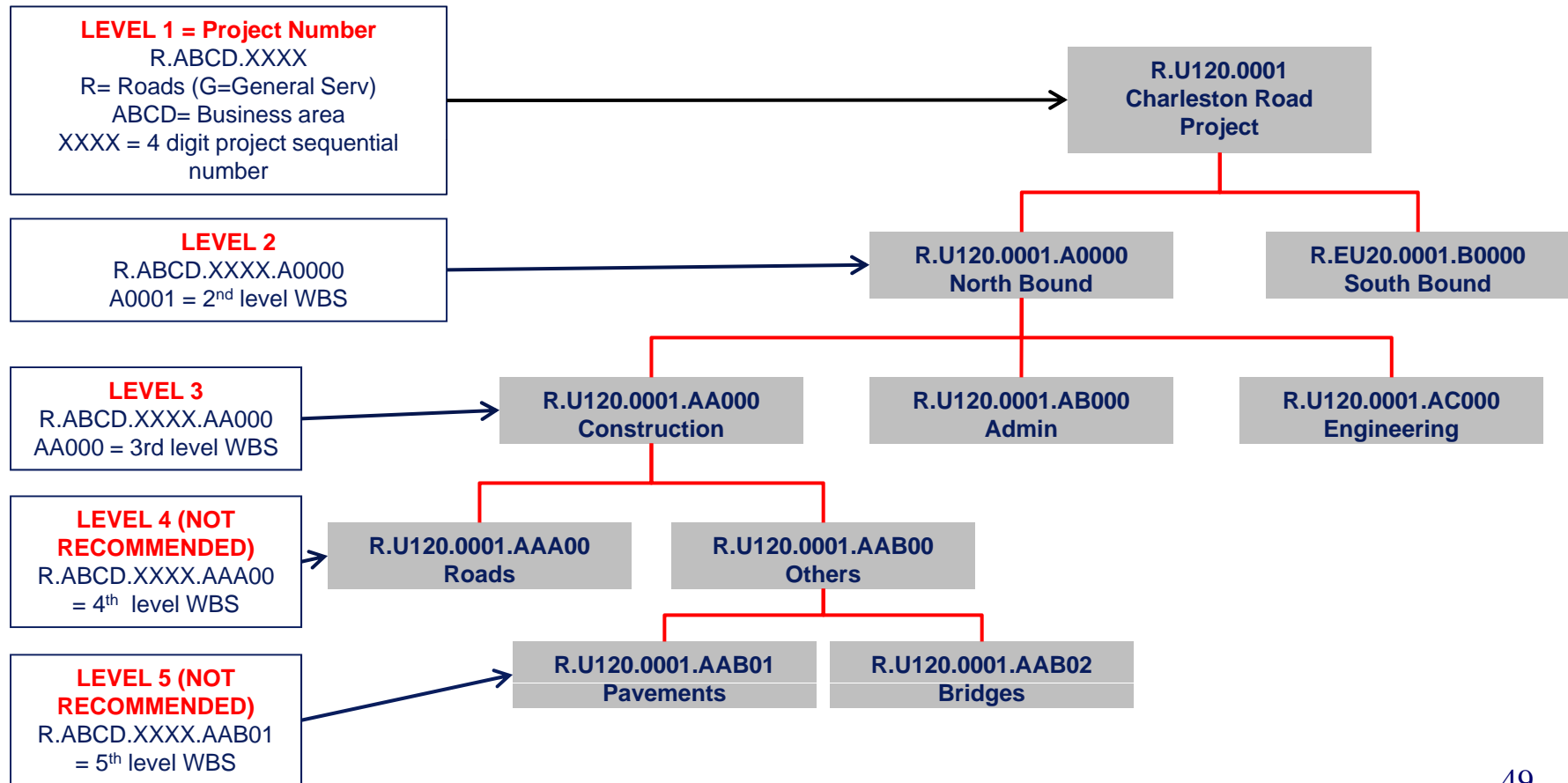
Typical DOT Project



Work Break Down Structure (WBS) = Cost buckets used in Accounting

Work Break Down Structure

Typical DOT Project



Project Structure and naming convention

Proj. det. **Z.E120.0004** Charleston Road Project (CRP)

S...	Le...	WBS element	Description
	1	Z.E120.0004	Charleston Road Project
	2	Z.E120.0004.B0000	North Bound
	2	Z.E120.0004.A0000	South Bound
	3	Z.E120.0004.AA000	Construction
	3	Z.E120.0004.AB000	Engineering
	3	Z.E120.0004.AC000	Admin
	3	Z.E120.0004.AD000	Turn Key - Subcontracting
	3	Z.E120.0004.AE000	Bridges
	3	Z.E120.0004.AF000	Pavements

First Character Z = Unique identifier can be R = Roads// C= Construction// G= General Services

Next 4 characters ABCD = Business area

Next 4 numbers NNNN = Sequential number (project number)

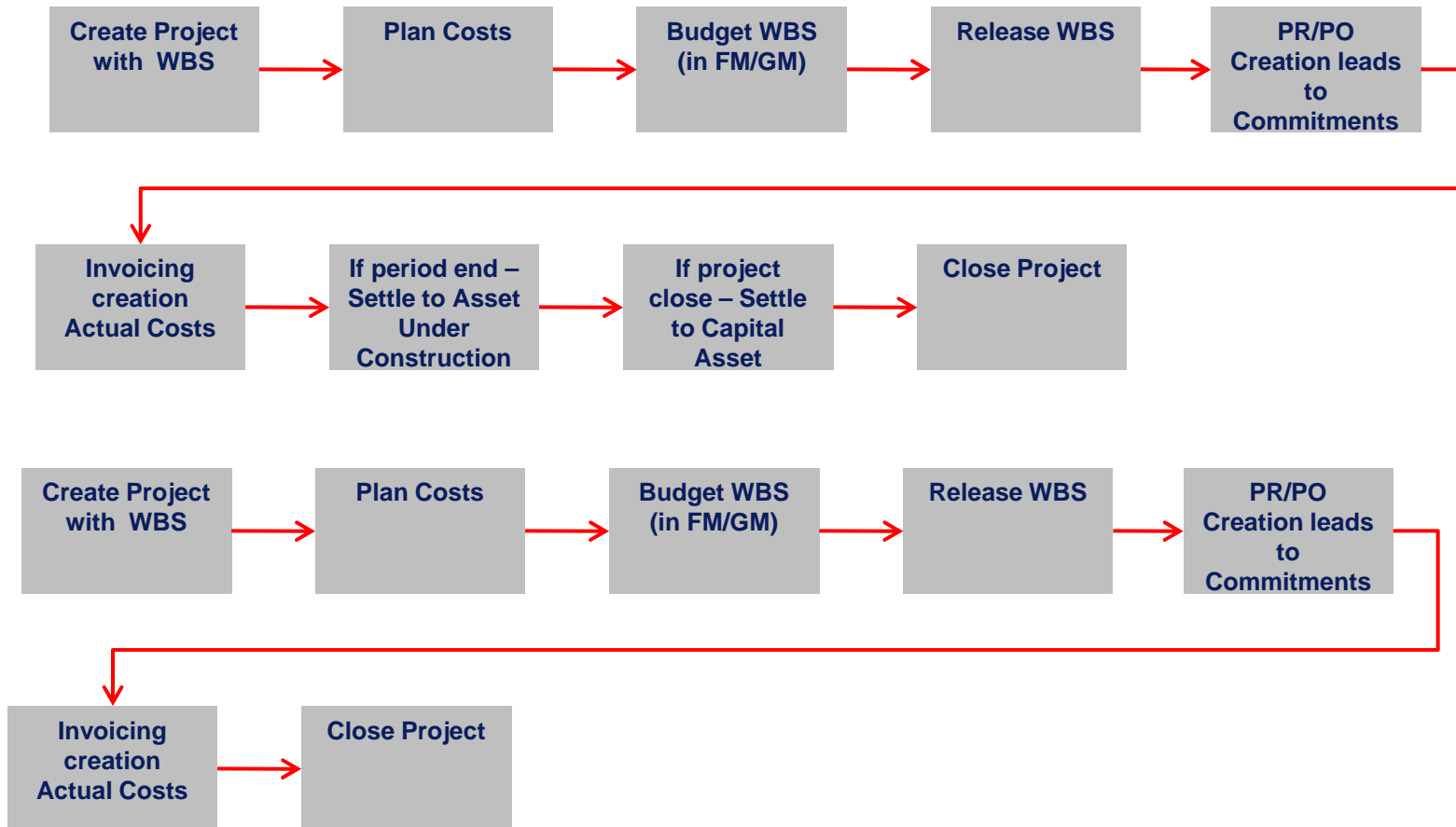
Z.ABCD.NNNN = Project Number

Z.ABCD.NNNN = WBS @ Level 1 (also the project number)

Z.ABCD.NNNN.A0000 = WBS @ Level 2

Z.ABCD.NNNN.AF000 ← WBS @ Level 3

Capital Project Life cycle



Expense Project Life cycle



Module 7: Learning Activities

Learning Activity # 1

Which SAP FI modules will be used to conduct business in the state of South Carolina?

Learning Activity #1 - Answer

The State of South Carolina will use the following modules to conduct business:

- Financial Accounting (FI) including:
 - General Ledger
 - Accounts Receivable
 - Accounts Payable
- Funds Management
- Grants Management
- Controlling (CO)
- Asset Management
- Materials Management (MM) including:
 - SRM
- Work Flow
- Human Resources (HR) - only supports functions through integration of SAP ECC modules (Payroll and Time will be implemented in a later phase.)

Learning Activity #2

1. Name the modules that support the Project System module.
2. When will you use an Internal Order vs Project?
3. What is parent-child relationship in a WBS?
4. What is the difference between a Capital Project and an Expense Project?

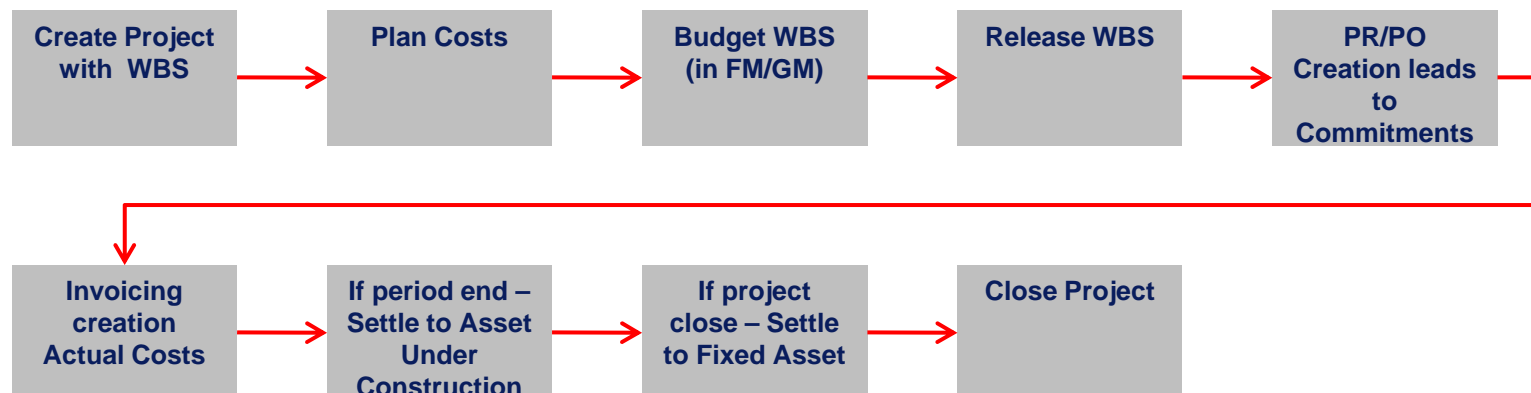
Learning Activity #2 - Answers

1. All Modules
2. If it is a short term, small collection of Costs with no need to see separation of Costs, it will be internal Order. If Complex and there is a need to see costs separately and spanning multi-years, Project Systems is to be used.
3. Lower level WBS are the children of the attached upper level Parent.
4. In Capital Project, expenses are settled to an Asset while in Expense Projects it will remain on the Project or settled to any other element other than Assets.

SAP ON LINE DEMO

- 🕒 Structure creation
- 🕒 Cost Planning
- 🕒 Releasing of WBS- See Asset Under Construction
- 🕒 Budgeting
- 🕒 Post Cost (Vendor Invoice)
- 🕒 See relevant reports
- 🕒 Settle to Asset Under construction for period end close

Capital Project Life cycle



Learning Activity #3



 Demo Online PS

Course Summary

- You should now be able to:
 - List benefits of the SCEIS SAP Financial Overview.
 - List the key changes.
 - Describe the high level process flow for PS
 - Describe how each finance module interacts with PS to perform functions.

Any Questions?

