Command Cost Model Document

AMC Military Surface Deployment and Distribution Command (SDDC)

The Deputy Assistant Secretary of the Army - Cost & Economics

(DASA-CE)

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Enterprise Resource Planning (ERP) Command Cost Model (CCM) Document — Command Series

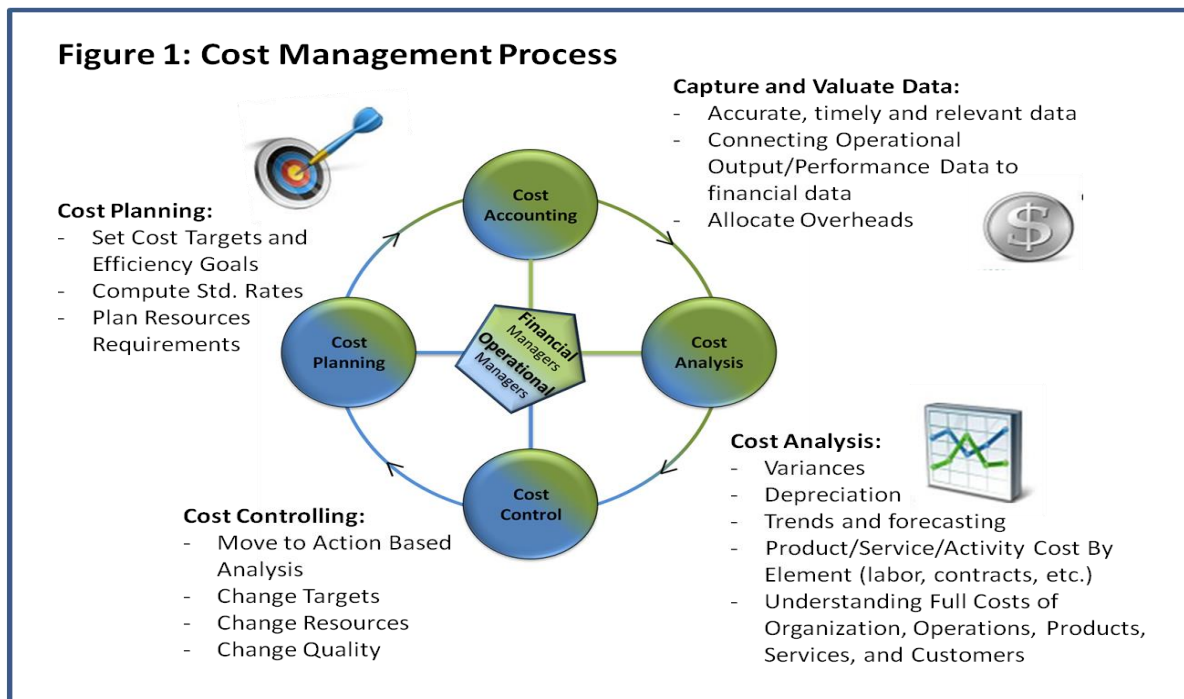Reference No. » CCM—OA60.L

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Statement of Purpose

The purpose of the *ERP Command Cost Model (CCM)* document (hereinafter the "Cost Model") is to provide a <u>living document</u>, which contains the necessary information to be utilized as a reference guide to aid in the understanding of how the command's current Cost Model is represented in the multiple ARMY ERP platforms, such as the General Fund Enterprise Business System (GFEBS), Global Combat Support System (GCSS), and Logistics Modernization Program (LMP) ERPs.   Each command's Cost Model and corresponding utilization of supporting capabilities within the ERP's has been adapted to meet the requirements of each command and the Army-Wide cost objectives. The Cost Model consists of the defined system master data and supporting transactions necessary to support the Cost Management Process (see Figure 1). Therefore the Cost Model consists of:

- identification of the cost objectives
- definition for the master data elements
- execution of various kinds of planning
- capturing of 'actuals'
- allocations/cost assignments and corresponding data loads necessary for driver data
- various reporting requirements

Figure 1: Cost Management Process

The intended audience of this document consists of readers already familiar with the ERP applications and the cost management concepts within the Cost Management Handbook.

Command Overview

This section of the AMC Command Cost Model document covers the portion of the AMC Cost Model associated with the U.S. Army Military Surface Deployment and Distribution Command (SDDC) only.

SDDC provides global deployment and distribution capabilities to commands. These capabilities support the delivery of equipment and supplies for deployed soldiers, sailors, airmen, marines and coast guardsmen worldwide. SDDC acts as the Army's Service Component Command of the U.S. Transportation Command (USTRANSCOM) and has partnered with the commercial transportation industry, serving as a link between DOD surface transportation requirements and the capability industry provides.

Cost Management Objectives

Current Objectives

SDDC's current cost objective is to track the costs of organizations and the work efforts those organizations perform. Additionally, SDDC is required to track base operation costs using Service Based Costing methodology. For this purpose, they utilize codes prescribed by OACSIM to capture costs for Installation Service Reporting (ISR). The purpose of ISR is to evaluate the cost and quality of service delivery performance for base support services provided at a location. These components assess cost, quantity, and quality of services provided to organizations and individuals associated with bases. Therefore the definition of the Products/Services to be tracked for the SDDC related to base operations is well established.

Future Objectives

As conflicts and support requirements change within the area, objectives should continually be reviewed to ensure the Cost Model is providing the level of information required to make resource informed decisions and/or provide transparency for external reporting and requirements justifications.

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ERP Command Cost Model Document — Command Series
U.S. Army Materiel Command Military Surface Deployment and Distribution (SDDC)

Command Master Data

Cost Centers

Overview

Cost Centers (CCs) represent the organizations (e.g. 688TH DISTRIBUTION NODE SECT) listed within the Modification Table of Organization and Equipment (MTOE) or Table of Distribution and Allowances (TDAs) entities (e.g. SECURITY SECTION). Cost Centers are established to collect and manage costs incurred within an organization for the corresponding capacity output provided (e.g. Labor Hours). Cost Centers align to the UIC-Paragraph structure of the TDAs or the MTOE structured authorized UICs (e.g. Company A).

SDDC utilizes facilities which are also maintained and managed. For each installation or entity, there are a set of Cost Centers reflecting the aggregate capacity output by types of Facilities (approx. 35). For SDDC, there is one set of the Facility related Cost Centers for the entire command to capture the costs of maintaining the buildings.

Coding Logic

SDDC functions within the Army's Global Combat Support System-Army (GCSS-A) ERP, which replaces many legacy logistical systems, such as the Property Book and Unit Supply Enhanced (PBUSE) system. GCSS-A technically requires Federated 4* series Cost Centers. SDDC is completely Federated for 4* series Cost Center numbers to support utilizing GCSS-A as well. To maintain consistency between GFEBS and GCSS-Army, Cost Center changes are allowed under specific conditions. Creating a new Cost Center requires a unique combination of the UIC-Paragraph on an approved Force Structure document or a structure Derivative UIC (DUIC) to reflect the MTOE units (e.g. WXXXA0 for Company A).

Real Property related Cost Center numbers remain as quasi smart-coded as they are used solely within GFEBS and will not be integrated with GCSS-A. The first four positions remain the last four of the Fund Center responsible for that real property, followed by a P to distinguish from Organizational Cost Centers, and then 001-035 for types of Buildings as identified in Table 1.

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Table 1: Example Standard Real Property Cost Centers for SDDC

CC #	CC Description
60LLP001	AIRFIELDS
60LLP002	AIRFIELD OPS FACILITIES
60LLP005	SHIPS PIERS & WHARFS
60LLP011	AVIATION & MISSILE MAINT
60LLP012	SHIP MAINT & REPAIR FACILITIES
60LLP013	VEHICLE MAINT FACILITIES
60LLP014	WEAPON & AMMO MAINT FACILITIES
60LLP015	MAINT & PRODUCTION FACILITIES
60LLP017	BULK LIQUID STORAGE & SUPPLY
60LLP018	STORAGE & SUPPLY
60LLP019	AMMO STORAGE & SUPPLY
60LLP030	SURF/UNSURF AREAS
60LLP031	MAINT. RAILROADS
60LLP032	FUEL FACILITIES & STORAGE
60LLP035	LAND

These Cost Centers are necessary to support the Real Property Depreciation process within GFEBS and to support the capability of tracking costs per building.

Informational Fields

In addition to the Cost Center code, there are many other data elements defined on the Cost Center master data record that are utilized for reporting or interfacing with other systems, such as (but not limited to), Standard Hierarchy, Area of Responsibility, Name 4 and Interface Indicator (utilized if using ATAAPS for time tracking).

Activity Types

Overview

Activity Types, (i.e. Resource Pools) describes the kind of capacity of a specified resource within a Cost Center, typically measured in units of time, hours (HRS) or volume (BTUs), etc. Therefore, Activity Types (AcTypes) are used to assign capacity-related costs to consuming cost objects. Activity Types are used to plan, allocate and control costs.   Activity Types are categorized as Labor Related versus Non-Labor Related. The most prevalent category is Labor Related which is structured to reflect the different types of Labor Related Resource Pools such as Civilians,

Military, etc. Additionally, Non-Labor Related Activity Types are created as needed to reflect the capacity costs of Machines (e.g. Bulldozer $/Hour) or Facilities (e.g. $/Sqft).

Usage & Calculations

SDDC's main capacity is work force, and therefore Labor Related. The transaction for associating the capacity consumed requires a *quantity* and *rate* to exist for the Cost Center and Activity Type. Refer to Table 2: Summary Utilization of Activity Types that lists a summary of Activity Types utilized by SDDC.

- Labor Related Activity Types – the Labor Related Activity Types have been defined for the ARMY as a whole, based on various Pay Plans and Series and encompasses all of the kinds of skills provided by labor resources utilized by SDDC.

  - Civilian – For all Civilian related labor charges, the payroll costs remain on the Cost Center where the Primary expense posting occurs. For entities tracking Civilian Labor to products/services, then Civilian Labor Activity Types are utilized to perform time tracking. SDDC does not currently perform Time Tracking for Civilian labor hours, and as such Labor Activity Types are needed only to support the payroll process.

  - Military – Currently, SDDC is not tracking time related to Military labor hours and output worked within GFEBS. However, MIL Activity Types are supported within the MilPay Payroll interface.

  - Local National – SDDC does not have Local National (LN) Payroll and therefore does not utilize LN Activity Types.

  - Contractor – SDDC currently does not track Contractor labor hours to outputs.

- Non-Labor Related Activity Types – Currently, SDDC does not utilize non-Labor Related Activity Types to assign out cost of capacity.

TABLE 2: SUMMARY UTILIZATION OF ACTIVITY TYPES

Type	Area	Utilized
Labor	Civilians	Yes
Labor	Military	No
Labor	Local Nationals	No
Labor	Contractors	No
Non-Labor	NA	No

Internal Orders

Overview

Orders are a type of cost object utilized to capture the cost of an event (e.g. maintenance request, reason for travel) or a repetitive service (e.g. Military Card Processing). There are various kinds of Orders, such as Internal Orders (IOs) and Plant Maintenance Orders (PMOs). Within each kind of Order there are various Order Types which support the segregation of like-kind events.

Command Usage

SDDC does not utilize Internal Orders within its Cost Model, except for the automatic usage of Order Type ZUFL for support of the Payroll interface for Unfunded Leave costs.

WBS Elements

Overview

Work Breakdown Structure (WBS) Elements are utilized to identify the sub-activities required to perform a Project. Additionally, WBS Elements are utilized to support the reimbursable processes (via the Sales Orders or the Direct Charge processes) for services provided within and external to the Army.

Command Usage

The main cost collector for SDDC is the WBS Element in order to track the transparency, visibility and activity of the efforts being supported. In summary, SDDC uses WBS Elements to:

- Collect any reimbursable costs for services provided
- Provide funding to other entities via the Direct Charge process
- Manage Official Representation Funding (ORF)
- Track costs of CE2T2 training exercises – the different 7097.01 CE2T2 related exercises are required to be reported (e.g. EX5VS – VIGILANT SHIELD) for the year the exercise is performed (e.g. 5 represents the FY15 portion of the exercise). As such, WBS Elements are to be created each year (not rolled over) to ensure that a distinct WBS Element exists for the year of execution for the exercise.
- Track costs of Functional Cost Accounts (FCAs) – a portion of the effort supported by SDDC is related to FCA activities (e.g. F1201–SECURITY FORCES/TECHNICIANS, F4810–ADMINISTRATIVE AND OPERATIONAL SUPPORT AIRLIFT)
- Capture the cost of base operations (BASOP) activities tracked for (ISR) reporting and legacy point account information

Statistical Key Figures (Non-Financial Measures)

Statistical Key Figures (SKFs) represent the non-financial measures a command might want to track to support performance reporting and/or to be utilized to support Allocations. Currently, SDDC does not utilize SKFs to track non-financial measures.

Cost Elements

Primary Cost Elements

Primary Cost Elements track initial expenditures within the system and are defined ARMY-wide. Therefore, nothing specific for the SDDC command has been developed related to Primary Cost Elements.

Secondary Cost Elements

Secondary Cost Elements are utilized to track cost flows from initial expenditure to final cost objects. There have not been any Secondary Cost Elements generated specifically to address SDDC requirements.

Business Processes

Currently the SDDC Cost Model does not use Business Processes to track cross-functional business activities or Activity-based Costing.

Real Property

SDDC does have Real Property and therefore this cost object is present within the SDDC Cost Model.

Attributes (Custom Fields)

Currently, SDDC uses Custom Fields added to the base SAP master data elements of Cost Centers, Internal Orders and WBS Elements:

- Attribute 1 (ATTR1) field – contains Exercise codes to be tracked for CE2T2 Funding or when Army funds are utilized to augment the exercises.

- Attribute 1 (ATTR1) field – utilized to capture information related to the Legacy Point Accounts such as A7852000–WASTE WATER SYSTEMS or A3940000 - SECURITY FORCES/TECHNICIANS

- Functional Cost Account – is utilized for tracking FCA codes issued Army-wide for tracking of Hurricanes, deployments, and other events.

- Command Defined Field – Starting in FY15, AMC has issued policy on utilization of the Command Defined Field in order to provide transparency into the reimbursable customer source of funding. See Table 3 for sample values (not all-inclusive list.) The AMC General Funds Customer Codes are 5 alphanumeric digits and are representative of organizations only (e.g. the fund center requesting such as A5XA0 or external entities). Within GFEBS, the AMC Customer Code must be populated on all WBS Elements that will execute reimbursable funds. The AMC Customer Code must be input as the first five characters in the "Command Defined Field" of the execution level WBS Elements. Additionally, the AMC MSC/LCMC must input the LAST four digits of the supplying Funds Center immediately after the AMC Customer Code.

TABLE 3: SAMPLE OF AMC-WIDE COMMAND DEFINED FIELD VALUES

Customer Defined Code	Customer	Description
A5XB0	PEO Ammunition	PEO Ammunition - includes all Fund Centers A5XB*
A5XC0	PEO Aviation	PEO Aviation - includes all Fund Centers A5XC*
D4A00	Air Force	Air Force
D4C00	Defense Advanced Research Projects Agency (DARPA)	Defense Advanced Research Projects Agency (DARPA)
F5A00	Department of Agriculture (USDA)	Department of Agriculture (USDA)
N6A00	Private Industry	Private Industry
N6B00	Academia/Universities	Academia/Universities

Planning

SDDC currently does not utilize any Cost Planning capabilities.

Capture Actuals

Payroll

Civilian Payroll will be disbursed out of the Defense Civilian Payroll System (DCPS) with financial transactions being recorded on a bi-weekly basis. The Budget LOA is defined within the Human Resources (HR) master data record for each employee.   One item to note is the Funds Center for the paying Budget LOA is actually determined by the Funds Management business logic (i.e. FMDERIVE – a custom table inside the ERP platforms that associate Cost Management master data with Funds Management master data).

SDDC is responsible to maintain both the Faces-to-Spaces document identifying the association of Activity Types to Cost Centers and the calculations of the Rates. Additionally, SDDC maintains the HR LOA within ERPs and requests updates to the FMDERIVE related business rules necessary for payroll to post against the correct funding. For more information on Faces-to-Spaces see http://www.opm.gov/oca/10tables/indexGS.asp .

Military Payroll currently comprises a portion of SDDC's overall cost of operations. Currently, the MILPAY appropriation is being recorded in GFEBS at an aggregate level and not to the organizations that have the Military positions.

Labor

SDDC currently does not track labor to products/services command wide. Therefore, Secondary Cost Elements, such as 9300.0100 for 'LABOR CHARGE – REG' are not used to assign the cost of labor from SDDC -related Cost Centers to Orders and/or WBS Elements.

SDDC receives the benefit of Labor charges associated to an activity performed against Direct Charge-related WBS elements. Therefore, SDDC entities should understand Secondary Cost Elements related to Labor Activity Types to become familiar with these charges if/when they are received from other supporting organizations.

Non-Pay/Labor

For Non-Pay/Labor costs, the individual initiating the budget execution action needs to indicate the organization and/or event (e.g. WBS Element) receiving the benefit of the non-payroll expense.

Depreciation

SDDC receives depreciation postings for capital equipment tracked within the Property Book Unit Supply Enhanced (PBUSE) system. PBUSE is being subsumed by GCSS-Army as a part of the GCSS-Army Wave 2 rollout FY15 – 17.

In the interim, PBUSE interfaces with GFEBS to provide all transactional data to financially reflect the capital equipment acquisitions, destruction, lost and transferred. GFEBS utilizes the asset transactions in conjunction with depreciation schedules or equipment usage data received from Operating and Support Management Information System (OSMIS) to determine the Usage-Based Depreciation to post as the non-budget relevant cost of the equipment associated to each Organization or Unit (Cost Center).

For the SDDC related facilities, depreciation postings for Real Property are associated to the buildings and assets identified within the Real Property portion of GFEBS. Types of facilities include permanent facility, semi permanent facility, and temporary facility. The various types of facilities have different Useful Life determinations for determination of depreciation. For example, a facility could depreciate over twenty years (25 yr) useful life while an access control point could depreciate over four years (5 yr) of useful life.

Perform Allocations/Cost Assignments

Various kinds of Cost Allocations/Assignments can be supported within the Cost Model. SDDC currently does not have any recurring cost allocations occurring.

CM Data Load

Currently, SDDC does not have any external systems that need to be imported as cost drivers for allocations.

Reporting

No specific reports are associated for the SDDC command only. Below Table 4: Sample List of Common Cost Management Reports provides a sample list of common Cost Management related reports used for all commands.

TABLE 4: SAMPLE LIST OF COMMON COST MANAGEMENT REPORTS

GFEBS ECC Reports			
Area	**Report Name**	**T-Code/ROLE**	**Benefit**
Master Data – CCs	Display Cost Centers (CCs)	KS03 and KS13/ EPS_EC_CM_ECC_DISPLY_RPTR_0000	Display individual or all Cost Center(s) Master Data within a Group (e.g. use the last 4 digits of the Fund Center to get all Cost Centers associated with the Cost Center Hierarchy of that Fund Center).
Master Data – IOs	Display Internal Orders (IOs)	KO03 and KOK3 / EPS_EC_CM_ECC_DISPLY_RPTR_0000	Display individual or all Internal Order Master Data.
Master Data – WBSs	Project Info System: WBS Elements	CN43n	Displays all Projects and WBS Element Master Data.
Plan – AcType Rates	Activity Type (AcType) Price Report	KSBT/ EPS_EC_CM_ECC_DISPLY_RPTR_0000	Displays AcType Rates Associated to a Cost Center.
Actuals – CCs	Cost Centers: Actual/Plan/Variance	S-ALR_87013611/ EPS_EC_CM_ECC_DISPLY_RPTR_0000	Actual $s for Cost Centers and AcType, SKF Quantities.
Actuals – IOs	Orders: Actual/Plan/Variance	S-ALR_87012993/ EPS_EC_CM_ECC_DISPLY_RPTR_0000	Actual $s for Internal Orders and SKF Quantities.
Actuals – WBS	Display Project Actual Costs Line Items	CJI3	Cost Line Item Postings to WBS Elements.
Actuals – Costs	Display Actual Cost Document	KSB5/ EPS_EC_CM_ECC_DISPLY_RPTR_0000	CO Document Actual Costs for Transactions that have posted.
GFEBS BI Reports			
Area	**Report Name**	**T-Code/ROLE**	**Benefit**
Actuals – Costs	Cost by Reports	Cost by Cum Report / Cost Management Reporter.	BI Report displaying costs with various Attributes.

Considerations for Cost Model Updates

Table 5: Improvements to Command Cost Model lists items for consideration for updating/improving the SDDC Cost Model.

Notional example only – to be built with Command based on priorities

TABLE 5: IMPROVEMENTS TO COMMAND COST MODEL

Code	Category	Description	Benefit	Timeline
1	Master Data	Review Cost Centers for Federation and GFMDI especially for Derivative UICs.	Aligns structures to future automated approach for maintenance of Cost Centers.	QX FY15
2	Master Data	Evaluate RESP CC on WBS Elements to support Settlements.	All WBS Elements must net zero eventually to support deactivation of master data. Costs are assigned back to a Cost Center for the organization responsible or to follow-on products/services.	QX FY15
3	Master Data	Ensure ATTR1 is populated correctly for base operation activities.	Ensure correct reporting out for ACSIM.	QX FY15
4	Master Data	Populate Attribute 2 (ISR) codes for base operation activities.	Ensure correct reporting out for ACSIM and alignment with future validation rules to be applied for base operations funding	QX FY15
5	Master Data	Review 0100 Exercise Funding Related WBS Elements for ATTR1 Exercise Codes	Compliance to DOD7097.01 Appendix 5-CE2T2-ARMY-0100 Regulation for reporting Exercise Execution	QX FY15
6	Master Data	Review Real Property Cost Centers associated with Cost Center Hierarchy 60LL for deletion.	Eliminate performance impacts on Cost Center master data.	QX FY15
7	Master Data	Review Real Property associated to 4* Federated Cost Centers versus Real Property.	Ensure Real Property Depreciation reporting is correct for Army.	QX FY15
8	Actuals	Validate Labor time tracking postings.	Ensures accurate cost association to the correct receiver objects and available funds.	QX FY15
9	Allocations & Assignments – GFEBS	Generate Overhead Allocations.	Associate centralized and Indirect costs to the benefiting organization or work effort.	QX FY15
10	Non-Financial Measures	Determine what Metrics SDDC utilizes for performance and identify if they can be associated within the Cost Model.	Alignment of Output/Measures with costs for efficiency/effectiveness reporting.	QX FY15