VOLUME 4, CHAPTER 23: "COST DISTRIBUTION FOR INFORMATION TECHNOLOGY FACILITIES"

SUMMARY OF MAJOR CHANGES

All changes are denoted by blue font.

Substantive revisions are denoted by an * symbol preceding the section, paragraph, table, or figure that includes the revision.

Unless otherwise noted, chapters referenced are contained in this volume.

Hyperlinks are denoted by ***bold, italic, blue and underlined font***.

The previous version dated January 1995 is archived.

PARAGRAPH	EXPLANATION OF CHANGE/REVISION	PURPOSE
	Added Table of Contents.	Add
Multiple	Added hyperlinks.	Add
230202	Updated reference.	Update
230703.F	Added a step addressing Accumulated Operating Results.	Add

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CHAPTER 23

<u>COST DISTRIBUTION FOR INFORMATION TECHNOLOGY FACILITIES</u>

2301   PURPOSE

       230101.   Accounting Requirements

       The purpose of this chapter is to provide accounting requirements and guidance applicable to cost distribution for information technology facilities. The term "information technology facility" (ITF) is used in this chapter in lieu of data processing facility, data processing installation, central design activity, computer center, data center, and similar terms. It encompasses all resources used to provide data or information processing and telecommunications services. The chapter provides instructions for accounting for the full costs of operating ITFs, as required by ***OMB Circular No. A-130,*** "Management of Federal Information Resources."

       230102.   Obligation Data or Service Costs

       The identification of obligation data or service costs related to ITF operations can provide important information to organizational managers, ITF managers, and users that may result in more efficient operation and use of the ITF. Such information can show trends by which the efficiency of the services may be measured. Also, the cost identification process can demonstrate utilization and cost trends, develop user profiles, isolate information technology costs, improve planning, and become an important element in management's overall evaluation of the ITF. Obligation or cost data can be used to support budget exhibits and provide the information needed to support management decisions related to ITFs.

2302   REQUIREMENTS

       230201.   Accounting Systems

       DoD Component accounting systems shall provide sufficient accounting support to ITFs for them to identify obligations or operating costs applicable to their operations. ITFs shall identify costs applicable to services provided to users if: (a) services are provided to more than one organizational or accounting entity, (b) it operates one or more general management computers, and (c) it has annual operating costs or obligations greater than $5 million. An ITF shall identify costs applicable to services provided to users if it has an annual reimbursable program of more than $500 thousand.

       230202.   Cost Identification Guidance

       The cost identification guidance in this chapter also can be used to support management needs to identify ITF costs related to the life cycle of an Automated Information System (AIS). For example, management must identify AIS program development and procurement costs to determine if the major AIS threshold, as defined in ***DoD Directive 5000.01***, has been exceeded.

230203.   Excluded Services

Services provided under emergency conditions or reciprocal backup agreements are excluded from the service-costing requirement. Defense Working Capital Fund (DWCF) activities that operate ITFs shall follow the guidance contained in this chapter for the ITF function and chapters 19 through 21 of this Volume, as applicable, for other functions.

2303   REIMBURSEMENTS

The specific policy applicable to the billing for ITF services is contained in Volumes 11A (Reimbursable Operations, Policy and Procedures) and 11B (Reimbursable Operations, Policy and Procedures - Working Capital Funds (WCF)). Volume 11A or 11B shall be followed as appropriate to determine if an ITF should bill for its services and at what price. This chapter provides guidance to identify all costs associated with ITF services regardless of any billing requirements.

2304   DEFINITIONS

The following are definitions for certain terms used within this chapter:

230401.   Cost Center

A logical or physical grouping of one or more similar services for the purpose of identifying obligations or developing the cost identification for the services. Services are grouped into cost centers in order to (a) normalize between services that use similar resources with different capabilities; (b) apply surcharges and discounts to services; (c) identify costs for different classes of the same service; or (d) identify obligations. A software design team in a central design activity is an example of a cost center. One or more cost centers will make up an ITF. A cost center also can be referred to as a service center.

230402.   Costs

A.   Direct Costs. Any item of cost that is easily and readily identified to a specific unit of work or output within the ITF cost centers. Typical direct costs include civilian and military personnel costs, supplies, materials, and contract services. (See Volume 11A for guidance relevant to general fund activities and Volume 11B, Chapter 11 for guidance applicable to DWCF activities)

B.   Indirect Costs. An item of cost that is incurred for more than one specific unit of work or output within the ITF, and, therefore, cannot easily and readily be identified to a single item and must be allocated. There are numerous allocation methods that can be used; however, indirect costs are normally allocated based on total direct costs or total direct labor costs. An example of indirect costs is the management personnel of a computer operations room that provides for the development, implementation and administration of all policy guidance and procedures for the computer operations room.

C.   General and Administrative Costs (G&A). An item of cost that supports the total operation of the ITF not just selected cost centers. There are numerous allocation methods that can be used; however, G&A costs are normally allocated based on total direct costs or total direct labor costs. Examples of G&A costs are the front office of the ITF, administrative staffs, or general maintenance and repair expenses.

230403.   General Management Computer

A general management computer is a digital computer that is used for any purpose other than as a part of a process control system, space system, mobile system, or equipment that is an integral part of a weapon or weapons system. It excludes equipment involved with intelligence activities and cryptologic national security activities.

230404.   Information Technology Facility (ITF)

An information technology facility is an organizationally defined set of personnel, hardware, software, and physical facilities, operated within or on behalf of the Department of Defense, a primary function of which is the operation of information technology. An ITF includes:

A.   The personnel who operate computers or telecommunications systems; develop or maintain software; provide user liaison and training; schedule computers, prepare and control input data; control, reproduce, and distribute output data; maintain tape and disk libraries; provide security; and provide direct administrative support to personnel engaged in these activities.

*   B.   The owned or leased computer and telecommunications hardware, including central processing units; associated peripheral equipment such as disk drives, tape drives, printers, and consoles; data entry equipment; telecommunications equipment including control units, terminals, modems, and dedicated telephone and satellite links provided by the facility to enable data transfer and access to users. Hardware acquired and maintained by users of the facility is excluded (e.g., sponsor owned hardware procured solely to support a particular customer's order/workload and not used to support multiple customers' orders/workload).

*   C.   The software, including operating system software, utilities, sorts, language processors, access methods, data base processors, and similar multi-user software required by the facility for support of the facility and/or general use by users of the facility. All software acquired or maintained by users of the facility is excluded (e.g., sponsor owned hardware procured solely to support a particular customer's order/workload and not used to support multiple customers' orders/workload).

D.   The physical facilities, including computer rooms, tape and disk libraries, stock-rooms and warehouse space, office space, and physical fixtures.

230405.   Obligations
Amounts of orders placed, contracts awarded, services received, and similar transactions during a given period that will require payments during the same or a future period. Obligations are

directly related to budget authority received for a given fiscal year, and the amounts of budget authority obligated are reported monthly in budget execution reports. (See Volume 6A, Chapter 4.)

     230406.   <u>Service</u>

     A service is any work done by the ITF for a user or group of users.

     230407.   Unit of Service

     A unit of service is the end product or unit used to measure the amount of service received by users. Examples of service units are central processing unit (CPU) time for Multiple Virtual Storage (MVS) CPU service, UNISYS Standard Unit of Processing (SUPS), Megabyte Storage, Application Support and Hardware Services for Windows or UNIX, direct labor hours expended to develop a software application or checks processed for a payroll service. The unit of service selected should be an accurate unit of the dominant type of work performed by the ITF. If a single unit cannot be determined, then the possibility of dividing the work into multiple services should be considered. For example, preparing a report by an ITF can require CPU time, data storage and retrieval, and printing. Total cost for the report may involve summing costs of each required service.

     230408.   <u>User</u>

     A user is an individual, organizational or functional entity that receives ITF services. A user may be internal or external to the DoD Component.

2305 IDENTIFICATION OF OBLIGATION/COST DATA

     The identification and recording of obligation or cost data for ITFs shall be in accordance with Volume 11 and Volume 4. Because detailed information on recording and reporting obligations and costs are contained throughout this Regulation, guidance will not be repeated here. Accounting support must be provided to ITFs so that they can identify obligation or cost data and report it when required.

2306 IDENTIFICATION AND ALLOCATION OF COSTS

     230601   Allocation Process

     The identification and allocation of costs is a process by which the costs incurred by the ITF for providing its services are collected by function and related to the service unit being supported. The costs of direct functions are directly related to the service unit they support. However, an allocation process is used to properly relate indirect and G&A costs to the appropriate service units. A full description of the allocation process must be documented. A description (including a schematic) of the allocation process that shows the relationships of the various cost center indirect and G&A costs should be available for review by appropriate authority and for user understanding of the allocation process.

230602.   Cost Centers

All costs associated with the operation of an ITF shall be distributed to the appropriate service units.   Charges must be equitable to resources consumed and priority requested. Dedicated services are to be identified to specific users.   For multi-user services, workload measurement tools should be used to insure ITF costs are equitably charged to users for all service units consumed.   Within the ITF, further breakdowns shall be made to specific cost centers.   Costs within these centers should be determined within a documented cost element structure.   See Figure 23-1 for a breakdown of potential information technology cost elements associated with an ITF.   The identification and allocation process should be established by knowledgeable and informed people who are familiar with the particular ITF operation.

230603.   Review Period

The identification and allocation process must be reviewed periodically to ensure that no service has been inadvertently omitted or unnecessarily included.

230604.   Unit of Service Rates

Where appropriate, e.g., cost center or completion of a process, specific units of service shall be established to produce a rate for each type of service provided.   Figure 23-2 is an example of the possible types of information technology services being performed and their related unit(s) of service and workload measurements.

230605.   Direct Costs

All direct costs associated with an ITF shall be identified to the applicable function, service and cost centers. (See subparagraph 230402.A, Figure 23-3, and Volume 11.)

230606.   Indirect Cost Pools

Indirect cost pools shall be established for each cost center to identify the indirect costs associated with each product or service within the cost center.   These costs shall be allocated periodically based on an acceptable allocation method such as total direct costs or total direct labor costs. The allocation method applied must be documented.

230607.   G&A Cost Pools

A G&A cost pool shall be established for an ITF. Applicable costs shall be identified to the G&A cost pool and periodically allocated based on an acceptable allocation method such as total direct and indirect costs. The allocation method applied must be documented.

230608.   Review Period for Indirect and G&A Costs

Indirect and G&A costs shall be evaluated periodically to verify cost type (that is, indirect or overhead), and adjust allocations to the applicable service units as necessary.

230609.   Documentation of User and Services Provided

A record shall be maintained to identify the users of an ITF and the services provided to each user. The total output of an ITF should be reconcilable with the work accomplished or produced by the ITF for each customer. Statements of charges or identification of ITF services to users shall be derived from records kept by the ITF. These records are needed for billing, verification of cost allocations, and for future planning and budgeting.

230610.   Management Control Procedures

Management control procedures for implementing this chapter are to be established and documented.

2307   RATE COMPUTATION

230701.   Developing Rates

Figure 23-4, "Information Needed to Define the Current Environment," provides some suggested actions or questions to be answered that may be helpful before beginning to develop rate computations.

230702.   Points for Consideration When Developing Rates

When developing rates, these points should be understood:

A.   Services and their unit(s) of service should be easily understood by the ITF users.

B.   Services should represent a significant portion of the ITF's work, and the unit(s) of service should be a valid measure of the amount of work performed.

C.   Services are not limited to equipment based units. Other services, especially personnel based services, are often costly and should be identified.

D.   When possible, services that are transaction or output based should be selected so that the users can easily understand them.

E.   Services and the cost collection/allocation process should be reviewed periodically to insure that rates are an accurate reflection of what it costs the ITF to provide each service. Policies and procedures need to be in place to facilitate this process.

230703.   Rate Development Procedures

Rate development should follow a sequential procedure. Identified below are six basic steps that should be taken for all reimbursable charges. Step 6 applies to DWCF only.

A.   Step 1. Identify all costs associated with the ITF. Figures 23-5 and 23-5A provide sample cost data for two ITFs; a central design activity (CDA) and the other a data processing installation (DPI). For ease in demonstration, only one productive cost center, along with the general and administrative cost center, was identified for each and is representative of an annual period. Additionally, the cost in each productive cost center is identified by the direct and indirect amounts.

B.   Step 2

1.   For each productive cost center, identify the direct costs of each product and service by service unit. This is achieved by identifying the direct cost of all functions performed in support of products/ services produced and relating those costs to the service unit(s) supported. Note that the CDA has a service unit for customer direct pass through items. This includes travel, costs for testing, contractor support services, and so forth, performed for specific customers that should be reimbursed by the benefiting customers only.

2.   Additionally, the units of work/workload should be identified since they are paramount in determining the level of resources required to support them. Initially, this may have to be estimated by informed personnel; however, after a given period of time, the information should be systematically gathered and documented from workload job accounting software packages and/or labor tracking systems as applicable. The total direct cost of each service unit and the associated units of work/workload for the DPI and CDA have now been determined. (See Figure 23-6.)

C.   Step 3. Indirect costs of each productive cost center must be allocated to the service units produced/supported in that cost center. Indirect rates for this allocation process are calculated by dividing the total indirect cost by the allocation base selected. In Figure 23-7, the allocation base selected is total direct costs for the DPI and direct labor costs for the CDA. Once the indirect rates have been calculated, they are used to allocate the indirect cost to each service unit supported within the cost centers. For the DPI, this is achieved by multiplying the total direct cost of each service unit by the indirect rate. For the CDA, this is achieved by multiplying the total direct labor costs of each service unit by the indirect rate. The example shows that the total indirect costs of $475,000 and $442,500 for the DPI and CDA respectively, have been fully allocated to all service units supported within each organization. The total indirect costs of each service unit/output for the DPI and CDA have now been determined.

D.   Step 4. General and administrative (G&A) costs must be allocated to all services produced within the ITF. The G&A rate for this allocation process is calculated by dividing the G&A costs by the allocation base selected. In Figure 23-8, the allocation base selected for both the DPI and CDA is total direct plus indirect costs. Once the G&A rate is calculated, it is used to allocate the G&A costs to all service units provided by the ITF. This is achieved by multiplying the total direct plus indirect cost of each service unit by the G&A rate. The example shows that the total G&A costs of $495,600 and $403,200 for the DPI and CDA respectively, have been fully allocated to all service units supported within each organization. The total direct, indirect and G&A costs of each service unit for the DPI and CDA has now been determined.

        E.   Step 5. Establish the rate for each unit of service by dividing the total direct, indirect and G&A costs (Step 4) of each service unit by the associated units of customer work/workload required (Step 2). These rates incorporate the total costs of all cost centers in producing each product and service and the related service unit(s). Such rates should be verified periodically because they form the basis by which a customer is billed (in accordance with the reimbursement policy found in Volume 11) or by which costs can be identified and allocated for planning or budgeting (e.g., operating an automated information system (AIS) within a DPI or developing and/or modernizing an AIS within a CDA). (See Figure 23-9.)

*   F.   Step 6. Applicable to DWCF only. Evaluate whether any adjustment to the rate (Step 5) is required in the next budget development cycle to return accumulated profits or to recover accumulated losses to achieve Accumulated Operating Results of $0 in the budget year. The gain or loss amounts are divided by the number of service units and either subtracted or added to the rate, as appropriate. Evaluate whether planned capital outlays is expected to exceed planned capital collections during the budget year. If this excess would cause the working capital fund to fall below the required 7-10 days of cash, then a capital surcharge should be considered for inclusion in the rate. Planned capital depreciation, a component of stabilized rates charged to the customer, is the amount used for capital collections. See Volume 2B, Chapter 9 for detailed guidance on rate-setting in DWCF Activity Groups.

Figure 23-1 POTENTIAL COSTS ASSOCIATED WITH AN ITF

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POTENTIAL COSTS ASSOCIATED WITH AN ITF

Personnel. Both civilian and military persons who manage and perform information technology (IT) functions. This includes work such as development and maintenance of computer software, operation and management of in-house data processing centers and departments, data preparation, electronic output reproduction and distribution, equipment maintenance, and contract management. It also includes persons performing IT related custodial services, security, and building maintenance. This also includes other personnel related costs for leave, holiday, fringe benefits, training, travel, and recruiting.

Equipment. Nonrecurring expenditures for acquisition and recurring costs for rental and leasing of computers, associated on-line and off-line IT equipment, and special purpose IT furniture. If the dollar value of equipment and its projected service life meet the capitalization criteria set forth in Chapters 1 and 6 of this Volume or in Volume 11B, depreciation may be applicable.

Computer Software. Nonrecurring expenditures for acquisition, development, and conversion and recurring expenses for rental and leasing of all types of software--operating, multipurpose, and application. If the dollar value of the software and its projected life meet the capitalization criteria in Chapters 1 and 6 of this Volume, or Volume 11B, depreciation may be applicable.

Space Occupancy. Funded and unfunded costs for (1) rental and lease of buildings and general office furniture, (2) building maintenance, (3) regular telephone service and utilities, and (4) custodial services and security.

Supplies. Expenditures for non-capital office supplies and general and special purpose data processing materials. Special purpose supplies are those prepared for one or a few applications. IT data storage media may be considered either supplies or items of equipment.

Contracted Services. Expenditures and contracting expenses for:

(1)   Technical and consulting services for agency-operated computer facilities and equipment, including equipment maintenance; security and custodial services for computer facilities; finance and accounting; and advice on the acquisition, selection, and use of computer facilities or software.

(2)   Computer system services and off-line equipment services such as key data entry, report reproduction, and testing.

(3)   Analysis, design, programming, documentation, and testing for development, modification, conversion, and maintenance of computer software.

(4)   Data communications network services, associated telecommunications line charges, channel lease and rental, equipment rental and maintenance, and telecommunications system analysis and design.

Services from Other Units or Agencies. The costs of other governmental agencies or organizational elements for those services cited under "Contracted Services," above.

Intra-agency Services and Overhead. The costs of normal agency support services and overhead, either billed or allocated, and the costs of central ADP management, policy, and procurement services.

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Figure 23-2 EXAMPLES OF COST CENTERS, SERVICES AND UNITS OF SERVICE

<u>COST CENTER A MAINFRAME PROCESSING:</u>

PRODUCTS/ SERVICES	BILLABLE SERVICE UNITS	WORKLOAD MEASURE
IBM PROCESSING	CPU TIME	HOURS
UNISYS PROCESSING	SUPS	HOURS
	DASD	MEGABYTES PER DAY
	TAPE STORAGE	MEGABYTES PER DAY

<u>COST CENTER #1 SERVER PROCESSING:</u>

PRODUCTS/ SERVICES	BILLABLE SERVICE UNITS	WORKLOAD MEASURE
BASIC SERVER	OPERATING ENVIRONMENT (OE)	PER OE
DATABASE ADMIN	OPERATING ENVIRONMENT	PER OE
STORAGE	DISK STORAGE	GIGABYTES PER MONTH
OTHER	DIRECT COST	NUMBER OF CUSTOMERS

Figure 23-3 TYPES OF COSTS AND ASSOCIATED WITH OPERATING AN ITF

TYPES OF COSTS ASSOCIATED WITH OPERATING AN ITF
(See Volume 11)

Direct civilian labor
      (1)   Payroll costs
      (2)   Leave or holiday costs
      (3)   Funded fringe benefit costs
      (4)   Unfunded fringe benefit costs

Indirect civilian labor
      (1)   Payroll costs
      (2)   Leave or holiday costs
      (3)   Funded fringe benefit costs
      (4)   Unfunded fringe benefit costs

Direct military labor
      (1)   Payroll costs
      (2)   Leave and holiday costs
      (3)   Other support cost factors

Indirect military labor
      (1)   Payroll costs
      (2)   Leave and holiday costs
      (3)   Other support cost factors

Use of DoD assets
      (1)   Asset use charge
      (2)   Depreciation on investments
      (3)   Interest on investment in assets

Contractor support services   Rental and leases

Equipment maintenance   Travel/Temporary duty costs

Software maintenance   Supplies and materials

Utilities   Building services

Telephone

Training

Figure 23-4 INFORMATION NEEDED TO DEFINE THE CURRENT ENVIRONMENT

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<u>INFORMATION NEEDED TO DEFINE THE CURRENT ENVIRONMENT</u>

1. Describe the ITF hardware and software configuration.

2. Provide an organization chart that identifies the lowest organizational entity within the activity.

3. List of functions performed by organizational entity.

4. Describe the various types of processing done (local applications, batch, on-line, real-time, and so forth).

5. What are the staffing levels for the ITF (number of management personnel, programmers, analysts, operators, and so forth)?

6. Provide an inventory listing of the ITF's hardware and software.

7. Explain how the ITF supports the various components within the agency, and provide numbers for the various types of users within each component.

8. Identify the products and services provided.

9. Does the ITF provide services to any outside users? If so, how many outside users are there and what percentage of the ITF workload does each comprise?

10. Identify customers and whether the ITF is being reimbursed by them for services provided. If yes, identify the amount by customer.

11. Have IT/ITF costs been isolated within the budget? To what level of detail?

12. What type of capacity planning currently is done? What are workload estimates based on? How often are these estimates updated?

13. Identify the prior year actual operating cost and any approved programmed budget changes.

14. Ascertain whether hardware/software is owned or leased.

15. Identify the workload measurement tools to collect the applicable utilization data, e.g. labor distribution system for a design activity.

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Figure 23-5 EXAMPLE OF RATE COMPUTATION

STEP 1: IDENTIFY THE TOTAL COST OF THE ITF BY COST CENTER

CENTRAL DESIGN ACTIVITY:

COST ELEMENTS	TOTAL COSTS	COST CENTER #1 CDA SERVICE DIRECT	COST CENTER #1 CDA SERVICE INDIRECT	COST CENTER #2 G & A OVERHEAD
LABOR	$2,153,800	$1,500,000	$350,000	$303,800
MATERIALS & SUPPLIES	101,700	75,000	15,000	11,700
TRAVEL	143,400	100,000	20,000	23,400
CONTRACTUAL SERVICES	358,400	250,000	50,000	58,400
DEPRECIATION	8,500	0	5,000	3,500
EQUIPMENT	14,900	10,000	2,500	2,400
TOTAL	$2,780,700	$1,935,000	$442,500	$403,200

DATA PROCESSING INSTALLATION:

COST ELEMENTS	TOTAL COSTS	COST CENTER A MAINFRAME PROCESSING DIRECT	COST CENTER A MAINFRAME PROCESSING INDIRECT	COST CENTER B G & A OVERHEAD
LABOR	$1,821,500	$1,175,000	$300,000	$346,500
MATERIALS & SUPPLIES	288,300	250,000	25,000	13,300
TRAVEL	71,600	25,000	20,000	26,600
CONTRACTUAL SERVICES	746,600	580,000	100,000	66,600
DEPRECIATION	199,000	175,000	20,000	4,000
EQUIPMENT	42,600	30,000	10,000	2,600
TOTAL	$3,169,600	$2,235,000	$475,000	$459,600

Figure 23-6 EXAMPLE COMPUTATION OF SERVICE UNIT RATE

STEP 2: IDENTIFY DIRECT COST AND THE RELATED
UNITS OF WORK BY BILLABLE SERVICE UNIT

ITF	PRODUCTS/ SERVICES	BILLABLE SERVICE UNITS	DIRECT LABOR COSTS	DIRECT NON-LABOR COSTS	TOTAL DIRECT COSTS	WORK LOAD
DPI CC A	IBM PROCESSING	CPU TIME	$550,000	$475,000	$1,025,000	$10,800
	UNISYS PROCESSING	SUPS	350,000	290,000	640,000	610,000,000
		DASD	150,000	125,000	275,000	157,016
		TAPE STORAGE	125,000	170,000	295,000	26,940,333
TOTAL DPI			$1,175,000	$1,060,000	$2,235,000	
CDA CC #1	BASIC SERVER	PER OE	$770,000		$770,000	$17,942
	DATABASE ADMIN	PER OE	480,000		480,000	15,145
	STORAGE	GB PER MONTH	250,000		250,000	10,518
	OTHER	DIRECT COST		435,000	435,000	1,000
TOTAL CDA			$1,500,000	$435,000	$1,935,000	

Figure 23-7 EXAMPLE OF COMPUTATION OF SERVICE UNIT RATES

<u>STEP 3: COMPUTE INDIRECT RATES FOR EACH COST CENTER AND
ALLOCATE INDIRECT COSTS</u>

INDIRECT RATE:

DPI = INDIRECT COSTS / TOTAL DIRECT COSTS   CDA = INDIRECT COSTS / DIRECT LABOR COSTS

COST CENTER A   = $475,000 / $2,235,000   COST CENTER #1   = $442,500 / $1,500,000

              = 21.253%   = 29.50%

ITF	PRODUCTS/ SERVICES	BILLABLE SERVICE UNITS	TOTAL DIRECT COSTS	COST CENTER A @ 21.253%	COST CENTER #1 @ 29.500%
DPI CC A	IBM PROCESSING	CPU TIME	$1,025,000	$217,841	
	UNISYS PROCESSING	SUPS	640,000	136,018	
		DASD	275,000	58,445	
		TAPE STORAGE	295,000	62,696	
TOTAL DPI			$2,235,000	$475,000	$0
			TOTAL DIRECT LABOR		
CDA	BASIC SERVER	PER OE	$770,000		$227,150
	DATABASE ADMIN	PER OE	480,000		141,600
	STORAGE	GB PER MONTH	250,000		73,750
TOTAL CDA			$1,500,000	$0	$442,500

Figure 23-8 EXAMPLE OF COMPUTATION OF SERVICE UNIT RATE

<u>STEP 4: COMPUTE GENERAL AND ADMINISTRATIVE (G&A) RATE
AND ALLOCATE G&A COSTS</u>

G&A RATE = G&A COSTS / TOTAL DIRECT + INDIRECT COST

DPI = $459,600 / ($2,235,000 + 475,000)   CDA   = $403,200 / ($1,935,000 + $442,500)

     = $459,600 / $2,710,00   = $403,200 / $2,377,500

     = 16.959%   = 16.959%

ITF	PRODUCTS/ SERVICES	BILLABLE SERVICE UNITS	TOTAL DIRECT COSTS	INDIRECT COSTS	TOTAL DIRECT + INDIRECT	G&A @ 16.959%	TOTAL DIRECT INDIRECT AND G&A
DPI	IBM PROCESSING UNISYS PROCESSING	CPU TIME	$1,025,000	$217,841	$1,242,841	$210,779	$1,453,260
		SUPS	640,000	136,018	776,018	131,608	907,626
		DASD	275,000	58,445	333,445	56,550	389,995
		TAPE STORAGE	295,000	62,696	357,696	60,663	418,359
TOTAL DPI			$2,235,000	$475,000	$2,710,000	$459,600	$3,169,600
CDA	BASIC SERVER JC	PER OE	$770,000	$227,150	$997,150	$169,106	$1,166,256
	DATABASE ADMIN	PER OE	480,000	141,600	621,600	105,417	727,017
	STORAGE	GB PER MONTH	250,000	73,750	323,750	54,905	378,655
	OTHER	DIRECT COST	435,000	0	435,000	73,772	508,772
TOTAL			$1,935,000	$442,500	$2,377,500	$403,200	$2,780,700

Figure 23-9 EXAMPLE OF COMPUTATION OF SERVICE UNIT RATE

<u>STEP 5: COMPUTE THE SERVICE UNIT RATES</u>

ITF	PRODUCTS/ SERVICES	BILLABLE SERVICE UNITS	WORKLOAD MEASURE	UNITS OF WORK/ WORKLOAD	TOTAL DIRECT, INDIRECT AND G&A COSTS	SERVICE UNIT RATE
DPI	IBM PROCESSING	CPU TIME	HOURS	10,800	$1,453,620	$134.5944
	UNISYS PROCESSING	SUPS	HOURS	610,000,000	907,626	.0015
		DASD	MB PER DAY	157,016	389,995	2.4838
		TAPE STORAGE	MB PER DAY	26,940,333	418,359	.0155
TOTAL DPI					$3,169,600	
CDA	BASIC SERVER	OPERATING ENVIRONMENT	PER OE	17,942	$1,166,256	$65.0014
	DATABASE ADMIN	OPERATING ENVRONMENT	PER OE	15,145	727,017	48.0038
	STORAGE	DISK STORAGE	GB PER MONTH	10,518	378,655	36.0007
	OTHER	DIRECT COST	DIRECT COST	1,000	508,772	508.772
TOTAL CDA					$2,780,700	