ACQUISITION AND TECHNOLOGY

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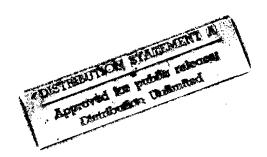
ENVIRONMENTAL SECURITY

(DEFENSE ENVIRONMENTAL SECURITY CORPORATE INFORMATION MANAGEMENT)

FY 96/97 BIENNIAL BUDGET ESTIMATES

FEBRUARY 1995





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ACQUISITION AND TECHNOLOGY ENVIRONMENTAL SECURITY DEFENSE ENVIRONMENTAL SECURITY CORPORATE **INFORMATION MANAGEMENT (DESCIM)** FY 1996/1997 BIENNIAL BUDGET ESTIMATES

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ACQUISITION AND TECHNOLOGY ENVIRONMENTAL SECURITY DEFENSE ENVIRONMENTAL SECURITY CORPORATE INFORMATION MANAGEMENT (DESCIM) EXECUTIVE SUMMARY FY 1996/1997 BIENNIAL BUDGET ESTIMATES

Defense Environmental Security Corporate Information Management Initiatives: In the Department's effort to comply with Federal, State and local environmental laws and regulations and to centralize and standardize the environmental reporting process, the Defense Environmental Security Corporate Information Management (DESCIM) program was established. DESCIM is a part of the DoD Corporate Information Management (CIM) initiative, and comes under the authority of the Deputy Under Secretary of Defense for Environmental Security (DUSD(ES)). The essential and driving force behind the CIM initiative is to prevent duplication of efforts within the DoD in developing and maintaining multiple Automated Information Systems (AIS) to meet the same functional requirements. The CIM concept aims to achieve efficient information transfer within/between organizations through strategic planning. The DESCIM will identif improved environmental business practices, and identify investments in information technology to support the business practices. Other benefits will be productivity payback and cost avoidance. For example, the DESCIM will propagate throughout the DoD the use of the 'pharmacy' concept in processing hazardous materials and hazardous waste, and will provide the supporting AIS. This will result in reduced cost of hazardous material acquisition, reduced cost of hazardous waste disposal, and reduced personnel exposure to hazardous substances, which will reduce medical claims.

The migration of AIS includes the following environmental activities: cleanup of past hazardous waste sites; compliance with all Federal, State and local laws and regulations in the areas of hazardous waste, toxics, water, air pollution, etc; conservation of natural and cultural resources; pollution prevention and environmental technologies.

Major Initiative That Influences the Budget: The FY96/FY97 DESCIM Information Technology budget of \$9.4M and \$9.8M, respectively, includes funds for the re-engineering and fielding of multiple migration AIS that support a broad range of Environmental Security functional activities. The functional area addressed by the DESCIM has been divided into 22 functional activities, which are: A-106; air quality; cleanup program; cleanup reporting; cleanup GIS; compliance deficiency; corporate database; cultural and natural resources; environmental documents (aka TEMP); explosive safety; environmental noise; fire prevention; hazardous substances; safety and occupational health; pest management; solid waste; spill/release; staff/training; tanks; technology; toxic substances; and water quality. Each of the functional activities is to be supported by one or more migration AIS. A total of 29 migration AIS are currently planned, to replace a total of 1766 automated tools (e.g., AIS, spreadsheets, database files), of which 357 have been identified as legacy AIS. The FY96/FY97 budget will be used for re-engineering and deployment of migration AIS that support: the cleanup of old hazardous waste sites; compliance with underground storage tank regulations; compliance with laws associated with hazardous waste, hazardous material, safety, and explosive safety; and compliance with regulations associated with air and water pollution. The DESCIM Information Technology budget supports only the re-engineering and deployment of migration AIS; operation of these systems will be the responsibility of the DoD components.

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The Management Process: The management process for the selection, re-engineering and deployment of migration AIS follows the principles of the DoD CIM methodology, which are documented in a set of standards published by the Deputy Assistant Secretary of Defense for Command, Control, Computers and Intelligence (DASD(C3I)). The process involves a collaborative effort by the DUSD(ES) and DoD component functional experts to develop and review business rules, develop and review data models, develop selection criteria for migration AIS, review legacy AIS, and recommend selection of migration AIS for DUSD(ES) approval. The process requires a sequence of specific steps applied to each functional activity:

1. Develop an inventory of automated tools currently in use. This information was collected via a DoD-wide survey to identify tools used in all functional activities of Environmental Security. A total of 1766 tools were identified.

2. Establish the baseline of legacy AIS. The automated tools in the inventory were reviewed to determine those that should be considered part of the baseline of legacy AIS. Many entries in the inventory were simply spreadsheets, word processing documents or database files, which were not classified as legacy AIS. A total of 357 were classified as legacy AIS.

3. Perform a functional review of the baseline AIS to identify a set of migration candidates. Those baseline AIS that only marginally supported the functional activity were screened out. A total of 93 AIS passed the screen to become candidates.

4. Perform a thorough functional evaluation of the migration candidates. Functional experts from the components gather to collaboratively conduct this evaluation for each functional activity, and one or more legacy AIS is recommended for further consideration. For example, there may be 5 candidate AIS evaluated, with 2 recommended as functionally acceptable for further consideration.

5. Perform a technical evaluation of the recommended candidates. A DESCIM technical team member evaluates the technical quality of the remaining candidates and feeds the evaluation factors into the Defense Information Support Tool (DIST), which rank-orders the migration candidates based on how well they conform to the Technical Architecture Framework for Information Management (TAFIM) guidance.

6. Produce an Integration Decision Paper (IDP) and recommend a migration solution. The IDP summarizes the results of the evaluations and recommends the most viable migration solution.

7. Perform re-engineering, as required, of the selected migration system(s). A software engineering organization is selected, and the AIS is re-engineered to meet the defined DESCIM functional requirements, while at the same time striving to move the AIS towards compliance with the TAFIM. Estimates were developed for re-engineering and deployment of each migration AIS. The FY96/97 DESCIM Information Technology budget is based on those estimates. Cost-benefit analyses for all DESCIM functional activities are currently underway.

8. Produce a Tactical Integration Plan (TIP) and deploy the AIS. The TIP and the model for deployment will be tailored to the characteristics of the specific AIS and the needs of the components. DESCIM deployment costs to be incurred in FY96/FY97 were estimated and are included in the Information Technology budget.

The variances from the previous submission are decreases; 16 percent and 26 percent for FY96 and FY97, respectively. The variances are due to progress in selecting migration AIS, which has produced better estimates of re-engineering and deployment costs and schedules. While the estimated costs for FY96 and FY97 have decreased, the schedule for accomplishing re-engineering and deployment of all 29 migration AIS is now longer than previously anticipated.

Acquisition and Technology Environmental Security Report on Information Technology (IT) Resources FY 1996/1997 BIENNIAL BUDGET ESTIMATES (Dollars in Thousands)

	<u>FY 1994</u>	<u>FY 1995</u>	<u>FY 1996</u>	<u>FY 1997</u>
 Equipment (\$000) A. Capital Purchases B. Purchases/leases Subtotal 				
 2. <u>Software (\$000)</u> A. Capital Purchases B. Purchases/leases Subtotal 				
 3. <u>Services (\$000)</u> A. Communications B. Processing C. Other Subtotal 				
4. <u>Support Services (\$000)</u> A. Software	4480	7500	9397	9824
B. Equipment Maintenance	e			
C. Other Subtotal	4480	7500	9397	9824
Subiotal	4100	1000		
5. <u>Supplies (\$000)</u>				
 6. <u>Personnel (Compensation/B</u> A. Software B. Processing C. Other 	<u>enefits) (\$000)</u>			
Subtotal				
 7. <u>Other (Non-FIP Resources)</u> A. Capital Purchases B. Other Current Subtotal 	<u>(\$000)</u>			

Note: FY 1994 estimates reflect a \$25 thousand investment/expense threshold; FY 1995 estimates reflect a \$50 thousand investment/expense threshold; and FY 1996 and the outyear estimates adhere to the centrally managed criteria.

EXHIBIT 43

Acquisition and Technology Environmental Security Report on Information Technology (IT) Resources FY 1996/1997 BIENNIAL BUDGET ESTIMATES (Dollars in Thousands)

Continued	FY 1994	<u>FY 1995</u>	<u>FY 1996</u>	<u>FY 1997</u>
 8. <u>Intra-Governmental Payments</u> A. Software B. Equipment Maintenance C. Processing D. Communications E. Other Subtotal 	<u>(\$000)</u>			
 9. <u>Intra-Governmental Collection</u> A. Software B. Equipment Maintenance C. Processing D. Communications E. Other Subtotal 	<u>s (\$000)</u>			
NET IT RESOURCES (sum 1-9 above)	4480	7500	9397	9824
Workyears O&M, Defense-Wide	4480	7500	9397	9824

Note: FY 1994 estimates reflect a \$25 thousand investment/expense threshold; FY 1995 estimates reflect a \$50 thousand investment/expense threshold; and FY 1996 and the outyear estimates adhere to the centrally managed criteria.

EXHIBIT 43

Acquisition And Technology Environmental Security Report on Information Technology (IT) Resources FY 1996/1997 BIENNIAL BUDGET ESTIMATES (Dollars in Thousands)

 A. Environmental Security 1. Major Systems/Initiatives NONE 	<u>FY 1994</u>	<u>FY 1995</u>	<u>FY 1996</u>	<u>FY 1997</u>
2. <u>Non Major System/Initiatives</u> NONE				
3. <u>All Other</u>				
Development/Modernization Current Services	4480	7500	9397	9824
Subtotal Appropriation/Fund	4480	7500	9397	9824
0&M, Defense Wide	4480	7500	9397	9824
4. TOTAL Environmental Security:				
Total Development/Modernization Total Current Services	4480	7500	9397	9824
Subtotal Total Appropriation/Funds	4480	7500	9397	9824
O&M, Defense-Wide	4480	7500	9397	9824

Note: FY 1994 estimates reflect a \$25 thousand investment/expense threshold; FY 1995 estimates reflect a \$50 thousand investment/expense threshold; and FY 1996 and the outyear estimates adhere to the centrally managed criteria.

EXHIBIT 43(IT-1)