[redacted]

(U) Today, our satellite collection and processing systems continually satisfy critical intelligence community needs by capitalizing on their unique collection vantage point above the earth. Satellite systems' rapid, flexible response, and worldwide unintrusive access provide unmatched capabilities to complement the rest of the US SIGINT System. The remainder of this budget justification describes the missions, customers, architectures and capabilities of today's and tomorrow's overhead SIGINT and MASINT systems.

(S/TK) [redacted]

(S/TK) [redacted]

(U) Overhead SIGINT Collection Highlights

(U) The blueplates in the mission based budgeting sections and their accompanying text provide examples illustrating how our general purpose overhead SIGINT and MASINT collection systems supported our national interests in the last year.

(U) The Current Overhead SIGINT Architecture

(S) [redacted]

(S) [redacted]

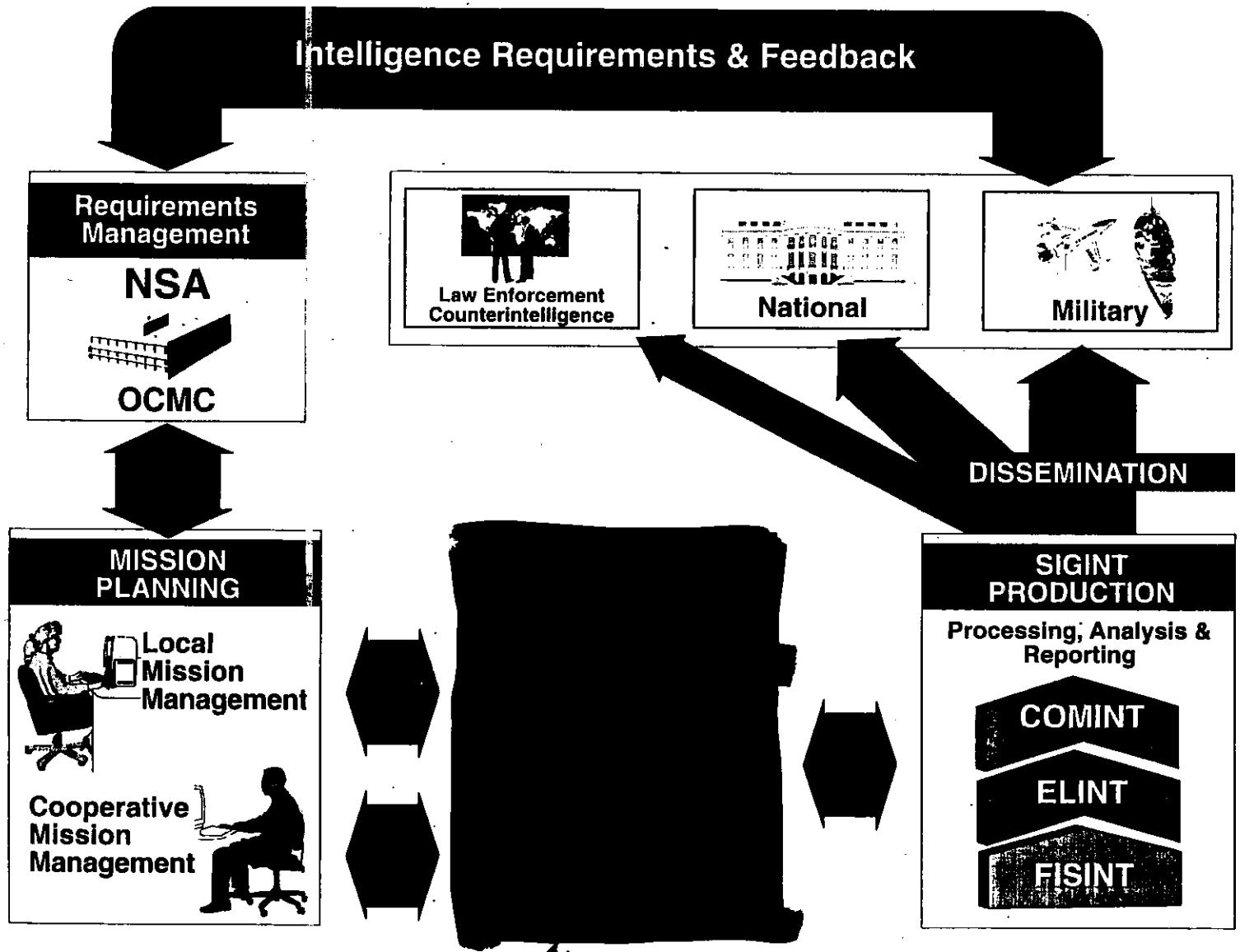

Figure 29. IOSA Mission Management

[redacted]

(U) Foreign Instrumentation Signals

(S/TK) [redacted]

(U) Advanced Technology

(S) [redacted]

(U) Development and Missions Operations Support

(U) This major category encompasses life cycle support of all operational processing systems to include hardware and software maintenance and engineering of the systems, spares depots, training, and upgrades to mission essential equipment. Development support includes system engineering, logistics, configuration management support for development efforts, and integration and testing of new capabilities.

(U) Summary

(S/TK) [redacted]

[redacted]

(S) [redacted]

(U) SIGINT Mission Support Consolidated Expenditure Center

National Reconnaissance Program [redacted]
SIGINT Mission Support Consolidated Expenditure Center
Funds by Expenditure Center and Base/Ongoing/New
FY 1996-2003

	FY 96	FY 97	FY 98	FY 97-98 Change	FY 99	FY 98-03
[redacted]						

(S) [redacted]

(S) The SIGINT Mission Support Consolidated Expenditure Center funds three essential operations and acquisition support areas for the SIGINT Directorate—the Overhead Collection Management Center; SIGINT Mission Support consisting of SIGINT Program Systems Engineering, SIGINT Program Support, and IOSA Phase II; and SIGINT Technology. Impacts due to reductions in CAAS support have been taken into account.

(S/TK) Overhead Collection Management Center

National Reconnaissance Program [redacted]
Overhead Collection Management Center Base
by Project
FY 1996-2003

	FY 96	FY 97	FY 98	FY 97-98 Change	FY 99	FY 98-03
[redacted]						

(S) [redacted]

(S/TK) The Overhead Collection Management Center (OCMC) project funds the NRO's operational support to the OCMC. The OCMC is an intelligence community organization jointly managed by the NSA and NRO. Acting as the nerve center of SIGINT satellite operations, OCMC's mission is critical to the United States SIGINT System—it serves as the sole collection management authority for all overhead SIGINT assets. OCMC responsibilities are essential to US intelligence operations and include overhead SIGINT collection planning, tasking and performance evaluation. OCMC continually strives to maintain a critical balance between competing high priority national and military support requirements. The NRO supports all facets of OCMC operations by providing personnel and NRP funds for operations and maintenance support of the automated collection management system, tools, and working aids vital to the OCMC. The NSA also supports the OCMC by providing personnel and CCP funds. The CCP dollars for OCMC are shown in the following table for reference only and will be justified in the FY 98 - FY 99 CCP CBJB.

CCP Funds for OCMC
FY 1996-2003

	FY 96	FY 97	FY 98	FY 97-98 Change	FY 99	FY 98-03
[redacted]						

(S) V0423598

(S/NK) All overhead SIGINT assets are operationally tasked by the OCMC and monitored on a 24-hour basis via the SIGINT Overhead Mission Management System (SOMMS). SOMMS enables collection managers to orchestrate overhead SIGINT responses to crises throughout the world. As part of the strategic plan for IOSA, the OCMC must modernize its hardware and software infrastructure. A new network topology and state of the art processing hardware is replacing the legacy hardware components. Additionally, the SOMMS software is undergoing major upgrades, most notably in the areas of user interface, data sharing/exchange, and integration of new IOSA era capabilities. These modifications are required to allow the OCMC to readily respond to near and long term changes in the SIGINT operations environment.

(S/NK) [redacted]

(U) SIGINT Mission Support

National Reconnaissance Program
SIGINT Mission Support by Project and Base/ Ongoing/New
FY 1996-2003

	FY 96	FY 97	FY 98	FY 97-98 Change	FY 99	FY 98-03
[redacted]						

(S) V0423098

(S) The SIGINT Mission Support Expenditure Center includes base funds for SIGINT Program Systems Engineering and Program Support as well as a request for ongoing funds for IOSA Phase II, as described below.

(U) SIGINT Mission Support Base

National Reconnaissance Program
SIGINT Mission Support Base by Project
FY 1996-2003

	FY 96	FY 97	FY 98	FY 97-98 Change	FY 99	FY 98-03
[redacted]						

(S) V0423198

(S[redacted]K) *SIGINT Program Systems Engineering.* The SIGINT Program Systems Engineering project sustains the continued activities of the SIGINT Directorate's Systems Engineering Office. The System Engineering Office (SEO) is responsible to the NRO SIGINT Director for ensuring the successful acquisition, integration and operation of IOSA. This encompasses such disciplines as requirements definition, design definition, performance analysis, configuration management, integration and requirements verification. The SEO is the process owner for the Directorate's management approaches which permit the multiple programs to work together to jointly satisfy the objectives of the integrated architecture. In addition, studies and experiments are conducted to review the potential to reduce risk and/or cost and improve user support. To facilitate requirements understanding, the SEO represents the NRO at the National SIGINT Committee, the SIGINT Overhead Reconnaissance Subcommittee and the National Emitter Intelligence Subcommittee.

(S[redacted]K)

[redacted]

(S[redacted])

[redacted]

(S[redacted]) *SIGINT Program Support.* This project funds required SIGINT Directorate administrative operations including security and travel/training of the SIGINT staff element. This line item has been reorganized and now principally funds security costs. Security administration funds specifically required by SIGINT programs have been moved from the NRO level into the SIGINT Program Support project. On the other hand, funds have been transferred to the NRO level for basic operations and maintenance of NRO activities in Los Angeles and for the NRO's cost estimating function previously managed by SIGINT as part of SIGINT Program Support.

(U) SIGINT Mission Support Ongoing

National Reconnaissance Program
Integrated Overhead SIGINT Architecture-
Phase II
FY 1996-2003

	FY 96	FY 97	FY 98	FY 97-98 Change	FY 99	FY 98-03
[redacted]						

(S[redacted])

(S[redacted]K) *Integrated Overhead SIGINT Architecture - Phase II.* In addition to performing system engineering for IOSA, the SEO is beginning a new effort to define an architecture that will follow IOSA Phase I. This new effort is known as IOSA Phase II. IOSA Phase II is an end-to-end study developing approaches to overhead SIGINT collection and processing beyond IOSA's 2006 FOC date. The study will examine SIGINT collection requirements and consider all approaches (including revolutionary

concepts), designs, and new technologies to satisfy community requirements beyond 2006. To ensure community involvement, especially for requirements definition, the study effort is managed by a joint NRO/NSA senior steering group and will consist of multiple supporting working groups.

(S/NF) In order to begin work immediately on IOSA Phase II, we initiated in FY 97 advanced planning prior to a potential future Key Decision Point "A", the initial NRO acquisition decision milestone. The working groups for IOSA Phase II will be supported by both government and contractor (CAAS) personnel.

(U) SIGINT Technology Program

National Reconnaissance Program
SIGINT Technology Base by Project
FY 1996-2003

	FY 96	FY 97	FY 97-98	FY 98-03
[redacted]				

(U) SIGINT Technology Introduction

(S/NF) The Jeremiah Panel stressed the need for the National Reconnaissance Office (NRO) to pursue revolutionary technologies to achieve US global information superiority. In concert with the NRO Office of Systems Applications, the SIGINT Research and Development Office (RDO) is pursuing innovative, cutting-edge technologies for incorporation in future SIGINT architectures and spacecraft.

(U) SIGINT Technology Program Overview

[redacted]

(S/NF) FY97 represents a transition year for SIGINT research and development (R&D). Based in part on the conclusions of the Jeremiah Panel, the program is being redirected from one that primarily worked on general-satellite and relatively near-term technology to one that has a strong long-range focus consolidated into the six program areas described below.

(U) Future Electronic Warfare (EW) and Electronic Order of Battle (EOB)

[redacted]

(U) Future SIGINT System

[redacted]

DENIED IN FULL

139

Handle via [redacted]-TALENT-KEYHOLE-COMINT
Channels Only

(U) Global Coverage

(U) New Sources and Methods

(U) Information Superiority

This effort focuses on developing the technologies necessary to ensure that operators and users of NRO systems have the information they need when they need it. Projects in this program fall into three groups: actionable information to the user, specific emitter identification, and the virtual ground system. Specific projects include developing techniques to rapidly turn data into useful information, developing mechanisms to enable users to more efficiently and effectively access information, and presenting information in a context relevant to the user.

Major SIGINT Technology Successes and Transitions to SIGINT Operational Systems

The true measure of a successful SIGINT Technology program is its ability to transition technologies into operational uses. To that end, a number of recent successes are noteworthy.

(U) Object Technology

[redacted]

(U) Summary

(U) The SIGINT Research and Development Office is on the leading edge of technology advancements. The success of our exploration and transfer of new technologies to current and future operational SIGINT systems is critical to the continuation of the NRO's position as a space and intelligence leader. The sustained funding of this element is an enabling piece of our SIGINT vision.... A single integrated overhead SIGINT system providing information—in the form and with the timeliness required—to SIGINT users worldwide.

THIS PAGE INTENTIONALLY LEFT BLANK