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DD/A Registry  
85-1829/12

**ROUTING AND RECORD SHEET**

**SUBJECT:** (Optional)

Transmittal of OC Five Year Plan

**FROM:**

AD/CO

**EXTENSION**

**NO.**

OC-1043-85

**DATE**

7 Nov 85

**TO:** (Officer designation, room number, and building)

**DATE**

**OFFICER'S INITIALS**

**COMMENTS** (Number each comment to show from whom to whom. Draw a line across column after each comment.)

RECEIVED      FORWARDED

1. DDA / PLANS  
7D18 HQS

11/19

DD

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185-1829/18

20 NOV 1988

MEMORANDUM FOR: Director of Communications

FROM: Harry E. Fitzwater  
Deputy Director for Administration

SUBJECT: Office of Communications Long Range Plan

REFERENCE: Office of Communications Five-year Plan,  
FY-1986 to FY-1991

I have reviewed and approved your long-range plan. It's exceptionally forward-looking and exceptionally well done. I look forward to meeting with you and your people quarterly to review the progress of your important programs and to discuss any problem areas.

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[Redacted Signature Box]

Harry E. Fitzwater

25X1ORIG: DDA/MS

[Redacted Box]

Distribution:

- Original - Addressees
- 1 - DDA Chrono
- 1 - DDA Subject
- 1 - DDA/MS Chrono
- 1 - DDA/MS Subject

~~SECRET~~

85-1829/1

OC-1043-85

07 NOV 1985

MEMORANDUM FOR: Deputy Director for Administration

FROM:   
Acting Director of Communications

SUBJECT: Transmittal of OC Five Year Plan

REFERENCE: DDA 85-1829/1, dtd 19 Jul 85, Subj: Directorate  
of Administration Planning, FY1986 - FY1991

As requested in the referenced memorandum the OC Plan for  
FY1986-FY1991 is forwarded herewith.



Attachment

cc: D/OIT

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DOWNGRADE TO CONFIDENTIAL  
UPON REMOVAL OF ATTACHMENT



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S E C R E T

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OFFICE OF COMMUNICATIONS

FIVE-YEAR PLAN

FY-1986 - FY-1991

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S E C R E T

## I. INTRODUCTION

This Office of Communications Five-Year Plan for FY1986-FY1991 is based on the OC Strategic Plan for the same period.

The Office of Communications has identified seven key business areas which it engages in to meet its mission responsibilities to the Directorate and the Agency. They are:

- Conventional Communications
- Non-Conventional Communications
- Communications Security Services
- Staff Support for Non-OC Components
- Technical Support for Non-OC Components
- Engineering Support for Non-OC Components
- Conference Support for Non-OC Components

Using the Directorate of Administration Goals and Assumptions for FY86 and the office-level assumptions set out in Section II of this plan, OC has established, in Section III, 17 goals in support of its seven business areas. Specific activities to be undertaken to realize Office goals, and a schedule for their completion are displayed in spread sheet form which shows completion dates for activities to be concluded in FY86 by quarters. The plan concludes with a discussion of significant resource issues in Section V.

2  
S E C R E T

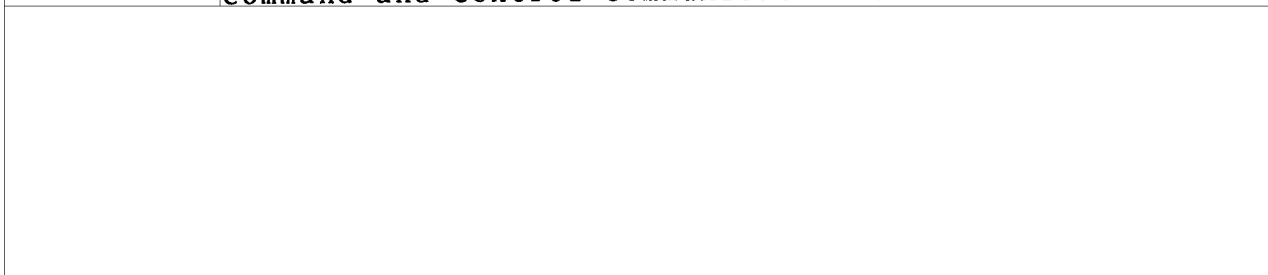
## II. OFFICE-LEVEL ASSUMPTIONS

Office planning for the next five years must take account of a variety of factors, some well defined, others vague. Some of the factors that are most likely to influence Office activities are discussed below.

In the United States and other developed countries, commercial carriers will begin to migrate away from operating separate systems for analog and digital service toward networks in which all analog signals, e.g., unencoded speech or television, will be converted to digital form (by customer terminal equipment) for transmission within the carrier network. This service, which has been named, "Integrated Services Digital Network" (ISDN) will supply all conventional telecommunications services to the user through a standard interface. ISDN, when implemented will provide customers with routine access to 64,000 bits-per-second communications channels, without the need for the modulating/demodulating equipment which must now be used. It will offer an alternative to the installation of costly local area networks, and is also expected to have some restorability and survivability features not now found in commercial service. ISDN standards are evolving and will be subject to changes for the next two years at least, but the service promises operating speeds and features which today are available only on expensive dedicated leased circuits.

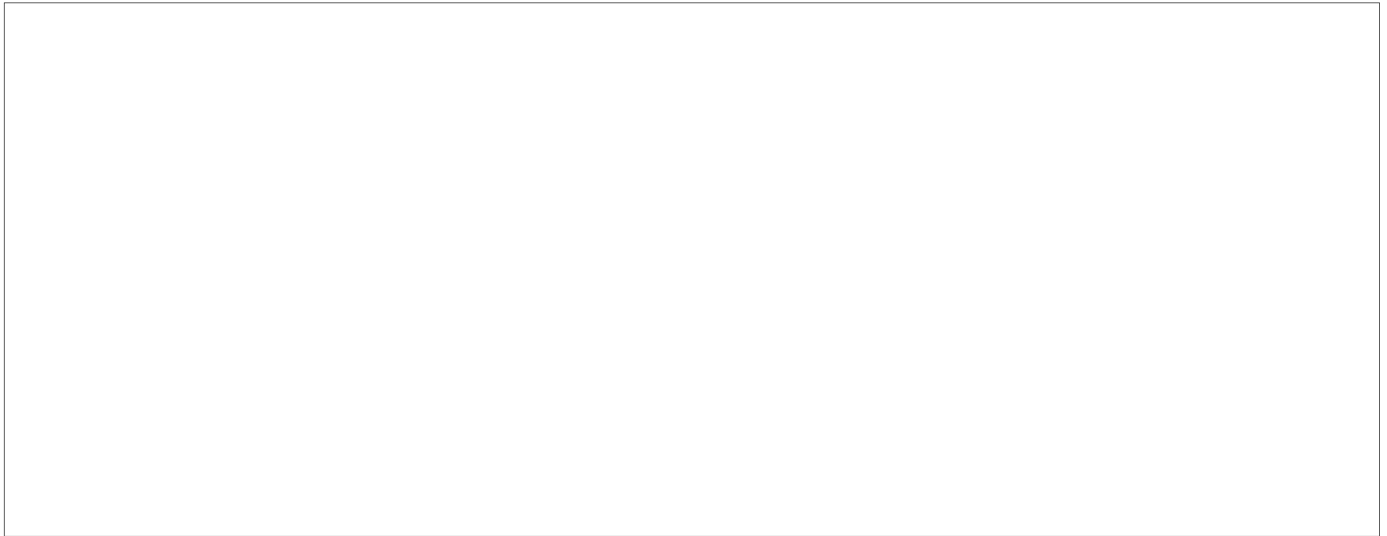
In contrast to the expanded bandwidth and services which commercial carriers will be offering, the absolute capacity of government-owned transmission media available to satisfy staff communications requirements may remain static (unless we are prepared to invest substantial resources and/or seek national funding to acquire Agency-dedicated satellite transponders for wideband communications needs). New baseband equipment which is just now being installed will make more efficient use of our allocation of satellite power and bandwidth but the allocation itself will remain a finite resource. Although further definition of this problem is necessary, it is quite possible that OC will use some elements of commercial systems to meet Agency and intelligence community requirements for

command and control communications. Satisfaction of



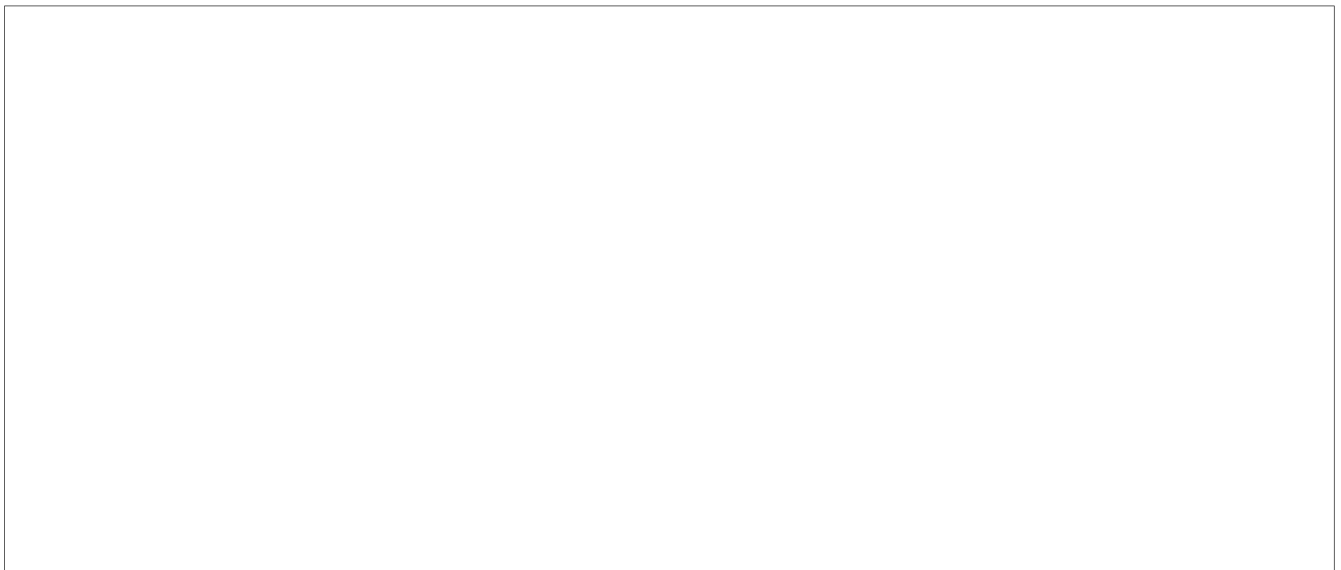
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On the national scene, National Security Decision Directive 97 has mandated that Federal telecommunications networks be survivable and interoperable. Executive Order 12472 charges the Manager, National Communications System with coordinating the development and maintenance of an effective and responsive capability for meeting the national security and emergency preparedness telecommunications needs of the Government. As Federal departments and agencies plan for the implementation of these policies, the Office will be forced to factor national planning considerations into its network planning and implementation, and may find itself involved in interagency politics to a much greater degree than ever before.

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The trends in technology, user requirements, and in national policy indicate that the networks may have to support and maintain the infrastructure to provide electronic cryptographic key generation, distribution and accounting to supplement and/or replace current methods. To meet these requirements will require new programs to be initiated soon if this infrastructure is to be in place by the 1990's.

While the developments in the areas discussed above unfold, OC will be completing its Capitalization and base station modernization programs. The MERCURY effort will be approaching full operating capability, [redacted]

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[redacted]



### III. OFFICE-LEVEL GOALS

The Office of Communications has established these goals in its FY86-FY91 Strategic Plan:

#### a. Conventional Communications

Complete the current phase of the Capitalization Program.

Continue network modernization and improve customer service.

Recruit the highest caliber officers to operate and maintain the network, give them the best possible training and support, and provide opportunities for career advancement commensurate with their skills and contributions.

Improve the Office management structure and methodologies.

Ensure that network facilities are designed and installed in conformance with good human and technical engineering practices.

#### b. Non-Conventional Communications

Improve the availability and the quality of crisis communications services available to CIA users.

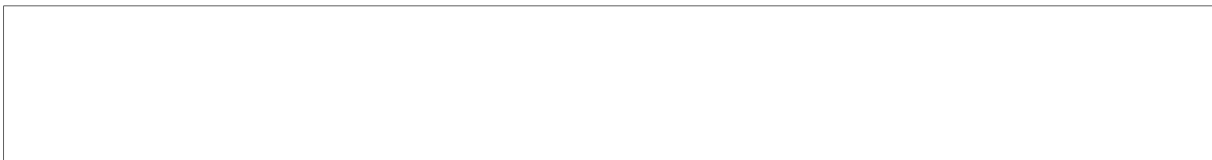
Acquire the satellite power and bandwidth needed to meet all present and future non-conventional communications requirements which are currently being satisfied by UHF satellite systems.

Acquire the funding and staff positions which are necessary to support non-conventional communications requirements.

c. Communications Security Services

Sustain the security of CIA conventional and non-conventional communications at the highest possible level.

Develop a file encryption system and embedded cryptographic systems in support of Agency information processing programs.



d. Staff Support for Non-OC Components

Reach a level of personnel strength sufficient to fully staff each of the non-OC activities which the Office supports.

e. Technical Support for Non-OC Components

Conduct a review of technical support activities with the object of ensuring that customer funding of these activities is set at levels which are consistent with the support which is rendered.

Encourage the selection of equipment sized and configured to minimize the quantity and size of hardware which must be handled as Plain Text Processing Equipment.

f. Engineering Support for Non-OC Components

Maintain the personnel and expertise needed to meet all OIT communication engineering requirements.

Acquire the additional resources needed to aggressively market OC engineering services to Agency and non-Agency clients in need of such services.

g. Conference Support for Non-OC Components

Modernize and improve  conference facility through a DDA funding initiative.

IV OBJECTIVES & SCHEDULES

Business Area: Conventional Communications

DA FY86-FY91 Five Year Plan  
 Office of Communications Annex  
 October 1985

Objective: Complete the Capitalization Program and continue network modernization.

	<u>Activity</u>	<u>Supports DA Goals</u>	<u>FY86 Quarters</u>				<u>FY87</u>	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
			<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>					
25X1	Install modern terminal and HF radio equipment [redacted]	4 & 8				X					
25X1	Deploy packet switching nodes at Headquarters [redacted]	4 & 8					X				
	Complete 20% of the base station modernization program in each year of the five-year plan.	4 & 8				X	X	X	X	X	
	Eliminate all obsolete terminal equipment, OTT equipment, and HF radio equipment from the foreign network.	4 & 8					X				
	Define and design a terminal device to replace the TERP IIA terminal.	4 & 8				X					
	Provide secure facsimile service to OC Area Headquarters and base stations, and several selected field stations.	4 & 8					X				
	Define a program to develop an off-line cryptosystem to replace the present one-time tape system.	4 & 8				X					
25X1	[redacted]	4 & 8					X				

Business Area: Conventional Communications

DA FY-86-FY91 Five Year Plan  
 Office of Communications Annex  
 October 1985

Objective: Complete the Capitalization Program and continue network modernization.

<u>Activity</u>	<u>Supports DA Goals</u>	<u>FY86 Quarters</u>				<u>FY87</u>	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>					
Define and document the architecture of the communications network.	8		X							
Define architectural alternatives for providing wideband commo services.	4 & 8									X
Program and procure technical and network control systems	8					X				
25X1 <span style="border: 1px solid black; display: inline-block; width: 300px; height: 30px; vertical-align: middle;"></span>	4									X
Conduct tests of alternate routing capabilities of overseas facilities under simulated stress conditions.	9			X						
Install uninterruptable power systems at eighteen locations served by unreliable commercial power.	3,4,6,9									X

Business Area: Conventional Communications

DA FY-86-FY91 Five Year Plan  
 Office of Communications Annex  
 October 1985

Objective: Complete the Capitalization Program and continue network modernization.

<u>Activity</u>	<u>Supports DA Goals</u>	<u>FY86 Quarters</u>				<u>FY87</u>	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>					
Develop and implement a field/Hqs. secure voice capability which is reliable, user friendly and of good voice quality	2 & 4					X	X	X		
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Business Area: Conventional Communications

DA FY86-FY91 Five Year Plan  
 Office of Communications Annex  
 October 1985


Objective: Recruit the highest caliber officers to operate and maintain the network, train them well, support them, and give them opportunities for career advancement commensurate with their skills.

Activity	Supports DA Goals	FY86 Quarters				FY87	FY88	FY89	FY90	FY91
		1	2	3	4					
Each full personnel strength in all OC disciplines.	1				X					
Review OC training activities with particular attention to computer-based training and managerial training.	1 & 8				X					
Ensure that OC Station/Base members receive equal consideration in the allocation of personal and quasi-personal items provided by the Station/Base.	1		X							
Develop a program for banding OC technicians and examine the feasibility of banding other OC career disciplines.	1		X							
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Business Area: Conventional Communications

DA FY85-FY91 Five Year Plan  
Office of Communications Annex  
October 1985

Objective: Improve the OC Management structure and methodologies.

<u>Activity</u>	<u>Supports DA Goals</u>	<u>FY86 Quarters</u>				<u>FY87</u>	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>					
Establish an automated office-wide correspondence suspense system.	3, 4, 7		X							
Study the feasibility of establishing an office-wide requirements tracking system.	3, 4, 7			X						
25X1 	8									X

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Business Area: Communications Security Services

DA FY86-FY91 Five Year Plan  
Office of Communications Annex  
October 1985

Objective: Sustain the security of CIA telecommunications at the highest possible level.

<u>Activity</u>	<u>Supports DA Goals</u>	<u>FY86 Quarters</u>				<u>FY87</u>	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>	<u>FY91</u>
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>					
Conduct a comprehensive review of CIA communications security policies and practices; identify critical areas in need of priority attention and implement changes.	2		X							
Project TENSE, network security testbed: Test, certify and develop standards for secure network gateways	2					X				
CRAFT File Encryption. Provide full database encryption capability for DO CRAFT installations	2, 3, 4					X				
Identify requirements and develop a program for electronic cryptographic key generation, distribution, and accounting for Agency networks	2								X	

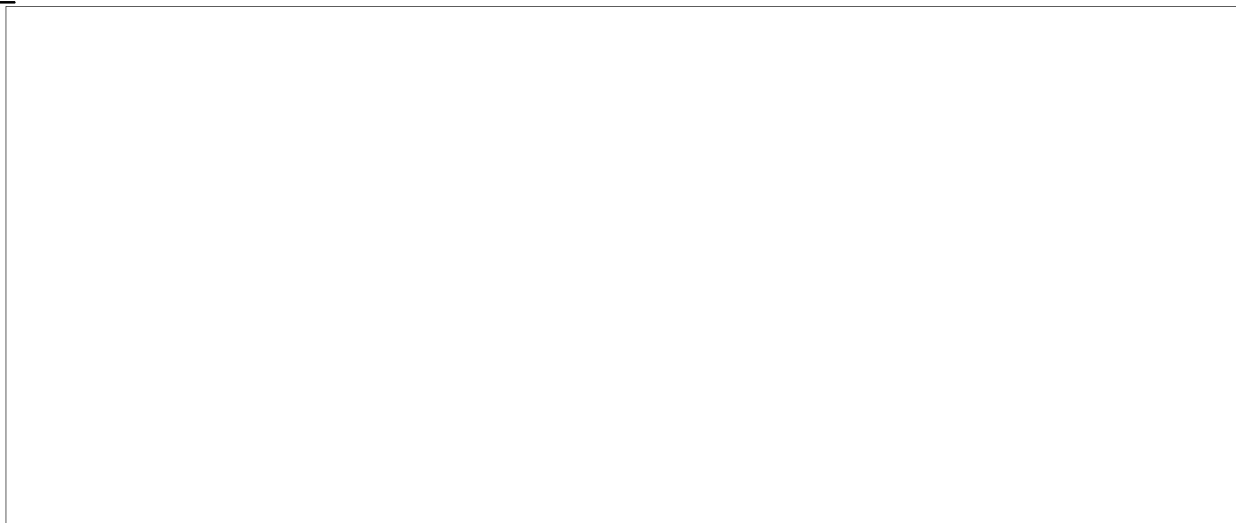
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SPECIAL TOPIC REQUESTER

IMPACT ON COMMO COSTS OF:

SCS

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NSDDs

°NSDD 145 NATIONAL POLICY ON TELECOMMUNICATIONS AND INFORMATION SYSTEMS SECURITY.

°CURRENT ISSUE IS UNFUNDED REQUIREMENT FOR STU IIIs TO REPLACE STU IIs:

<u>87</u>	<u>88</u>	<u>89</u>	<u>90</u>
\$2.0M	.55	.50	.50

°MAJOR ISSUE IS POSSIBILITY OF SHARED FUNDING FOR FUTURE PROGRAMS, WHICH CIA IS ON RECORD AS OPPOSING.

°NSDD 201 NATIONAL SECURITY EMERGENCY PREPAREDNESS (NSEP)

TELECOMMUNICATIONS FUNDING:

°BEGINNING IN 1988 CALLS FOR SHARED FUNDING OF IMPLEMENTATION AND RECURRING COSTS FOR NSEP TELECOMMUNICATIONS.

°AT THIS POINT CIA 88 SHARE OF FUNDING IS \$20K: OC CAN ABSORB.

°LONG TERM CONSEQUENCES OF SHARED FUNDING ARE TROUBLESOME: OC HAS ALERTED COMPTROLLER TO THIS AS A POTENTIAL AGENCY PROBLEM.