

DRAFT CIR FOR COP

SLC0 SERIES 5 CARRIER SYSTEM CENTRALIZED OPERATIONS AND PROVISIONING

AT&T announces Centralized Operations and Provisioning (COP), a Personal Computer (PC) software program to support the provisioning of SLC0 Series 5 from centralized work centers. COP will be available in November, 1988.

Features

- ⊕ COP supports all provisionable SLC0 Series 5 channel units.
- ⊕ COP provides centralized summary status reporting of channel units and channel bank memory in both RT and COT. It is possible to determine installed equipment inventories and maintain plant records without traveling to RT and COT sites.
- ⊕ COP improves the engineering of special service circuits by providing easy confirmation of existing provisioning data and the existence of required facilities.
- ⊕ Channel banks are accessed by COP using switched or dedicated data links through the Extended Test Controller (XTC). The XTC uses modified XTC Digital Line Unit (XDLU) and XTC Control Unit (XCU) plug in boards. The single data link to the XTC can access any of the banks supported by the XTC.
- ⊕ COP is compatible with Feature Packages C and later.

Compatible COT Bank Controllers	MC97725A1	MC97755A1
Compatible RT Bank Controllers	MC97726A1	MC97756A1

- ⊕ COP matches existing CIU provisioning procedures.
- ⊕ COP software uses existing modems and MS-DOS compatible computers. COP is delivered on a floppy disk with user documentation.
- ⊕ COP is a step toward implementing the Bellcore OS/NE interface.

More detailed information is provided in the attachment.

This document is for planning purposes only and is not intended to modify or supplement specifications or warranties relating to AT&T products and services. For additional information or assistance, please contact your AT&T Account Executive.

ATTACHMENT
SLCØ Series 5 Carrier System
Centralized Operations and Provisioning (COP)
Description

COP is used to provision channel units from off site locations which range from a few feet to many miles from the target bank. COP is low cost and provides immediate off site provisioning capability by using popular PCs and switched data lines.

COP accesses SLCØ Series 5 channel banks by means of a dial up data circuit to a dedicated port on the XTC at the host central office. The target bank may be any bank accessible by the XTC. Video display terminal activities related to call establishment, security login, and other set up activities are supported by a set up mode in which keyboard entries to the PC are sent directly to the modem for transmission. For provisioning, COP operates in a provisioning mode in which the provisioner is prompted for required data and is assisted by extensive error detection and correction processes. Data fields are compatible with Work Order Record Detail (WORD) content and format. Messages and prompts are Man Machine Language (MML), augmented by explanatory comments.

COP provides a capability for the centralized provisioning of SLCØ Series 5 Channel Units and channel bank memory. For provisioning, its user interface and its functionality equal the CIU. A user who is familiar with the CIU provisioning procedures is equally proficient with COP provisioning procedures.

Channel Unit types that are provisionable with COP are:

- E SPOTSØ (CLEI = 5SCU69 or 5SCU6A)
- 4-Wire Voice Frequency (CLEI = 5SCU7B, 5SCU7C, or 5SCU7D)
- Dataports (CLEI = 5SCU48 or 5SCU38)
- Digital Connectivity Unit (CLEI = 5SCS50)

COP also offers a Status Summary Report which provides a current audit of the provisioning of each channel, the channel unit type (including CLEI if determinable), presence or absence of channel units in each slot, and the Redline (i.e., Special Services Protection) status of each channel for both the RT and the COT ends. The Status Summary Report can be obtained for any number of sequential

channels up to 96 on a given bank. The report is printed on request. Figure 1 shows a sample Status Summary Report.

Channel Unit Types identified by the Status Summary Report are:

• Identified by CLEI:

5SCU69	5SCU6A	(E SPOTSØ)
5SCU7C	5SCU7B	5SCU7D (4 Wire)
5SCU38	5SCU48	(DDS)
5SCU54	5SCU57	(Multiparty)
5SCU23	5SCU26	(Coin)
5SCU9E	5SCU9F	(DID)
5SCUS0	5SCUT0	(FSR)

• Identified as "POTS", "SPOTS", or "POTS-SPOTS":

"POTS-SPOTS"	(RT)	(AUA51	5SCU150)
		(AUA58	5SCU1H0)
		(AUA59	5SCU1L0)
		(AUA25	5SCURP7)
		(AUA45	5SCUU05)
"POTS"	(COT)	(AUA31	5SCU110)
		(AUA38	5SCU1G0)
		(AUA45	5SCUU05)
"SPOTS"	(COT)	(AUA32	5SCU820)
		(AUA39	5SCU8M0)

Specifications

COP depends directly on the software residing in the PC, on certain hardware options that must be available with the PC, on the presence of the RS-232 to RS-422 Converter, and on the XTC firmware. The remaining elements of the access configuration (depicted as two modems and a data link in Figure 2) are chosen at customer option.

1. System

- A. A new XDLU card (AUB63B) is required, as described in AT&T Practice 363-205-103.
- B. A new XCU (MC97761A) is required, as described in AT&T Practice 363-205-103.
- C. RS-232 to RS-422 converter at the XTC is required.
- D. Automatic call back security device at the XTC is optional.
- E. Feature Package C and later Banks are compatible.

Compatible COT Bank Controllers	MC97725A1	MC97755A1
Compatible RT Bank Controllers	MC97726A1	MC97756A1

- F. An optional SLC[®] Series 5 mounting shelf and interconnection cable (J1C182XB-1,L1) accommodates the COP equipment at the XTC site.

2. PC and Modem

COP has been tested with the AT&T PC6300 WGS and the IBM XT computers with 10 Megabyte hard disk, 640K RAM and MS-DOS Version 2.1 or later. If an internal modem is used, it is recommended that it be "AT-Command" compatible. COP has been tested with:

- A. Internal Modem: AT&T Model 4112
- B. External Modem: AT&T Model 4000 configured for COMM 1 or COMM 2
- C. Printer (optional, but recommended): AT&T Model 473

3. Data Link

- A. 1200 Baud
- B. Even Parity
- C. 7 bit data word length
- D. 1 stop bit
- E. RS-232 asynchronous
- F. Access options:
 - Switched data circuit using automatic call-back after hang-up by remote security unit
 - Dedicated data link with Modems
 - Direct connection (restricted by RS-232 limit of 50 feet maximum length)
- G. Modem Options:

- Menu-Driven Internal Modem ("AT-Command" compatible type required)
- User-Operated Internal Modem ("AT-Command" compatible type not required)
- External modem having RS-232 interface (user operated)

Comparison of COP and the CIU

Important distinctions between COP and the CIU are:

- A. The CIU interfaces directly to a dual bank in the host CO. COP can be used in a dial-up mode from a work center not co-located with the CO and interfaces via an XDLU port of the XTC that is dedicated to centralized provisioning. The XTC performs the fanout to connect the COP data link with the target channel bank.
- B. To support the different kinds of video display terminal activities before, after, and during a centralized provisioning session, COP operates in two different modes, called call set up mode, and provisioning mode.
- C. The CIU test access capabilities include digital and metallic access. COP capabilities do not support test access and system turn up. They include only activities associated with the provisioning of channel units and channel bank memory. Insofar as the CIU functionality is retained by COP, however, identical capabilities are supported. They are:

- Provision E SPOTS CU
- Provision 4W CU
- Provision DDS CU
- Provision DCU
- COPY
- CLEAR-CU
- Change Status

- D. COP can produce the Status Summary Report, which the CIU cannot.
- E. COP runs on a PC. There are minor differences between the display, keyboard, and operating system of the PC and the CIU. In addition, the PC printer can be used.

STATUS SUMMARY REPORT FOR SYSTEM 1234 ON January 1, 1988

SLC SERIES 5 COT AND RT

CH #	COT STATUS			RT STATUS		
	SLOT	MEMORY	REDLINE SSP	SLOT	MEMORY	REDLI SSP
1	5SCU69	5SCU69	NO	5SCU6A	5SCU6A	NO
2	5SCU69	5SCU69	YES	5SCU6A	5SCU6A	YES
3	5SCU7C	5SCU7C	NO	5SCU7B	5SCU7B	NO
4	(N/A)	EMPTY	NO	(N/A)	EMPTY	NO
5	5SCU38	5SCU38	NO	5SCU48	5SCU48	NO
6	(N/A)	EMPTY	NO	(N/A)	EMPTY	NO
7	5SCU54	EMPTY	NO	5SCU57	EMPTY	NO
8	5SCU54	EMPTY	NO	5SCU57	EMPTY	NO
9	SPOTS	EMPTY	NO	POTS-SPOTS	EMPTY	NO
10	SPOTS	EMPTY	NO	POTS-SPOTS	EMPTY	NO
11	5SCU7D	5SCU7D	NO	5SCU7C	5SCU7C	NO
12	(N/A)	EMPTY	NO	(N/A)	EMPTY	NO
13	5SCU23	EMPTY	NO	5SCU26	EMPTY	NO
14	(N/A)	EMPTY	NO	(N/A)	EMPTY	NO
15	5SCU9F	EMPTY	NO	5SCU9E	EMPTY	NO
16	5SCU9F	EMPTY	NO	5SCU9E	EMPTY	NO
17	POTS	EMPTY	NO	POTS-SPOTS	EMPTY	NO
18	POTS	EMPTY	NO	POTS-SPOTS	EMPTY	NO
19	5SCUS0	EMPTY	NO	5SCUT0	EMPTY	NO
20	(N/A)	EMPTY	NO	(N/A)	EMPTY	NO

Figure 1 (Above) -- Sample Status Summary Report

Special Services Applications Represented Above:

CH #	Application
1 2	E SPOTS
3 4	4 Wire
5 6	DDS
7 8	Multiparty
9 10	
11 12	4 Wire
13 14	Coin
15 16	DID
17 18	
19 20	FSR

