

**SESS® SWITCHING SYSTEMS
SWITCHING MODULE 2000
APPLICATION SCHEMATIC**

4. REASONS FOR REISSUE

D. Description of Changes

Provided information on the placement of beltline TEL and TTJK panels in line trunk peripheral (LTP) cabinets.

Introduced communication module model 2C (CM2C) "AS 24" which mounts in an LTP cabinet of the switching module (SM), SM2000 to the left of the administrative module (AM) 3B21D.

Introduced digital line trunk unit model 3 (DLTU3) "AS 25" which can support both 24 and 30 channel trunks in the SM2000.

Limited the location of the packet switch unit (PSU) to an LTP cabinet in the same line up as the SMC2000 cabinet.

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DEPT NA5350300-RDA-FNG

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CONTENTS

1. GENERAL DESCRIPTION	1
1.1 PURPOSE OF CIRCUIT	1
2. DETAILED DESCRIPTION	2
2.1 SWITCHING MODULE CONTROL CABINET	2
2.2 LTP PERIPHERAL UNITS	3
3. REFERENCE DATA	4
4. ACRONYMS	5

1. GENERAL DESCRIPTION

1.1 PURPOSE OF CIRCUIT

This SESS® switching systems switching module (SM) 2000 (SM2000) application schematic defines at a high level the engineering rules and interconnection of the SM2000. The SM2000 is divided into two cabinet configurations: the switching module control (SMC) cabinet and the line trunk peripheral (LTP) cabinet. Every SM requires one SMC cabinet and either one to fourteen LTP cabinets within the same line-up, or one to twenty-eight LTP cabinets if cross-aisle arrangements are used. The SM2000 configuration is defined by the number of peripheral units and the office floor plan.

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2. DETAILED DESCRIPTION**2.1 SWITCHING MODULE CONTROL CABINET**

The switching module control (SMC) cabinet in SM2000 is composed of five units and a cabinet:

J5D003N-()	5E2000 Cabinet
J5D003FJ-()	Modular Fuse Filter Unit
J5D003FH-()	Bi-Directional Fan Unit
J5D003NA-()	Switching Module Processor Unit model 4 (SMPU4)
J5D003NB-()	Time Slot Interchange Unit model 4 (TSIU4)
J5D003NC-()	Digital Service Unit model 3 (DSU3)

The SMC cabinet is always required in an SM and is designated as cabinet "0". The 5E2000 cabinet is approximately 30 inches wide (762mm) x 24 inches deep (600mm) and 72 inches high (1828mm). An SMC2000 provides for 30,000 time slots per side of which no more than 50% can be used on the network side. There are 144 electrical PIDB per side and 92 electrical PICB per side. Of these, 24 PIDBs and 12 PICBs are dedicated for local digital service functions. The cabinet provides seven 8.5 inch spaces used to mount various peripheral units. One of the spaces is usually equipped with a fan unit:

J5D003BE-()	three fan unit
J5D003BN-()	six fan unit
J5D003FH-()	bi-direction fan unit (or for special configurations a second fan unit)
J5D003BW-()	six fan exhaust unit at EQL 62

The LTP cabinets are numbered "1" to "14" alternating left and right of the SMC cabinet, with even numbered LTP cabinets to the right as viewed from the equipment side, and the odd numbered cabinets to the left. LTP cabinets are allowed across the equipment and wiring aisles. The numbering and quantity are as follows:

- Across Equipment Aisle - starting at LTP "100" directly across the SMC with LTPs "101, 102, 103, and 104" alternating out from the "100" cabinet.
- Across Wiring Aisle - starting at LTP "200" directly across from the SMC with LTPs "201 through 208" alternating out from the "200" cabinet.

The cross-aisle LTP cabinets, as viewed from their equipment side, are always numbered in even numbers to the right and odd numbers to the left.

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2.2 LTP PERIPHERAL UNITS

The units which may be equipped in the LTP cabinets of an SM are:

Digital Service Unit model 2 (DSU2)	J5D003EA-()
Global Digital Service Unit - Export (GDSUE)	J5D003BC-()
Modular Metallic Service Unit (MMSU)	J5D003BD-()
Line Unit model 3 (LU3)	J5D004AD-()
Integrated Services Line Unit (ISLU)	J5D004AK-()
Analog Trunk Unit - Export (ATUE)	J5D003AG-()
Packet Switch Unit (PSU)	J5D003BL-()
Digital Line Trunk Unit - Export (DLTUE)	J5D003BA-()
Digital Line Trunk Unit model 2 (DLTU2)	J5D024AA-()
Echo Canceler Signaling Unit (ECSU)	J5D003JD-()
Directly Connected Test Unit (DCTU)	J5D023AM-()
Periodic Pulse Metering Unit (PPMU)	J5D003AW-()
Integrated Services Line Unit model 2 (ISLU2)	J5D004AL-()
Digital Carrier Line Unit (DCLU)	J5D003AR-()
Supplementary DCLU	J5D003AS-()
Integrated Digital Carrier Unit (IDCU)	J5D003FL-()

Supporting functional information is found in the CDs of the individual Peripheral Units.

Each LTP cabinet is equipped with a modular fuse filter unit (MFFU) in a configuration which supports the peripheral units in that LTP. The appropriate fan unit or units are also equipped in the LTP. The cabinet is six feet high and provides space for an MFFU and seven 8 1/2-inch shelves. One of these shelves is usually equipped with a fan unit.

The SMC cabinet has all shelves equipped with a fan and three units. The fan in the SMC cabinet is mounted in the middle of the cabinet with three shelves above and three below.

The LTP cabinet is equipped as the peripheral units' individual requirements dictate. The fan unit is mounted as required by the peripherals it is cooling.

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3. REFERENCE DATA

None.

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4. ACRONYMS

ATUE - Analog Trunk Unit - Export
DCLU - Digital Carrier Line Unit
DCTU - Directly Connected Test Unit
DLTU2 - Digital Line Trunk Unit model 2
DLTUE - Digital Line Trunk Unit - Export
DSU2 - Digital Service Unit model 2
DSU3 - Digital Service Unit model 3
ECSU - Echo Canceler Signaling Unit
EQL - Equipment Location
GDSUE - Global Digital Service Unit - Export
IDCU - Integrated Digital Carrier Unit
ISLU2 - Integrated Services Line Unit model 2
ISLU - Integrated Services Line Unit
LTP - Line Trunk Peripheral
LU3 - Line Unit 3
MFFU - Modular Fuse Filter Unit
MMSU - Modular Metallic Service Unit
PICB - Peripheral Interface Control Bus
PIDB - Peripheral Interface Data Bus
PPMU - Periodic Pulse Metering Unit
PSU - Packet Switch Unit
SM2000 - Switching Module 2000
SM - Switching Module
SMC - Switching Module Control
SMPU4 - Switching Module Processor Unit model 4
TSIU4 - Time Slot Interchange Unit model 4

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