3

5ESS* SWITCHING EQUIPMENT
DATA SET APPLICATION SCHEMATIC
CIRCUIT

SECTION I - GENERAL DESCRIPTION

1. PURPOSE OF SCHEMATIC

1.01 SD-5D011-01 documents the various
      links in a 5ESS office between the 3B
Input/Output Processor (IOP) and both
Operational Support Systems (OSS) and
various terminals. Each type of link is
shown in a separate AS figure.

2. GENERAL DESCRIPTION OF OPERATION

2.01 Each link consists of a Peripheral
      Controller (PC) circuit pack (in the
3B IOP) connected to the terminal or OSS by
various data sets, data auxiliary sets, and
related hardware.

2.02 Ordering and assignment of PCs are
      controlled by SD-5D014-02, the 5ESS
Applications Schematic. Ordering of data
sets, data mountings, and associated
hardware is shown in ED-5D061-50.

SECTION II - DETAILED DESCRIPTION

1. DATA LINK TO TN74 PC (AS-1)

1.01 The circuit provides a 1200-baud,
      asynchronous, full duplex data link
between a TN74 PC and any of the following:

- Any of the Recent Change and Verify's
  (RCVs), such as SCC, NAC, RC center,
  but not the local RCV (See AS-17);

- Repair Service Bureau Local Test Desk
  (verify only); and

- ALIT RSB.

The link consists of a TN74 PC, a 202T DS,
and an 829A DAS in the No. 5 office,
connected by a 4-wire private line
transmission loop to equipment located in
the remote office. All links described
above are powered from the essential
ac circuit.

2. DATA LINK BETWEEN TN83 PC AND NO. 2
    SCCS, USING 201C DATA SETS (AS-7)

2.01 This circuit provides the data link
      between the TN83 PC and the No. 2
SCCS, using 201C data sets. The link
consists of two TN83 PCs, 201C DSs, and 829
DASs, connected over two 4-wire private
line loops to the No. 2 SCCS circuit. This
circuit is powered from the protected ac
circuit.

2.02 For the same link using 2024A data
      sets, see Section II.9.

3. DATA LINK TO TN75B PC, (USING 201C DATA
    SETS), (AS-8)

3.01 This circuit provides a full duplex,
      2400 baud, synchronous link between a
TN75B PC and any of the following OSSs:
EADAS, AMARC primary link, RMAS, and SES2.
The AMARC primary channel is powered from
the protected ac circuit; the others use
the essential ac circuit. The circuit
consists of a TN75B PC, a 201C DS, and an
829 DAS connected over a 4-wire private
line loop to equipment in the remote
office.

Printed in U.S.A.

Not for use or disclosure outside the
Bell System except under written agreement.

3.02 For the same link using 2024A DSs, See Section II.8.

4. DATA LINK TO TN75B PC USING 2024A DATA SETS (AS-10)

4.01 This circuit serves an identical purpose to the one described in Section II.3, except that 2024A data sets are used instead of 201C data sets. See Section II.3.

5. DIAL-BACKUP LINK TO TN75B PC (2400 BPS) (AS-12)

5.01 This circuit provides a full duplex, 2400 baud, synchronous, dial-backup link between a TN75B PC and the AMARC circuit. The circuit consists of a TN75B PC, a 2024A DS, and a 48FR1 data unit, connected over two DDD lines to the AMARC circuit. It is powered from the protected ac circuit.

6. DIAL UP LINK TO TN75B PC (4800 BPS) (AS-11)

6.01 This circuit provides a full duplex, 4800 baud, synchronous, dial up data link between a TN75B PC and the SCANS circuit. The circuit consists of a TN75B PC, a 2048A DS, and a 48FR1 DU connected over two DDD lines to the SCANS circuit. It is powered from the essential ac circuit.

7. CONNECTION OF 3BIOP TO MAINTENANCE CONTROL CENTER (MCC) (AS-15,16,17)

7.01 The MCC consists of two terminals plus a third optional one, all directly connected (no data sets) to the 3B IOP. AS-15 shows the circuit connecting the Maintenance TTY (MTTY) to the 3B Port Switch (which is itself connected to the 3B IOP). AS-16 shows the connection between the read only printer (ROP) and the 3B Port Switch. AS-17 shows the optional (required in 5E1.1 offices) local RCV terminal, connected to a TN74 PC.

7.02 Both the MTTY and ROP are powered from the protected ac circuit. The local RCV terminal is powered from the essential ac circuit.

7.03 Ordering information for the MCC is available in ED-5D039-30

8. BELTLINE CHANNEL (AS-18, AS-19)

8.01 Together, AS-18 and AS-19 show the beltline circuit.

8.02 AS-18 shows the circuit connecting a TN74 PC to the intraoffice communications circuit (SD-5D009-01). The circuit consists of a TN74 PC, 202T DS, and an 829 DAS, cross connected at the MDF to the intraoffice communications circuit. It is powered from the essential ac circuit.

8.03 AS-19 shows the connection of the beltline TTY to the intraoffice communications circuit. The circuit consists of a model 43 TTY, 202T DS, and 829 DAS, all mounted on a mobile cart, and powered from the convenience outlets (essential ac circuit). The cart is connected to the jack panel (part of intraoffice communications circuit) with a 6P1A cord.

8.04 At least one AS-18 and one AS-19 circuits are required in each office; up to one more AS-18 circuit may be ordered; more beltline TTYs (AS-19) may be ordered as desired.

9. DATA LINK BETWEEN TN83 PC AND NO. 2 SCCS, USING 2024A DATA SETS, (AS-20)

9.01 This circuit is identical to the one described in Section II.2, except for the use of 2024A data sets instead of 201C data sets. See Section II.2 for detailed description.

SECTION III - REFERENCE DATA

1. WORKING LIMITS

1.01 None.

2. CONNECTING CIRCUITS

(a) 5ESS Applications Schematic SD-5D014-02

(b) Intraoffice Communication Circuit SD-5D009-01

(c) 3B Peripheral Control Frame (cabinet enclosure includes IOP) - SD4C106-01

(d) 5ESS ac circuit SD-5D004-01

SECTION IV - REASON FOR REISSUE

A. Description of Changes

Issue 3D of the SD added OSSs provided in 5E1.2 generic (RMAS, SES 2) and updated all information that changed as a result of going from frames to cabinets. Also added was the beltline channel. The drawing was simplified, and the following ASs were deleted: ASs 2, 3, 4, 5, 6, 9, 11, and 14. New explanatory notes were added. Issues 2A and 3D are concurrent issues of the SD.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT 55614-AP-FNG