Figure C-9/Q.714 - T1115320-88

Figure C-10/Q.714 (sheet 1 of 4) - T1115330-88

Figure C-10/Q.714 (sheet 2 of 4) - T1115340-88

Figure C-10/Q.714 (sheet 3 of 4) - T1115350-88

Figure C-10/Q.714 (sheet 4 of 4) - T1115360-88

Figure C-11/Q.714 - T1115370-88

Figure C-12/Q.714 - T1115380-88

ANNEX D (to Recommendation Q.714)

xe ""§State transition diagrams (STD) for SCCP management control

D.1 General

This Annex contains the description of the SCCP management (SCMG) function according to the CCITT Specification and Description Language (SDL).

For the SCCP management function, Figure D–1/Q.714 illustrates a subdivision into functional blocks, showing their functional interactions as well as the functional interactions with the other major functions (e.g. SCCP connectionless control (SCLC)). This is followed by Figures D–2/Q.714 to D–10/Q.714 showing state transition diagrams for each of the functional blocks.

The detailed functional breakdown shown in the following diagrams is intended to illustrate a reference model, and to assist interpretation of the text of the SCCP management procedures. The state transition diagrams are intended to show precisely the behaviour of the signalling system under normal and abnormal conditions as viewed from a remote location. It must be emphasized that the functional partitioning shown in the following diagrams is used only to facilitate understanding of the system behaviour, and is not intended to specify the functional partitioning to be adopted in a practical implementation of the signalling system.

D.2 Drafting conventions

Each major function is designated by its acronym (e.g. SCMG = SCCP management).

Each functional block is also designated by an acronym which identifies it (e.g. SSAC = Sub–System Allowed Control).

External inputs and outputs are used for interactions between different functional blocks. Included within each input and output symbol in the state transition diagrams are acronyms which identify the functional blocks which are the source and the destination of the message, e.g.:

SSAC ® SSTC

indicates that the message is sent from Sub–System Allowed Control to Sub–System Test Control.

Internal inputs and outputs are only used to indicate control of timers.

D.3 Figures

Figure D–1/Q.714 shows a subdivision of the SCCP management function (SCMG) into smaller functional blocks, and also shows the functional interactions between them. Each of these

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functional blocks is described in detail in a state transition diagram as follows:

- a) Signalling Point Prohibited Control (SPPC) is shown in Figure D-2/Q.714;
- b) Signalling Point Allowed Control (SPAC) is shown in Figure D–3/Q.714;
- c) Signalling Point Congested Control (SPCC) is shown in Figure D–4/Q.714;
- d) Sub–System Prohibited Control (SSPC) is shown in Figure D–5/Q.714;
- e) Sub–System Allowed Control (SSAC) is shown in Figure D–6/Q.714;
- f) Sub–System Status Test Control (SSTC) is shown in Figure D–7/Q.714;
- g) Coordinated State Change Control (CSCC) is shown in Figure D–8/Q.714;
- h) Local Broadcast (LBCS) is shown in Figure D–9/Q.714;
- i) Broadcast (BCST) is shown in Figure D–10/Q.714.

D.4 Abbreviations and timers

Abbreviations and timers used in Figures D–1/Q.714 to D–10/Q.714 are listed below.

```
Abbreviations
BCST
CSCC
DPC
   Destination Point Code
LBCS
MSG
MTP
SCCP
SCLC
SCMG
SCOC
SCRC
SOG
SOR
   Sub-System Out of Service Request
SP
SPAC
SPCC
SPPC
SS
SSA
   Sub-System Allowed
SSAC
SSP
   Sub-System Prohibited
SSPC
SST
   Sub-System Status Test
SSTC
UIS
UOS
```

Timers

T(stat. info.)

Delay between requests for sub–system status information

T(coord. chg.)

Waiting for grant for sub–system to go out of service

T(ignore SST)

Delay for sub—system between receiving grant to go out of service and actually going out of service

Figure D-1/Q.714 - T1115390-88

Figure D-2/Q.714 - T1115400-88

Figure D-3/Q.714 - T1115410-88

Figure D-4/Q.714 - T1115420-88

Figure D-5/Q.714 (sheet 1 of 2) - T1115430-88

Figure D-5/Q.714 (sheet 2 of 2) - T1115440-88

Figure D-6/Q.714 (sheet 1 of 2) - T1115450-88

Figure D-6/Q.714 (sheet 2 of 2) - T1115460-88

Figure D-7/Q.714 - T1115470-88

Figure D-8/Q.714 (sheet 1 of 2) - T1115480-88

Figure D-8/Q.714 (sheet 2 of 2) - T1115490-88

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Figure D–9/Q.714 (sheet 1 of 2) - T1115500-88

Figure D–9/Q.714 (sheet 2 of 2) - T1115510-88

Figure D–10/Q.714 - T1115520-88