DSA

Log File Messages

DPS7000/XTA
NOVASCALE 7000

Communications: DSA

REFERENCE
39 A2 9693 06

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February 1995

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FRANCE

REFERENCE
39 A2 9693 06

Printed in France

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Preface

This manual is written for network administrators who are responsible for interpreting a DSA log file, using the Log File Editor. The DSA log file is used to survey the activity on an existing DSA network.

There are two types of message which may be recorded in the log file:

- unsolicited message
- command response message

This manual describes how to evaluate the various parameters of each log file message.

ORGANISATION OF THIS MANUAL

This manual gives details of every log file message possible. The messages are classified by:

- class of administration object
- domain, power, code and importance level

Section 1	describes the basic elements of DSA log file messages, and their formats.
Section 2	gives detailed descriptions (from class AC to class LX, in numerical order) of the log file messages.
Section 3	gives detailed descriptions (from class MB to class XN, in numerical order) of the log file messages.
Appendix A	contains a summary of the DSA log file messages.

MANUAL DIRECTORY

The following list gives the titles and order numbers of the manuals of the DSA manual set. These manuals may be ordered by Bull SA customers and Bull HN customers from the corresponding addresses given on the cover pages of this document.

For a detailed description of each manual, consult the DSA Documentation Directory.

DSA Concepts.....39 A2 9725
DSA Network Administration Guide 39 A2 8849
DSA Documentation Directory 39 A4 9726
DSA Pocket Guide 39 A4 9729
DSA Log File Analyser 39 A2 9732
DSA Network System Messages and Return Codes.....39 A2 26DM

In addition, the following manuals may be of interest to the reader :

DNS V4 NOI Operator's Guide 39 A2 25DN
CNS A2 NOI Operator's Guide 39 A2 34DN
DNS-E NOI Operator's Guide 39 A2 86RA
DSA - AUPI Programmer's Reference Manual 39 A2 16DM
NMF6 Software Release Bulletin 69 A2 LA48

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1. Introduction

Administrative records carry administration and control information between the distributed components of a network. These components are:

- the NAD (Node Administrator)
- the NOI (Node Operator Interface)
- the ASF (Administrative Storage Facility)
- AUTs (Administrative Utilities, written by the user)

There are several types of administrative records in the network:

- commands sent by an NOI to a NAD,
- responses to these commands from the NAD,
- unsolicited messages about statistics, events or errors,

Some administrative records are recorded in a LOG FILE using an ASF (Administrative Storage Facility), according to criteria given at system generation time. Once stored in the LOG FILE, these records are known as Log File Messages. These can be processed or inspected later using the Log File Editor or customized utilities.

1.1 LOG FILE MESSAGE FORMAT

The user visible part of a Log File Message is divided into many parts. Each message has a header comprising five values:

- Domain
- Power
- Code
- Class
- (Importance) Level

A given combination of values for these variables defines a certain command or event.

The Class value defines the object family upon which the command is operating, or about which an unsolicited message is sent.

The Code value shows what the command or unsolicited message is doing (what action or event).

The Code and Class values, give the basic meaning of the message. Inside each, certain fields give further (specific) information:

- For a Command:
  - the SELECTION part,
  - the MODIFICATION part,
  - the RESPONSE part,
- For an Unsolicited Message:
  - one part, comprising information defining the event. This is carried in the RESPONSE field.

The significance of each of these differs between object families.

Tables, later in this section, describe the values for classes, and code/level combinations.

1.2 LOG FILE EDITOR OUTPUT

```
2 11E DG66 85:02:28  20:10:19  UMP   00  FUNC=X'10' EX   HISTORY 00 0A
RSP ==>
FIELD    1     2   3   4    5     7   8
VALUE    120   2   269 269  270       0
         13304 12728
<RECORD  TOO LONG>



2 11E DG66 85:02:28  20:10:40  UMP  00  FUNC=X'00' VC   OPN-FAIL 00 OC
RSP ==>
FIELD   1  2             6   8    12           13    16    18
VALUE   0  NS    :DG8P   AC  1    ERROR=23/68  0044  256   7



2 11E DG66 85:02:28  20:13:52  UMP  00  FUNC=X'00' PL  ERROR    00  OC
RSP ==>
FIELD    1     7             8
VALUE    2000  ERROR=21/5    0000



2 11E DG66 85:02:28  20:13:53  UMP  00  FUNC=X'00' PC  HISTORY  00  OA
RSP ==>
FIELD   1     2           3    7    8    10   11  13  15  16  17
VALUE   442  PL   :2000   **:  61   262  61   611     0    0
```

Figure 1-1. Extract from Sample Log File Listing (DPS 8000)

A log file message can be broken down into these classifying parameters as shown below.

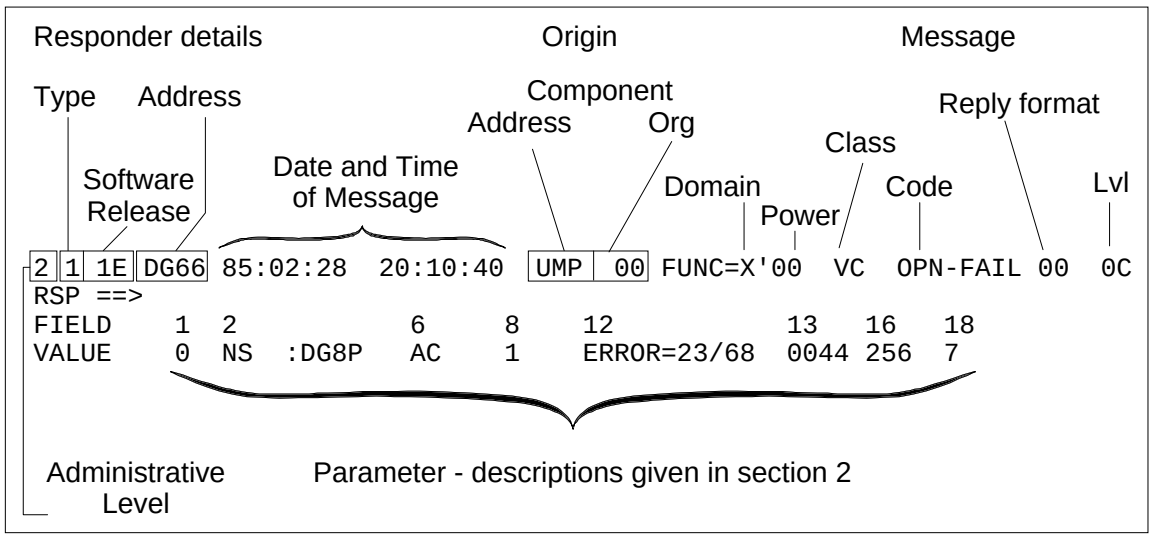

Figure 1-2. Breakdown of Logfile Message Parameters (DPS 8000 Log File Editor)

Values for certain parameters may be in text or in numerical code. Fields which have no significance or are reserved for future use do not figure or are left blank in the output. The tables on the following pages give text equivalents of numerical values for each parameter.

For Figure 1-2 the message concerns a VC (Virtual Circuit) event. This is an unsolicited message following an open failure (OPN-FAIL). Therefore the interpretation will be in the tables for unsolicited messages. The detailed interpretation of the fields is:

Field Number	Value	Meaning
6	AC	Acceptor of Call
8	1	Virtual Circuit ID
12	ERROR=23/68	Reason Code for Failure
13	0044	Network Reason Code
16	256	Emit packet size
18	7	Emit window size

NOTE: The Reason Code value explanations are in the reference manual: *DSA System Messages and Return Codes*.

1.2.1 Responder Node-Types

	Node Type
0	Unknown
1	DNS
2	GCOS 6
3	GCOS 7
4	GCOS 111
5	GCOS 8 native
6	DNS-E
7	Multics
10	CNS 7
12	NMF
13	DNS (through translator)
14	GCOS 6 (through translator)

1.2.2 Reply Format Values (ORG)

Bit	Response Status (Bit Set)
0	Rejected before processing
1	Rejected during an iteration
4	Iteration not complete
5	The rest of the message following in another item
6	Continuation Record

1.2.3 Class Meanings and Values

Value	Class
2	Cross Network Message (XN)
3	System Startup (SU)
4	Physical Line (PL)
5	Logical Line (LL)
6	Network Subscription (NS)
7	Network Route (NR)
8	Virtual Circuit (VC)
9	Transport Station (TS)
10	Mailbox (MB)
11	Session (SS)
12	Logical Connection (LC)
13	Controller (CT)
14	Device (DV)
15	Administrative Function (AF)
18	Administrative Function Connection (FX)
19	Executive (EX)
20	System (SY)
21	Transport Connection (TC)
23	Network Connection (NC)
25	Channel (CH)
26	Terminal Station
27	Cluster (CL)
28	Link Connection (LK)
29	Physical Connection (PC)
30	Session Control (SC)
31	Channel Connection (CC)
34	Administrative Filter (FL)
35	Statistics Block (SB)
38	Mailbox User (MU)
43	Administrative Correspondent (AC)
44	Session Route (SR)
45	Logical Device (LD)
48	Operator (OP)
49	Administrative Log File (LG)

Class Meanings and Values (Cont'd)

Value	Class
51	Tests (TL)
54	File Transfer (FT)
56	Administrative Group (AG)
57	Correspondent (CO)
58	Physical Subscription (PS)
59	Subscription Group (SG)
60	Station Connection (SX)
61	Logical Device Connection (LX)
62	Device Connection (DX)
63	User Descriptor (UD)
64	Logon Descriptor (LN)
65	Connection Descriptor (CD)
66	Terminal Mailbox Extension (TX)
68	Device Pool (DP)
69	Welcome Message of the day (WM)
70	Terminal Unit (TU)
71	Terminal Model (MD)
74	Software Component (SW)
75	Network User (NU)
90	Cable (CB)
95	Address List (AL)
96	Application (AP)
97	Application Connection (AX)
98	Transport User (UT)
111	Routing Base (RB)
112	Multilink Object (ML)
113	Multilink Connection (MK)
114	Internet Activity (IK)
115	Internet Network Activity (NK)

1.2.4 Domain Values

Value	Meaning
0	All Others
1	Executive or System
2	Application Administration
3	Administration
4	Security Administration

1.2.5 Power Values

Value	Meaning
0	Unsolicited message
1	Response to all commands except UP, TX, RL and MP
2	Test command responses and unsolicited messages
3	Response to UP, TX, RL and MP commands

Table 1-1. Code Values

Value	Definition	Mnemonic	Command/Response or Unsolicited Message
1	Number	NB	Command/Response
2	List	LS	Command/Response
3	Display Attributes	DA	Command/Response
4	Get History	GH	Command/Response
4	History Report	HR	Unsolicited Message
5	Update	UP	Command/Response
6	Map	MP	Command/Response
7	Open	OP	Unsolicited Message
8	Close	CL	Unsolicited Message
12	Get Attributes	GA	Command/Response
14	Error or Event	ER	Unsolicited Message
15	Threshold Violation	TH	Unsolicited Message
16	Reset Event	RE	Unsolicited Message
17	Open Failure	OF	Unsolicited Message
50	Text Broadcast	TX	Command/Response
51	Reload System	RL	Command/Response
52	Load System	LD	Command/Response
53	Dump System	DP	Command/Response
54	Start System	ST	Command/Response
60	Completed Startup	SU	Unsolicited Message
150	Executive Percentage	EP	Unsolicited Message
151	Executive Event	EE	Unsolicited Message

NOTE: In Sections 2 and 3, the Unsolicited Messages are shown with a letter u in the left-hand margin, and Command/Responses with a letter c.

Appendix A contains a list of the Log File messages which are described in Sections 2 and 3, with their values for Domain (Domn), Power (Pwr), Class, Code, and Importance

Level (Lvl). Details of Log File Editor implementation and use can be found in the documentation of the appropriate system.

1.3 MESSAGE OUTPUT ON A CONSOLE

The *NOI Operator's Guide* shows the format of commands and responses on the console. In general, however the parameters are shown in a similar fashion to a Log File listing.

```
1  ?? ga pl bc82
2  DNS-E BC88 :10:59:14
   PL NAME  STAT TYPE MAP1           MAP2    PHAD  SPD SWIT MODM HI DU
   BC82     USED HDLC LL:BC82        CT:1000 0:1:1  0    0    0  NO FU

3  DNS-E BC88 :10:59:50 CL   TC  1333 TS:BC88 TS:BC82 NC:1446  :  IN 33137..
   FULL  3 1016  REASON=18/08 64366 BE03     BCFB
```

Figure 1-3. Example of Console Messages

Certain parameters are prefixed by their object family, for example LL: (Logical Line), or CT: (Controller) etc.

Where parameters are not applicable, they are replaced by / (slash), indicating that a Reason Code is null (0), or : (semi-colon), indicating an absent mapping.

Line 1 is a command entered by the operator, see the *NOI Operator's Guide* manual.

Line 2 is the response to the command, giving the name of the node (BC88), time and date.

Line 3 is an unsolicited message refusing (CL closing) a transport connection (TC), perhaps for unavailable remote session control or badly configured Transport Station (Reason 18/08). The maximum credit possible is 3, maximum fragment length is 1016. The session control origin is BE03, the destination is BFCB.

2. Descriptions of Log File Messages (Classes AC to LX)

This section describes the log file messages in Class groups - all messages for a given class are described together.

The classes are documented in ALPHABETICAL order - for Class names corresponding to given values, see Section 1.

CLASS 43 AC

2.1 ADMINISTRATIVE CORRESPONDENT (CLASS 43)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2
c	Update	UP	3	3	5	6
c	Text Broadcast	TX	3	1	50	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first AC)
2	Name 2 (last AC)
3	State (of ACs reported)
4	Type (of ACs reported)
5	Map 1 (Class and name of AGs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by TX)

1	Message

MODIFICATION FIELD (used by UP)

1-2	Not used
3	Requested state
4-11	Not used
12	Remote mailbox
13-14	Not used
15	Threshold

CLASS 43 AC

Command Format Description

RESPONSE FIELD

NB response

1	Number of Administrative Correspondents

LS response

1	Name of each AC (list if necessary)

DA and GA responses - Common Part

1	Name (of AC)
2	State
3	Type
4	Map 1 (Class and name of AG)
5-6	Not used

GA Only Response

7	Administration Level (200 or 300)
8	Maximum record length
9	Character code (default = ASCII)
10	Local mailbox
11	Remote mailbox
12	Not used
13	Primary/Backup correspondent (PR/BK)
14	Threshold

TX response

1	Name (of AC)
2	Report Code

UP response

1	Name (of AC)
2	Old attribute
3	New attribute
4	Report code

CLASS 15 AF

2.2 ADMINISTRATIVE FUNCTION (CLASS 15)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2
c	Update	UP	3	3	5	6
c	Map	MP	0	3	6	6
c	Text Broadcast	TX	3	1	50	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first AF)
2	Name 2 (last AF)
3	State (of AFs reported)
4	Type (of AFs reported)
5	Map 1 (Class and name of AGs, LGs, OPs, or ACs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by TX)

1	Sysgen Message

CLASS 15 AF

Command Format Description

RESPONSE FIELD

NB response

1	Number of Administrative Functions

LS response

1	Name

DA and GA responses

1	Name (of AF)
2	State
3	Type
4-6	Not used
7	Administration Level (200 or 300)

TX Response

1	Name (of AF)
2	Report Code

CLASS 15 AF TLD

2.2.1 Administrative Function TLD

NOTE: This heading gives the codes and messages for AF TLD type.

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first AF)
2	Name 2 (last AF)
3	State (ENBL/LOCK)
4	Type (TLD)
5	Not Used
6	Map 2 (class and name of LL)

MODIFICATION FIELD (used by MP)

1	Old Mapping
2	New Mapping

MODIFICATION FIELD (used by UP)

1	Not Used
2	Not Used
3	State (ENBL/LOCK)
4-10	Not Used
11	Name of system to be loaded
12	Not Used
13	SC-ID supporting the ASF
14	Global mailbox name for the ASF
15	Scenario file name
16	Automatic or semi-automatic teleload

CLASS 15 AF TLD

Command Format Description

RESPONSE FIELD

NB Response

1	Number of ASFs

LS Response

2	Name

GA or DA Response

1	Name
2	State
3	Type
4	Not used
5	Map 2, associated LL name
6-9	Not used
10	System to be loaded
11	BDL logical line to be used
12	SC-ID supporting the ASF
13	Global mailbox name for he ASF
14	Scenario file name
15	Automatic or semi-automatic teleload

UP Response

1	AF name
2	Old attribute
3	New attribute
4	Report code

MP Response

1	AF name
2	Old mapping
3	New mapping
4	Report code

CLASS 15 AF TLD

Unsolicited Message Description

ERROR SPECIFIC

1	AF name
2	Mailbox ASF name
3	Reason code
4	Complementary code
5	Specific information

CLASS 56 AG

2.3 ADMINISTRATIVE GROUP (CLASS 56)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first AG)
2	Name 2 (last AG)
3	State (of AGs reported)
4	Type (of AGs reported)
5	Map 1 (Class and name of ACs, AFs, FLs, or OPs)
6	Map 2 (Class and names)

RESPONSE FIELD

NB response

1	Number of Administrative Groups

LS response

1	Name(s) of Administrative Groups

DA and GA responses

1	Name (of AG)
2	State
3	Type
4	Map 1 (Class and name of AF)
5	Not used

GA Only Response

6	Not used
7	Initiate connect (YS/NO)
8	Not used

CLASS 95 AL

2.4 ADDRESS LIST (CLASS 95)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first AL)
2	Name 2 (last AL)
8	NSAP
9	T-Sel
10	Transport user (UT class and name)
11	Subnetwork (class and name)

MODIFICATION FIELD

1-8	Not Used
9	NSAP address
10	T-Sel
11	Transport User (UT)
12	Not Used
13	Default NSAP

CLASS 95 AL

Command Format Description

RESPONSE FIELD

NB Response

1	Number of address lists

LS Response

1	Name of each AL (list if necessary)

DA and GA Response

1	Name (of AL)
8	NSAP
9	T-Sel
10	UT name
11	Subnetwork

GA Only Response

12	Default NSAP
13	Net NSAP

UP Response

1	Name (of AL)
2	Old attribute
3	New attribute
4	Report Code

CLASS 96 AP

2.5 APPLICATION (CLASS 96)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Error Report	ER	0	1	14	2

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first AP)
2	Name 2 (last AP)
3	State (of reported APs)
4	Type (of reported APs)
5	Map 1 (class and name of LDs)

MODIFICATION FIELD

None

CLASS 96 AP

Command Format Description

RESPONSE FIELD

NB Response

1	Number of applications

LS Response

1	Name of each AP (list if necessary)

DA and GA Response

1	Name
2	State
3	Type
4	Not Used
5	Map 1 (LD name and class)

Unsolicited Message Description

1	Name
2	State
3	Type
4-6	Not used
7	Reason Code

CLASS 97 AX

2.6 APPLICATION CONNECTION (CLASS 97)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first AX)
2	Index 2 (last AX)
3	State
4	Type
5	Map 1 (class and name of APs, AXs)

MODIFICATION FIELD

None

RESPONSE FIELD

NB Response

1	Number of application connections

LS Response

1	Name(s) of application connections (list if necessary)

DA and GA Response

1	Index
2	State
3	Type
4	Map 1 (AP name and class)

CLASS 97 AX

Unsolicited Message Description

1	Index
2	End point for AP
3	Not used
4	Supporting connection (AX)
5	Not used
6	Initiate accept (IN/AC)
7	Not used
8	Event duration (ms)
9	Delay (in ms)
10-12	Not used

CLASS 90 CB

2.7 CABLE (CLASS 90)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1
2	Name 2
3	State
4	Type
5	Mapping 1
6	Mapping 2

MODIFICATION FIELD (Used by UP)

1-2	Not used
3	New state
4	Not used

CLASS 90 CB

Command Format Description

RESPONSE FIELD

NB response

1	Number of cables

LS response

1	Cable name

DA and GA COMMON PART response

1	Cable name
2	State
3	Type
4	Mapping 1
5	Mapping 2

UP response

1	Cable name
2	Old attribute
3	Current attribute
4	Report code

CLASS 31 CC

2.8 CHANNEL CONNECTION (CLASS 31)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Get History	GH	0	1	4	2
u	History Report	HR	0	1	4	10
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Error	ER	0	0	14	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first CC)
2	Index 2 (last CC)
3	State (of CCs reported)
4	Type (of CCs reported)
5	Map 1 (Class and name of CCs, CHs, LCs, or TCs)
6	Map 2 (Class and names)

CLASS 31 CC

Command Format Description

RESPONSE FIELD

NB response

1	Number of Channel Connections

LS response

1	Index

DA and GA COMMON PART response

1	Index (of CC)
2	State
3	Type
4	Map 1 (Class and name of CHs proper or UT)
5	Map 1 (Class and name of CH image)
6	Map 1 (Class and name of CC, LC, TC)
7	Map 1 (Class and name of SS, CC)

GA only response

8	End
9	Local plug number
10	Remote image plug number
11	Remote CC index
12	Remote SC identifier
13	Local SC identifier

GH response

1	Index
2	Local end point (CH)
3	Remote end point
4	Supporting connection (TC)
5	Supported connections (LC)
6	Initiator/acceptor (IN/AC)
7	Remote plug
8	No of letters sent
9	No of letters received
10	No of bytes sent
11	No of bytes received

CLASS 31 CC

Unsolicited Messages Description

COMMON PART

1	Index
2	Local end point (CH)
3	Remote end point
4	Supporting connection (TC)
5	Supporting connections (LC)
6	Initiator/acceptor (IN/AC)
7	Remote plug

OPEN/OPEN FAILURE/CLOSE - SPECIFIC

8	Event duration (in ms)
9	Delay (in ms)
10	Reason code
11	System specific information
12	Local plug number
13	Not Used
14	Host CC id
15	Session control origin address
16	Session control remote address

ERROR SPECIFIC

8	Reason code
9	System specific information

HISTORY SPECIFIC

8	No of letters sent
9	No of letters received
10	No of bytes sent
11	No of bytes received

Note: Any further parameters represent implementation-specific counters

CLASS 65 CD

2.9 CONNECTION DESCRIPTOR (CLASS 65)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first CD)
2	Name 2 (last CD)
3	State (of CDs reported)
4	Type (of CDs reported)
5	Map 1 (Class and name of COs, or SNs)
6	Map 2 (Class and names)

CLASS 65 CD

Command Format Description

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4	Not used
5-6	Not used
7	User-id
8	User-id input parse (DEF/PR/PRDF)
9	User-id overridable (YS/NO)
10	User auxiliary device (YS/NO)
11	User-id retrieved at login
12	User-id lower case
13	Reserved
14	Project-id
15	Project-id input parse (DEF/PR/PRDF)
16	Project-id overridable (YS/NO)
17	Project auxiliary device (YS/NO)
18	project-id retrieved at login
19	Project-id lower case
20	Reserved
21	Account-id
22	Account-id input parse (DEF/PR/PRDF)
23	Account-id overridable (YS/NO)
24	Account auxiliary device (YS/NO)
25	Account-id retrieved at login
26	Account-id lower case
27	Reserved
28	Password (never reported)
29	Password input parse (DEF/PR/PRDF)
30	Password overridable (YS/NO)
31	Password auxiliary device (YS/NO)
32	Password retrieved at login
33	Password lower case
34	Reserved
35	Correspondent parse (DEF/PR/PRDF)
36	Correspondent overridable (YS/NO)
37	Correspondent auxiliary device (YS/NO)
38	Reserved
39	Auto-ack
40-44	Reserved
45	User-string
46	String-parse (DEF/PR/PRDF)
47	String-overridable (YS/NO)
48	String-auxiliary-device (YS/NO)
49	String-lower-case
60	Security string
61	Security string parse (DEF/PR/PRDF)
62	Security string parse overridable (YS/NO)
63	Security string auxiliary device (YS/NO)
64	Security string lower case (YS/NO)

CLASS 65 CD

Command Format Description

MODIFICATION FIELD (used by MP)

1	Old-mapping
2	New-mapping

RESPONSE FIELD

NB response

1	Number of Connection Descriptors

LS response

1	Name(s) of Connection Descriptor(s)

DA and GA COMMON PART response

1	Name (of CD)
2	State
3	Type
4	Mapping-1 (CO object mapped to this CD)
5	Not used

CLASS 65 CD

RESPONSE FIELD

GA only response

6	User-id
7	User-id-input-parse (DEF/PR/PRDF)
8	User-id-overridable (YS/NO)
9	User-auxiliary-device (YS/NO)
10	User-id-retrieved-at-login
11	User-id-lower-case
12	Not used
13	Project-id
14	Project-id-input-parse (DEF/PR/PRDF)
15	Project-id-overridable (YS/NO)
16	Project-auxiliary-device (YS/NO)
17	Project-id-retrieved-at-login
18	Project-id-lower-case
19	Not used
20	Billing-id
21	Billing-id input parse (DEF/PR/PRDF)
22	Billing-id overridable (YS/NO)
23	Billing-id auxiliary device (YS/NO)
24	Billing-id retrieved at login
25	Billing-id lower case
26-27	Not used
28	Password input parse (DEF/PR/PRDF)
29	Password overridable (YS/NO)
30	Password auxiliary device (YS/NO)
31	Password retrieved at login
32	Password lower case
33	Not used
34	Correspondent parse (DEF/PR/PRDF)
35	Correspondent override (YS/NO)
36	Correspondent auxiliary (YS/NO)
37	Not used
38	Auto-ack
39	Not used
40-43	Used only in DSA/SNA OSF
44	User string
45	User string parse (DEF/PR/PRDF)
46	User string override (YS/NO)
47	User string auxiliary (YS/NO)
48	User string lower case
59	Security string
60	Security string parse (DEF/PR/PRDF)
61	Security string overridable (YS/NO)
62	Security string auxiliary device (YS/NO)
63	Security string lower case (YS/NO)

UP response

1	Descriptor-name
2	Old-attribute
3	New-attribute
4	Report-code

CLASS 25 CH

2.10 CHANNEL (CLASS 25)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first CH)
2	Name 2 (last CH)
3	State (of CHs reported)
4	Type (of CHs reported)
5	Map 1 (class and name of CCs, CTs, SCs, or SRs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-8	Not used
9	Sample Interval

CLASS 25 CH

Command Format Description

RESPONSE FIELD

NB response

1	Number of Channels

LS response

1	Name(s) of Channel(s)

DA and GA responses

1	Name
2	State
3	Type
4	Map 1 (Class and name of Session Route (SR))
5	Map 2 (Class and name of Controller (CT))
6	Map 3 (Class and name of Channel Connection (CC))

GA Only Response

7	Address
8	Sample interval (in ms)
9	Number of connections

UP response

1	Name (of CH)
2	Old attribute
3	New attribute
4	Report code

Unsolicited Message Description

ERROR

1	Name
2	State
3	Hardware address
4-6	Not used
7	Reason code
8	Diagnostic information

CLASS 27 CL

2.11 CLUSTER (CLASS 27)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first CL)
2	Name 2 (last CL)
3	State (of CLs reported)
4	Type (of CLs reported)
5	Map 1 (Class and name of CLs, DVs, LLs, NSs or TUs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4	Not used
5-6	Not used
7	Address
8	Maximum consecutive polls

MODIFICATION FIELD (used by MP)

1	Old mapping (LL)
2	New mapping (LL)

CLASS 27 CL

Command Format Description

RESPONSE FIELD

NB response

1	Number of Clusters

LS response

1	Names of Clusters

DA and GA responses

1	Name
2	State
3	Type
4	Not used
5	Map 2 (Class and name of LL or NS)

GA Only Response

6	Address
7	Maximum consecutive pollings

UP response

1	Cluster name
2	Old attribute
3	New attribute
4	Report code

MP response

1	Cluster name
2	Old mapping (LL)
3	New mapping (LL)
4	Report code

CLASS 27 CL

Unsolicited Message Description

ERROR

1	Name
2	State
3	Type
4	Map 1 (Class and name of LL, PL, or NS)
5-6	Not used
7	Reason code

CLASS 57 CO

2.12 CORRESPONDENT (CLASS 57)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first CO)
2	Name 2 (last CO)
3	State (of COs reported)
4	Type (of COs reported)
5	Mapping 1 (Class and name of CD object)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-7	Not used
8	Global mailbox name
9	Backup Correspondent
10	Profile
11	CD override (YS/NO)
12-58	Not used
59	Terminal input activity timer
60	Application output activity timer
61	Session interrupt timer
62	Session pending timer
63-65	Not used
66	DIOV
67	DIAL

MODIFICATION FIELD (used by MP)

1	Old mapping
2	New mapping

CLASS 57 CO

Command Format Description

RESPONSE FIELD

NB response

1	Number of Correspondents

LS response

1	Name(s) of Correspondent(s)

DA and GA responses

1	Name
2	State
3	Type
4	Mapping 1
5	Mapping 2
6	Local mailbox name
7	Global mailbox name (DA only)
8	Back up CO
9	Profile
10	CD override (YS/NO)
11	Session disconnection timer
12-57	Not used
58	Terminal input activity timer
59	Application output activity timer
60	Session interrupt timer
61	Session pending timer
62-64	Note used
65	DIOV
66	DIAL

UP response

1	Correspondent name
2	Old attribute
3	New attribute
4	Report code

MP response

1	Name
2	Old Mapping
3	New Mapping
4	Report code

CLASS 13 CT

2.13 CONTROLLER (CLASS 13)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
u	Event Report	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first CT)
2	Name 2 (last CT)
3	State (of CTs reported)
4	Type (of CTs reported)
5	Map 1 (Class and name of CTs, CHs, or PLs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-6	Not used
7	Requested hardware address
8	Requested Ethernet address

CLASS 13 CT

Command Format Description

RESPONSE FIELD

NB response

1	Number of Controllers

LS response

1	Name(s) of Controller(s)

DA and GA responses

1	Name
2	State
3	Type
4-5	Not used

GA only response

6	Hardware address
7	Hardware update
8	Software update
9	CT software update

UP response

1	Name (of CT)
2	Old attribute
3	New attribute
4	Report code

Unsolicited Message Description

COMMON PART

1	Name
2	State
3	Hardware address
4-6	Not used
7	Reason code
8	System specific information

CLASS 68 DP

2.14 DEVICE POOL (CLASS 68)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first DP)
2	Name 2 (last DP)
3	State (of DPs reported)
4	Type (of DPs reported)
5	Map 1 (Class and name of DVs, LDs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4	Not used
5-7	Not used
8	Encoding
9	National character set
10	Case (UP/LW/FL)
11	Font
12	Line length
13	Page length
14	Line overflow (TRUN/FOLD/OVER)
15	Page overflow (SCRL/CLR)

CLASS 68 DP

Command Format Description

RESPONSE FIELD

NB response

1	Number of device pools

LS response

1	Name of each DP (list if necessary)

DA and GA response

1	Name
2	State
3	Type
4	Map 1 (Class and name of LDs)
5	Map 2 (Class and name of DVs)

GA Only Response

6	Map 3 (Class and name of MDs)
7	Encoding
8	National character set
9	Case (UP/LW/FL)
10	Font
11	Line length
12	Page length
13	Line overflow (TRUN/FOLD/OVER)
14	Page overflow (SCRL/CLR)

UP response

1	Device pool name
2	Old attribute
3	New attribute
4	Report code

CLASS 14 DV

2.15 DEVICE (CLASS 14)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6
c	Text Broadcast	TX	0	1	50	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first DV)
2	Name 2 (last DV)
3	State (of DVs reported)
4	Type (of DVs reported)
5	Map 1 (Class and name of CLs, LDs, LLs, MDs, NRs, TSs, or TUs)
6	Map 2 (Class and names)

CLASS 14 DV

Command Format Description

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4	Type
9	Encoding
10	National character set
11	Lower case on output (YS/NO)
12	Font
13	Line length
14	Page length
15	Maximum connect
16	Implicit login (YS/NO)
17	Override login (YS/NO)
18	Sharing ability (SHR/EHSR/DED)
19	Line overflow (TRUN/FOLD/OVER)
20	Page overflow (SCRL/CLR)
21	Device speed (chars per sec)
22	Echoplex (EPLX/NOEC)
23	Device address
24	Terminal buffer size
25	No session context time
26	Initial defer (DEFR/ACPT/DEL)
27	Lower case on print (YS/NO)
28	Model name prompt (YS/NO)
29	Auto logout (YS/NO)
30	Timer for reconnection

MODIFICATION FIELD (used for MP)

1	Old mapping
2	New mapping

CLASS 14 DV

Command Format Description

RESPONSE FIELD

NB response

1	Number of devices

LS response

1	Name of each DV (list if necessary)

DA and GA response

1	Name
2	State
3	Type
4	Map 1 (Class and name of CLs, LLs, NRs, TSs, or TUs)
5	Map 2 (Class and name of DPs or LDs)

GA Only Response

6	Map 3 (Class and name of LNs)
7	Map 4 (Class and name of MDs)
8	Encoding
9	National character set
10	Lower case on output (YS/NO)
11	Font
12	Line length
13	Page length
14	Maximum connect
15	Implicit login (YS/NO)
16	Override login (YS/NO)
17	Sharing ability (SHR/ESHR/DED)
18	Line overflow (TRUN/FOLD/OVER)
19	Page overflow (SCRL/CLR)
20	Device speed (chars per sec)
21	Echoplex (EPLX/NOEC)
22	Device hardware address
23	Terminal buffer size
24	No session context time
25	Initial defer (DEFR/ACPT/DEL)
26	Lower case on input (YS/NO)
27	Model name prompt (YS/NO)
28	Auto-logout (YS/NO)
29	Timer for reconnection
30	Which timer type

CLASS 14 DV

Command Format Description

UP and MP response

1	Device name
2	Old attribute
3	New attribute
4	Report code

Unsolicited Message Description

COMMON PART

1	Name
2	State
3	Type
4	Map 1 (Class and name of LL, PL, or NS)
5-6	Not used
7	Reason code

CLASS 62 DX

2.16 DEVICE CONNECTION (CLASS 62)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Error	ER	0	0	14	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first DX)
2	Index 2 (last DX)
3	State (of DXs reported)
4	Type (of DXs reported)
5	Map 1 (Class and name of DVs, DXs, LKs, TCs, or VCs)
6	Map 2 (Class and names)

CLASS 62 DX

Command Format Description

RESPONSE FIELD

NB response

1	Number of Device Connections

LS response

1	Name(s) of Device Connection(s)

DA and GA COMMON PART response

1	Index
2	State
3	Type
4	Map 1 (Class and name of DVs)
5	Map 2 (Class and name of LKs, TCs, VCs)

GA only response

6	Not used
7	Encoding
8	National character set
9	Case (UP/LW/FL)
10	Font
11	Line length
12	Page length
13	Echoplex (EPLX/NOEC)
14	Line overflow (TRUN/FOLD/OVER)
15	Device speed (chars per sec)
16	Initial defer (DEFR/ACPT/DEL)
17	User-id
18	Project-id
19	Billing-id

CLASS 62 DX

Unsolicited Message Description

COMMON PART

1	Index
2	End point (DV)
3	Not used
4	Supporting connection (DX)
5	Supported connections (LK, TC, or VC)
6	Initiate accept (IN/AC)
7	Not used

OPEN/OPEN FAILURE/CLOSE - SPECIFIC

8	Event duration (in ms)
9	Delay (in ms)
10	Terminal device address
11	Terminal device type
12	Reason-code

ERROR SPECIFIC

8	Reason code

CLASS 19 EX

2.17 EXECUTIVE (CLASS 19)

			Domain	Power	Code	Level
u	Error	ER	0	1	Variable	
u	Error	ER	1	0	150	6
u	Error	ER	4	0	151	6
u	Unsol. History Report	HR	1	0	4	10

Where the values for CODE are:

50-149 Events common to several executives

150-255 Events specific to one executive, for which the following importance-levels are applicable:

- 150-159: DNS, DNS-E
- 160-169: GCOS 6
- 170-179: GCOS 8
- 180-189: GCOS 7
- 190-199: Multics

Unsolicited Message Description

ERROR - COMMON PART

1 Event duration time stamp

ERROR

2 CPU identification

3 % CPU used

ERROR (Debug DNS, DNS-E)

2 Name of object reporting event

3 Reason code

4 Complementary information

CLASS 19 EX

Unsolicited Message Description

HISTORY SPECIFIC

1	Time interval covered
2	Percent used of CPU capacity
3	Mean free memory (number of buffers)
4	Minimum free memory (number of buffers)
5	Maximum free memory (number of buffers)
6	Disk I/O transfer
7	Maximum available OS workspace
8	Actual free OS workspace
9	Number of physical connections
10	Number of link connections
11	Number of virtual circuits
12	Number of transport connections
13	Number of logical connections
14	Number of sessions
15	Number of device connections
16	Number of logical device connections
17	Number of terminal station connection
18	Buffer size
19	Initial number of buffers
20	Initial available OS workspace

NOTE: The first history message sent by the NAD (DNS, DNS-E) is not significant and should be ignored.

CLASS 34 FL

2.18 ADMINISTRATIVE FILTERS (CLASS 34)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2
c	Update	UP	3	3	5	6
c	Map	MP	3	3	6	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first FL)
2	Name 2 (last FL)
3	State (of FLs reported)
4	Type (of FLs reported)
5	Map 1 (Class and name of AGs, LGs, or OPs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

3	Requested state
4	Not used
7	Not used
8	Low domain
9	High domain
10	Low power
11	High power
12	Low class
13	High class
14	Low code
15	High code
16	Low level
17	High level
18	System-id-1
19	System-id-2

MODIFICATION FIELD (used by MP)

1	Old Mapping (OP or AG)
2	New Mapping (OP or AG)

CLASS 34 FL

RESPONSE FIELD

NB response

1	Number of Filters

LS response

1	Name(s) of Filter(s)

DA and GA responses - Common Part

1	Name of Filter
2	State
3	Type
4	Map 1 (Class and name of AGs, LGs, or OPs)
5	Not used
6	Logic (INCL/EXCL/OBLI)

GA Only Response

7	Low domain
8	High domain
9	Low power
10	High power
11	Low class
12	High class
13	Low code
14	High code
15	Low level
16	High level
17	System-id-1
18	System-id-2

MP response

1	Name (of FL)
2	Old mapping
3	New mapping
4	Report code

UP response

1	Name (of FL)
2	Old attribute
3	New attribute
4	Report code

CLASS 18 FX

2.19 ADMINISTRATIVE FUNCTION CONNECTION (CLASS 18)

			Domain	Power	Code	Level
u	Open	OP	3	0	7	10
u	Close	CL	3	0	8	10/12
u	Error	ER	3	0	14	12
u	Open Failure	OF	3	0	17	12

Unsolicited Message Description

COMMON PART

1	Local AF name
2	Local AF type
3	Remote system id
4	Remote AF mailbox name
5	Remote AF type
6	Initiator or acceptor
7	Reason Code
8	Not Used

ERROR SPECIFIC

9	AEP Loss Count

CLASS 114 IK

2.20 INTERNET ACTIVITY (CLASS 114)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Get History	GH	0	1	4	2
u	History Report	HR	0	0	4	10
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Error	ER	0	0	14	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index-1 (first Internet activity to report)
2	Index-2 (last Internet activity to report)
3	State
4	Type (IPFL, IPSW, IPHD)
5	Map-1 (Class and names of LK, PC, VC, NR)
6	Map-2 (Class and names)

RESPONSE FIELD

NB response

1	Number of Internet Activities

LS response

1	Index

CLASS 114 IK

RESPONSE FIELD

DA and GA responses

1	Index
2	State
3	Type
4	Map 1 (NR)
5	Not Used
6	Map 3 (LK, PC, VC)
7	Not used

Unsolicited Message Description

COMMON PART

1	Index
2	Local end point
3	Remote end point (null)
4	Supporting connection
5	Not used
6	Initiator or acceptor
7	Type

OPEN/OPEN FAILURE/CLOSE/ERROR

8	Reason code
9	Diagnostic information

HISTORY REPORT

8	IKEPD Sub-network data requests sent
9	IKEDA Bytes sent
10	IKESD Network unit data requests sent
11	IKRPD Sub-network data units received
12	IKRDA Bytes received
13	IKRSD Network data units received
14	IKERD Redirect PDUs received
15	IKEDI PDUs discarded
16	IKEDC PDUs discarded due to congestion
17	IKEDS PDUs discarded for segment violation

CLASS 114 IK

Unsolicited Message Description

THRESHOLD VIOLATION

1	Object name
2	Threshold monitor name
3	Statistics block name
4	Calculated value
5	Low expectation
6	High expectation
7	Monitor rate
8-10	Reserved for future use
11	Actual transfer rate
12	Minimum transfer rate

CLASS 12 LC

2.21 LOGICAL CONNECTION (CLASS 12)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Get History	GH	0	0	4	2
u	History Report	HR	0	0	4	10
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Error	ER	0	0	14	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first LC)
2	Index 2 (last LC)
3	State (of LCs reported)
4	Type (of LCs reported)
5	Map 1 (Class and name of CCs, MBs, SCs, SSs, or TCs)
6	Map 2 (Class and names)
7	Ends (1/2)

MODIFICATION FIELD

None

CLASS 12 LC

Command Format Description

RESPONSE FIELD

NB response

1	Number of Logical Connections

LS response

1	Name(s) of Logical Connection(s)

DA and GA response - Common Part

1	Index
2	State
3	Type
4	Map 1 (Class and name of MBs)
5	Map 2 (Class and name of COs, or MBs)
6	Map 3 (Index of CCs or TCs)
7	Index of paired end in local system

GA Only Response

8	Logical connection id
9	Maximum subchannels
10	Maximum size letter send
11	Maximum size letter receive
12	Idle hold time
13	Maximum unreleased SRUs
14	Reported send quarantine capacity
15	Reported receive quarantine capacity
16	Mode (TWA/TWS/1WAY)
17	Re-establishment (YS/NO)
18	Suspend (YS/NO)
19	Recover (YS/NO)
20	Resynchronisation (YS/NO)
21	Commitment (YS/NO)
22	Data attention (YS/NO)
23	Reuse subchannels (YS/NO)
24	Commit superior (YS/NO)
25	My commit endpoint (YS/NO)
26	I request security (YS/NO)
27	Initiator/acceptor (IN/AC)
28	I rcv record segment (YS/NO)
29	I send record segment (YS/NO)

CLASS 12 LC

Unsolicited Message Description

COMMON PART

1	Index
2	Local end point global mailbox name (SCID, MB and Extension)
3	Remote end point global mailbox name (SCID, MB and Extension)
4	Supporting connection (TC or CC)
5	Supported connections (SS)
6	Initiator/acceptor (IN/AC)
7	Logical connection-id

ERROR SPECIFIC

8	Reason code
9	System specific information

OPEN/OPEN FAILURE/CLOSE - SPECIFIC

10	Maximum subchannels
11	Emission letter size
12	Receive letter size
13	Reason code
14	System specific information

HISTORY SPECIFIC

8-9	Not used
10	Number of application data chars sent
11	Number of system chars sent
12	Number of record segments sent
13	Number of records sent
14	Number of SRUs terminated by proper MB
15	Number of initiated SRUs sent
16	Number of letters sent
17	Number of application data chars received
18	Number of system data chars received
19	Number of record segments received
20	Number of records received
21	Number of SRUs terminated at remote MB
22	Number of initiated SRUs received
23	Number of letters received
24	Number of quarantine units sent
25	Number of quarantine units received
26	Number of recovery units
27	Number of interaction units
28-35	Not used

CLASS 45 LD

2.22 LOGICAL DEVICE (CLASS 45)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first LD)
2	Name 2 (last LD)
3	State (of LDs reported)
4	Type (of LDs reported)
5	Map 1 (Class and name of DVs or SNs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-6	Not used
7	Line length
8	Page length
9	Line overflow (TRUN/FOLD/OVER)
10	Page overflow (WRAP/PAGE/SCLR)
11	Maximum concurrent connect
12	Presentation protocol
13	Main auxiliary logical device
14	Allocation unit

MODIFICATION FIELD (used by MP)

1	Old mapping (DV or SN)
2	New mapping (DV or SN)

CLASS 45 LD

Command Format Description

RESPONSE FIELD

NB response

1	Number of Logical Devices

LS response

1	Name(s) of Logical Device(s)

DA and GA Response - Common Part

1	Name
2	State
3	Type
4	Map 1 (Class and name of SNs)
5	Map 2 (Class and name of DVs)

GA Only Response

6	Line length
7	Page length
8	Line overflow (TRUN/FOLD/OVER)
9	Page overflow (WRAP/PAGE/SCLR)
10	Maximum concurrent connects
11	Presentation protocol
12	Main auxiliary logical device
13	Allocation unit

UP Response

1	Name
2	Old attribute
3	New attribute
4	Report code

MP Response

1	Logical device name
2	Old mapping
3	New mapping
4	Report code

CLASS 49 LG

2.23 ADMINISTRATIVE LOG FILE (CLASS 49)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2
c	Update	UP	3	3	5	6
c	Text Entry	TX	3	1	50	6
c	Swap	SW	3	3	51	6
u	Open	OP	3	0	7	10
u	Close	CL	3	0	8	12
u	Error	ER	3	0	14	12
u	Open Failure	OF	3	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first LG)
2	Name 2 (last LG)
3	State (of LGs reported)
4	Type (of LGs reported)
5	Map 1 (Class and name of AFs or FLs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	Requested state
4	Type
5-7	Not used
8	Next file
9	Not used
10	Maximum file records
11	Maximum file bytes

MODIFICATION FIELD

1	Message

CLASS 49 LG

RESPONSE FIELD

NB response

1	Number of Administrative Logs

LS response

1	Name(s) of Administrative Log(s)

DA and GA response - Common Part

1	Name (of LG)
2	State
3	Type
4	Map 1 (Class and name of AF)
5	Not used

GA Only Response

6	Current file
7	Next file
8	Previous file
9	Maximum file records
10	Maximum file bytes

UP response

1	Name (of LG)
2	Old attribute
3	New attribute
4	Report code

TX response

1	Name (of LG)
2	Report code

SW response

1	Name (of LG)
2	State
3	Current file
4	Next file
5	Previous file
6	Report file

CLASS 49 LG

Unsolicited Message Description

COMMON PART

1	Name (of LG)
2	Log file name

OPEN/OPEN/ FAILURE - SPECIFIC

3	Previous file
4	Not used
5	Reason code

CLOSE/ERROR - SPECIFIC

3	Next file
4	Time opened
5	Reason code

CLASS 28 LK

2.24 LINK CONNECTION (CLASS 28)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Get History	GH	0	0	4	2
u	History Report	HR	0	0	4	10
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Error	ER	0	0	14	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first LK)
2	Index 2 (last LK)
3	State (of LKs reported)
4	Type (of LKs reported)
5	Map 1 (Class and name of LLs, PCs, MKs or VCs)
6	Map 2 (Class and names)
7	Ends

MODIFICATION FIELD

None

CLASS 28 LK

Command Format Description

RESPONSE FIELD

NB response

1	Number of Link Connections

LS response

1	Name(s) of Link Connection(s) (Index)

DA and GA response

1	Index
2	State
3	Type
4	Map 1 (Class and name)
5	Map 2 (Class and name of image LLs)
6	Map 3 (index of PCs)
7	Map 4 (index of VC, NC or MK)

Unsolicited Message Description

COMMON PART

1	Index
2	Local end point (LL)
3	Remote end point (LL, CL, or DV)
4	Supporting connection (PC or PL)
5	Supported connections (TC, CL, DV, MK, NC, IK or VC)
6	Initiator/acceptor (IN/AC)

OPEN/OPEN FAILURE/CLOSE - SPECIFIC

7	Event duration (in ms)
8	Delay (in ms)
9	Reason code

ERROR - SPECIFIC

7	Reason code

CLASS 28 LK

Unsolicited Message Description

HISTORY - SPECIFIC

7	Number of I frames sent/acknowledged
8	Number of S frames sent
9	Number of Rejected frames sent
10	Number of RNR frames sent
11	Number of information bytes sent
12	Number of timeouts causing retransmission
13	Number of rejects received causing retransmission
14	Number of times sending window closed
15	Total time window closed
16	Number of times RNR stops transmission
17	Total time RNRs effective
18	Number of I frames received correctly
19	Number of S frames received
20	Number of information bytes received
21	Number of duplicate frames received (and rejected)
22	Mean number of outstanding fragments awaiting ack
23-29	**Used only in DNS C1 : see next table**
30	Number of frames sent
31	Number of frames received
32	Number of frames NAK resent
33	Number of frames NAK received but not accepted
34	Number of polling messages receiving Number data
35	Number of unanswered polls not answering timeout
36	Number of parity errors
37	Number of received blocks with incorrect field content
38	Number of received blocks with invalid format
39	Number of incorrect frame sequences received
40	Number of received frames dropped (rules)

For DNS C1 numbers 23 to 49 are as follows:

23	Number of frames sent
24	Number of frames received
25	Number of frames NAK resent
26	Number of frames NAK received but not accepted
27	Number of polling messages receiving Number data
28	Number of parity errors
29	Number of received blocks with invalid format
30	Number of received blocks with incorrect field content
31	Number of incorrect frame sequences received
32	Number of received frames dropped (rules)
33	Number of unanswered polls not answering timeout
34	Number of received frames with BECN flag set
35	Number of received frames with FECN flag set
36-39	Not used
40-49	Implementation specific counters

CLASS 5 LL

2.25 LOGICAL LINE (CLASS 5)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first LL)
2	Name 2 (last LL)
3	State (of LLs reported)
4	Type (of LLs reported)
5	Map 1 (Class and name of CLs, MLs, DVs, PLs or NSs)
6	Map 2 (Class and names)

CLASS 5 LL

Command Format Description

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4	Not used

MODIFICATION FIELD (used by UP) : HDLC, SLP and BDL Lines

8	Maximum frame size (Not SLP)
9	Primary timeout
10	Maximum retransmits (Not SLP)
11	Primary address (Not SLP)
12	Not Modifiable (protocol)
13	Maximum unacknowledged frames
14	Activity Timeout
15-18	Not used
19	Output survey timeout
20	Not used
21	Delay acknowledgement (1/10 seconds)
22	Not used
23	Dynamic address determination (Not SLP)
24	TLD allowed (YS/NO) (Not SLP)
25	Disconnect Frame First (Not HDLC)
26	Extended numbering (YS/NO)
27	CRCR Type
28	Bust State Timeout
29	Reject Timeout
30	P Bit Timeout
31	Type 1 LLC
32	Type 2 LLC
33	Not used
34	Transmission Mode
35	Configuration
36	Switched Line
37-50	Not used
51	IRN
52	LLC Software Division
53	Maximum Bytes Transmitted
54	Maximum Bytes Received
55	No Activity Survey Timeout

CLASS 5 LL

Command Format Description

MODIFICATION FIELD (used by UP) : SLCC Lines

8	Maximum frame size
9	Primary timeout
10	Maximum retransmits
11	Primary address
12	Not Modifiable (protocol)
13	Maximum unacked frames
14-20	Not used
21	Delay acknowledgement (1/10 seconds)
22	Not used
23	Dynamic address determination (YS=dynamic, NO=fixed)
24	Not used
25	DISC frame first (YS/NO)
26	Extended numbering (YS/NO)
27	CRC type: 1 CCITT CRC16 2 CCITT CRC24 3 Federal Standard CRC32
28-36	Not used

MODIFICATION FIELD (used by UP) : MTPT lines for SECONDARY Stations

8	Maximum frame size
9	Primary timeout
10	Maximum retransmits
11	Secondary address
12	Not Modifiable (protocol)
13	Maximum unacked frames
14-18	Not used
19	Output survey timeout
20-25	Not used
26	Extended numbering (YS/NO)
27-33	Not used
34	Transmit mode (TWS/TWA)

CLASS 5 LL

Command Format Description

MODIFICATION FIELD (used by UP) : MTPT lines for PRIMARY Stations

8	Maximum frame size
9	Primary timeout
10	Maximum retransmits
11	Primary address (always zero)
12	Not Modifiable (protocol)
13-18	Not used
19	Output survey timeout
20-22	Not used
23	Dynamic address determination (YS=dynamic, NO=fixed)
24-25	Not used
26	Extended numbering (YS/NO)
27-33	Not used
34	Transmit mode (TWS/TWA)
35	Configuration (MPT/PTP)

MODIFICATION FIELD (used by UP) : SLV lines for PRIMARY Stations

8	Maximum frame size
9	Primary timeout
10	Maximum retransmits
11	Secondary address
12	Not Modifiable (protocol)
13	Maximum unacked frames
14-16	Not used
17	Slow poll timer
18-25	Not used
26	Extended numbering (YS/NO)
27-33	Not used
34	Transmit mode (TWS/TWA)
35	Not used
36	Switched line (YS/NO)

CLASS 5 LL

Command Format Description

MODIFICATION FIELD (used by UP): FR.

19	Output survey timer
20-25	Not used
56	Management function activation indicator
57	Committed measurement interval

MODIFICATION FIELD (used by UP): FRO

8	Maximum frame size
9	Primary timeout
10	Maximum retransmit
11	Not used
12	Not modifiable (protocol)
13	Maximum unacked frames
14	No activity survey timeout
15-20	Not used
21	Delay acknowledgement
22-36	Not used
37	Maximum delay without traffic
38-57	Not used
58	Committed information rate
59	Excess information rate
60	Data link connection identifier
61-62	Not used
63	Dynamic window algorithm

MODIFICATION FIELD (used by UP): FRCL

8	Maximum frame size
9-11	Not used
12	Not modifiable (protocol)
13-57	Not used
58	Committed information rate
59	Excess information rate
60	Data link connection identifier
61-62	Not used
63	Dynamic window algorithm

MODIFICATION FIELD (used by UP): FRMG

7-63	Not used
64	Link integrity verification polling timer
65	Full status polling counter
66	Error threshold counter
67	Monitored event count

CLASS 5 LL

Command Format Description

MODIFICATION FIELD (used by UP): CSM3

None

MODIFICATION FIELD (used by UP): LLC2

8	Maximum frame size
9	Primary timeout
10	Maximum retransmit
11	Not used
12	Not modifiable (protocol)
13	Maximum unacked frames
14	No activity survey timeout
15-20	Not used
21	Delay acknowledgement
22-60	Not used
61	Remote Ethernet address
62	Service access point address
63	Dynamic window algorithm

MODIFICATION FIELD (used by UP) : ASY lines:

8-11	Not used
12	Character-code ASC1 (except DNS-E) ASC2 ASCI EBCD BCD (except DNS-E) BCD1 (except DNS-E) BCD2 (except DNS-E) AS8E AS8N

MODIFICATION FIELD (used by UP): ASPI lines:

9	Interval between retries
10	Maximum number of retransmissions
14	Time between retries
15	Maximum wait time

CLASS 5 LL

Command Format Description

MODIFICATION FIELD (used by UP) : VIP/RCI/3270 lines:

8	Maximum tu size
9	Timeout for retry
10	Maximum transmissions
11	Poll address
12	Character code
13	Not used
14	Activity timeout
15	Short survey timeout
16	Long survey timeout
17	Frames sent before poll
18	Polling response timeout (1/10 seconds)
19	Output survey timeout (1/10 seconds)
20	Non traffic timeout (1/10 seconds)
21	Not used
22	No of NAK retries

MODIFICATION FIELD (used by UP) : LAN1 lines:

8	Maximum frame size
9-10	Not used
11	LSAP address
12-22	Not used
23	Dynamic address determination (YS=dynamic, NO=fixed)
24	TLD allowed (YS/NO)
25-26	Not used
27	CRC type: 1 CCITT CRC16 2 CCITT CRC24 3 Federal Standard CRC32
28-32	Not used
33	RIM SIM support (RIM/NRIM)

MODIFICATION FIELD (used for MP)

1	Old mapping
2	New mapping

CLASS 5 LL

Command Format Description

RESPONSE FIELD

NB response

1	Number of Logical lines

LS response

1	Name(s) of Logical line(s)

DA and GA responses - Common Part

1	Name
2	State
3	Type
4	Map 1 (Class and name of CLs, DVs, LLs, NSs or TUs)
5	Map 2 (Class and name of LLs, PLs or PSs)
6	Not used

GA Only Response : HDLC, BDL and SLP Lines

7	Maximum frame size
8	Primary timeout
9	Maximum retransmits
10	Primary address
11	Protocol (LAPA/LAPB)
12	Maximum unacked frames
13	Activity timeout
14-17	Not used
18	Output survey timeout
19	Not used
20	Delay acknowledgement (1/10 seconds)
21	Not used
22	Dynamic address determination (Not SLP)
23	TLD allowed (YS/NO) (Not SLP)
24	Disc frame first (YS/NO) (Not HDLC)
25	Extended numbering (YS/NO)

CLASS 5 LL

Command Format Description

GA Only Response: SLCC Lines (see Param-3 in response)

7	Maximum frame size
8	Primary timeout
9	Maximum retransmits
10	Primary address
11	Protocol (LAPB)
12	Maximum unacked frames
13 19	Not used
20	Delay acknowledgement (1/10 seconds)
21	Not used
22	Dynamic address determination (YS=dynamic, NO=fixed)
23	Not used
24	DISC frame first (YS/NO)
25	Extended numbering (YS/NO)
26	CRC type: 1 CCITT CRC16 2 CCITT CRC24 3 Federal Standard CRC32

GA Only Response: MTPT Lines for SECONDARY stations (see Param-3 in response)

7	Maximum frame size
8	Primary timeout
9	Maximum retransmits
10	Secondary address
11	Protocol (LAPN)
12	Maximum unacked frames
13-17	Not used
18	Output survey timeout
19-24	Not used
25	Extended Numbering (YS/NO)
26-32	Not used
33	Transmit mode (TWA/TWS)

GA Only Response: FRP

18	Output survey timer
19-54	Not used
55	Management function activation indicator
56	Committed measurement interval

CLASS 5 LL

Command Format Description

GA Only Response: FRCO

7	Maximum frame size
8	Primary timeout
9	Maximum retransmit
10	Not used
11	Protocol
12	Maximum unacked frames
13	No activity survey timeout
14-19	Not used
20	Delay acknowledgement
21-35	Not used
36	Maximum delay without traffic
37-56	Not used
57	Committed information rate
58	Excess information rate
59	Data link connection identifier
60-61	Not used
62	Dynamic window algorithm

GA Only Response: FRCL

7	Maximum frame size
8-10	Not used
11	Protocol
12-56	Not used
57	Committed information rate
58	Excess information rate
59	Data link connection identifier
60-61	Not used
62	Dynamic window algorithm

GA Only Response: FRMG

7-62	Not used
63	Link integrity verification polling timer
64	Full status polling counter
65	Error threshold counter
66	Monitored event count

GA Only Response: CSM3

None

CLASS 5 LL

Command Format Description

GA Only Response: LLC2

7	Maximum frame size
8	Primary timeout
9	Maximum retransmit
10	Not used
11	Protocol
12	Maximum unacked frames
13	No activity survey timeout
14-19	Not used
20	Delay acknowledgement
21-59	Not used
60	Remote Ethernet addresser
61	Service access point address
62	Dynamic window algorithm

GA Only Response MTPT Lines for PRIMARY stations (see Param-3 in response):

7	Maximum frame size
8	Primary timeout
9	Maximum retransmits
10	Primary address (always zero)
11	Protocol (LAPN)
12-17	Not used
18	Output survey timeout
19-21	Not used
22	Dynamic address determination (YS=dynamic, NO=fixed)
23-24	Not used
25	Extended Numbering (YS/NO)
26-32	Not used
33	Transmit mode (TWS/TWA)
34	Configuration (MPT/PTP)

GA Only Response SLV Lines for PRIMARY stations (see Param-3 in response):

7	Maximum frame size
8	Primary timeout
9	Maximum retransmits
10	Secondary address
11	Protocol (LAPN)
12	Maximum unacked frames
13-15	Not used
16	Slow poll timer
17-32	Not used
33	Transmit mode (TWS/TWA)
34	Not used
35	Switched line (YS/NO)

CLASS 5 LL

Command Format Description

For ASY lines (see Param-3 in response):

7-10	Not used
11	Character-code: ASC1 (except DNS-E) ASC2 ASCI EBCD BCD (except DNS-E) BCD1 (except DNS-E) BCD2 (except DNS-E) AS8E AS8N

GA Only Response : ASPI lines:

8	Interval between retries
9	Maximum number of retransmissions
13	Time between retries
14	Maximum wait time

GA Only Response : VIP/RCI/3270 lines (see Param-3 in response):

7	Maximum tu size
8	Timeout for retry
9	Maximum transmissions
10	Poll address
11	Character code
12	Not used
13	Activity timeout
14	Short survey timeout
15	Long survey timeout
16	Frames sent before poll
17	Polling response timeout (1/10 seconds)
18	Output survey timeout (1/10 seconds)
19	Non traffic timeout (1/10 seconds)
20	Not used
21	No of NAK retries

CLASS 5 LL

Command Format Description

GA Only Response : LAN1 lines (see Param-3 in response):

7	Maximum frame size
8-9	Not used
10	LSAP address
11-21	Not used
22	Dynamic address determination (YS=dynamic, NO=fixed)
23	TLD allowed (YS/NO)
24-25	Not used
26	CRC type: 1 CCITT CRC16 2 CCITT CRC24 3 Federal Standard CRC32
27-31	Not used
32	RIM SIM support (RIM/NRIM)

UP response

1	Name (of LL)
2	Old attribute
3	New attribute
4	Report code

MP response

1	Logical Line name
2	Old mapping
3	New mapping
4	Report code

Unsolicited Message Description

COMMON PART

1	Name
2	State
3-6	Not used
7	Reason code
8	Diagnostic information

CLASS 64 LN

2.26 LOGON DESCRIPTOR (CLASS 64)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first LN)
2	Name 2 (last LN)
3	State (of LNs reported)
4	Type (of LNs reported)
5	Map 1 (Class and name of DVs or SNs)
6	Map 2 (Class and names)

CLASS 64 LN

Command Format Description

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-6	Not used
7	User-id
8	User-id input parse (DEF/PR/BLK)
9	User-id overridable (YS/NO)
10	User auxiliary device (YS/NO)
11	Project-id
12	Project-id input parse (DEF/PR/BLK)
13	Project-id overridable (YS/NO)
14	Project auxiliary device (YS/NO)
15	Account-id
16	Account-id input parse (DEF/PR/BLK)
17	Project Case
18	Not used
19	Account Id
20	Account parse (DEF/PR/BLK)
21	Account overridable (YS/NO)
22	Account auxiliary device (YS/NO)
23	Account Case
25	Password
26	Password Parse
27	Password Overridable
28	Password Auxiliary Device
29	Password Case
31	Implicit Connection

CLASS 64 LN

Command Format Description

RESPONSE FIELD

NB response

1	Number of Logon Descriptors

LS response

1	Name(s) of Logon Descriptor(s)

DA and GA Common Part response

1	Name
2	Sate
3	Type
4	Map 1 (Not used)
5	Map 2 (Not used)

GA only response

6	User-id
7	User-id input parse (DEF/PR/BLK)
8	User-id overridable (YS/NO)
9	User auxiliary device (YS/NO)
10	Project-id
11	Project-id input parse (DEF/PR/BLK)
12	Project-id overridable (YS/NO)
13	Project auxiliary device (YS/NO)
14	Account-id
15	Account-id input parse (DEF/PR/BLK)
16	Account-id overridable (YS/NO)
17	Account auxiliary device (YS/NO)
18	Password (never reported)
19	Password input parse (DEF/PR/BLK)
20	Password overridable (YS/NO)
21	Password auxiliary device (YS/NO)
22	Implicit connect (YS/NO)

UP response

1	Descriptor name
2	Old attribute
3	New attribute
4	Reason code

CLASS 61 LX

2.27 LOGICAL DEVICE CONNECTION (CLASS 61)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first LX)
2	Index 2 (last LX)
3	State (of LXs reported)
4	Type (of LXs reported)
5	Map 1 (Class and name of DXs, LDs or SXs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

None

CLASS 61 LX

Command Format Description

RESPONSE FIELD

NB response

1	Number of Logical Device Connections

LS response

1	Name(s) of Logical Device Connection(s)

DA and GA Common Part response

1	Index
2	State
3	Type
4	Map 1 (Class and name of SXs)
5	Map 2 (Class and name of DXs)
6	Map 3 (Class and name of LDs)

GA only response

7	Line length
8	Page length
9	Line overflow (TRUN/FOLD/OVER)
10	Page overflow (WRAP/PAGE/SCLR)
11	Presentation protocol
12	Allocation unit

CLASS 61 LX

Unsolicited Message Description

COMMON PART

1	Index
2	Local end point (LD)
3	Not used
4	Supporting connection (DX)
5	Supported connections (SX)
6	Initiator/acceptor (IN/AC)
7	Not used (Not for ERROR SPECIFIC)

OPEN/OPEN FAILURE/CLOSE - SPECIFIC

8	Event duration (in ms)
9	Delay (in ms)
10	Logical device address
11	Presentation protocol
12	Reason code

3. Descriptions of Log File Messages (Classes MB to XN)

This section describes the log file messages in Class groups - all messages for a given class are described together.

The classes are documented in ALPHABETICAL order - for Class names corresponding to given values, see Section 1.

CLASS 10 MB

3.1 MAILBOX (CLASS 10)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first MB)
2	Name 2 (last MB)
3	State (of MBs reported)
4	Type (of MBs reported)
5	Map 1 (Class and name of LCs, SCs or TXs)
6	Map 2 (Class and names)
7	Venue (PR/IM)

MODIFICATION FIELD

3	New State

CLASS 10 MB

Command Format Description

RESPONSE FIELD

NB response

1	Number of Mailboxes

LS response

1	Name(s) of Mailbox(es)

DA and GA response - Common Part

1	Name
2	State (of MB reported)
3	Type (of MB reported)
4	Map 1 (Class and names)
5	Map 2 (Class and names)
6	Not used

GA Only Response

7	Maximum logical connections
8	User create

Unsolicited Message Description

COMMON PART

1	Name
2	State
3	Reason code
4	System specific information

CLASS 71 MD

3.2 TERMINAL MODEL (CLASS 71)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first MD)
2	Name 2 (last MD)
3	State (of MDs reported)
4	Type (of MDs reported)
5	Map 1 (Class and name of DVs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4	Type
7	Encoding
8	National character set
9	Case (UP/LW/FL)
10	Font
11	Line length
12	Page length
13	Line overflow (TRUN/FOLD/OVER)
14	Page overflow (SCRL/CLR)
15	Echoplex (EPLX/NOEC)
16	Terminal buffer size
17	Device speed (chars per sec)
18	ASPI Printer Identifier

CLASS 71 MD

Command Format Description

RESPONSE FIELD

NB Response

1	Number of Terminal Models

LS Response

1	Name(s) of Terminal Model(s)

DA and GA Response - common part

1	Name
2	State
3	Type
4-5	Not used

GA only response

6	Encoding
7	National character set
8	Case (UP/LW/FL)
9	Font
10	Line length
11	Page length
12	Line overflow (TRUN/FOLD/OVER)
13	Page overflow (SCRL/CLR)
14	Echoplex (EPLX/NOEC)
15	Terminal buffer size
16	Device speed (chars per sec)

UP response

1	Model name
2	Old attribute
3	New attribute
4	Report code

CLASS 113 MK

3.3 MULTILINK CONNECTION (CLASS 113)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2
c	Get History	GH	3	1	4	2

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1
2	Index 2
3	State
4	Type (MLP)
5	Map 1 (LK, ML, NC, VC)
6	Map 2

RESPONSE FIELD

NB response

1	Number of Multilink Connections

LS response

1	Index

DA and GA responses

1	Index
2	State
3	Type (MLP)
4	Map 1 (ML)
5	Not used
6	Map 3 (LK SLP)
7	Map 4 (NC, VC)

CLASS 113 MK

Unsolicited Message Description

COMMON PART

1	Index
2	Local end point (ML)
3	Null
4	Supporting connection (LK SLP)
5	Supported connections (NC or VC)
6	Initiator/acceptor (IN/AC)

OPEN/OPEN FAILURE/CLOSE - SPECIFIC

7-8	Not used
9	Reason code

ERROR-SPECIFIC

7	Reason code

HISTORY SPECIFIC

7	Number of I frames sent/acked
8	Number of S bytes sent (not DNS)
9	Number of retransmitted frames
10	Number of I frames correctly received
11	Number of bytes received (not DNS)
12	Number of lost frames detected on reception
13	Number of unexpected frames

CLASS 112 ML

3.4 MULTILINK OBJECT (CLASS 112)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first ML)
2	Name 2 (last ML)
3	State (of MLs reported)
4	Type (of MLs reported)
5	Map 1 (Class and name of NSs or LLs)
6	Map 2 (Class and names)
7	Venue

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State (ENBL or LOCK)
4-7	Not used
8	Lost frame timer
9	MLP group busy timer (not used in DNS)
10	MLP reset confirmation timer
11	Multilink window size
12	Receive MLP guard region window
13	Maximum unacked frames
14	Address used by SLP
15	FRL

MODIFICATION FIELD (used for MP)

1	Old mapping
2	New mapping

CLASS 112 ML

Command Format Description

RESPONSE FIELD

NB Response

1	Number of Multilink objects

LS Response

1	Name(s) of Multilink object(s)

DA and GA Responses - Common Part

1	Name
2	State
3	Type
4	Map 1 (Class and name of NS or LL)
5	Map 2
6	Not used

GA Only Response

7	Lost frame timer
8	MLP group busy timer (not used in DNS)
9	MLP reset confirmation timer
10	Multilink window size
11	Receive MLP guard region window
12	Maximum unacked frames
13	Address used by SLP
14	FRL Maximum frame length

UP Response

1	Name (of ML)
2	Old attribute
3	New attribute
4	Report Code

MP Response

1	Logical Line name
2	Old mapping
3	New mapping
4	Report Code

CLASS 38 MU

3.5 MAILBOX USER (CLASS 38)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first mailbox user)
2	Name 2 (last mailbox user)
3	State
4	Type
5	Map 1
6	Map 2 (SS, WS)

RESPONSE FIELD

NB Response

1	Number of Users

LS Response

1	User Name

DA and GA Responses

1	User Name
2	State
3	Type
4	Map-1 (MB)
5	Not Used
6	Not used
7	Mailbox Extension

CLASS 23 NC

3.6 NETWORK CONNECTION (CLASS 23)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Get History	GH	0	1	4	2
u	History Report	HR	0	0	4	10
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Error	ER	0	0	14	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first NC)
2	Index 2 (last NC)
3	State (of NCs reported)
4	Type (of NCs reported)
5	Map 1 (class and name)
6	Map 2 (class and name)
7	Ends (1/2)

RESPONSE FIELD

NB Response

1	Number of Network connections

LS Response

1	Name(s) of Network connection(s)

DA and GA Response

1	Index
2	State
3	Type
4	Map 1 Proper addressing object (TS)
5	Map 2 Image addressing object (TS)
6	Map 3 Lower level connection object (LK, MK, VC)
7	Map 4 Higher level connection object (TC)

CLASS 23 NC

Unsolicited Message Description

1	Index
2	Local end point (TS)
3	Remote end point (TS)
4	Supporting connection (VC)
5	Supported connections (TC)

OPEN/OPEN FAILURE/CLOSE - SPECIFIC

8	Event duration (in ms)
9	Not used
10	Reason code

ERROR SPECIFIC

8	Reason-code
9	Not used
10	Old VC Assigned
11	Additional VC Assigned

HISTORY SPECIFIC

8	Number of data fragments sent
9	Number of command fragments sent
10	Number of transport units sent
11	Number of data fragments received
12	Number of command fragments received
13	Number of transport units received
14	Number of transport connections opened
15	Number of transport connections closed or failed
16-20	Not used

NOTE: Parameters 21 to 29 may contain implementation-specific counters.

CLASS 115 NK

3.7 INTERNET NETWORK ACTIVITY (CLASS 115)

			Domain	Power	Code	Level
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2
c	Get History	GH	3	0	4	2

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1
2	Not Used
3	State
4	Type (IP)
5	Map 1 (TC, TS)
6	Map 2

RESPONSE FIELD

LS response

1	Index

DA and GA responses

1	Index
2	State
3	Type
4	Map 1 (TS)
5	Not Used
6	Not Used
7	Map 4 (TC)

CLASS 115 NK

Unsolicited Message Description

COMMON PART

1	Activity index
2	Local end point
3	Not used
4	Supporting connection (Null)
5	Supported connection
6	Initiate accept
7	Type

ERROR SPECIFIC

8	Reason code
9	Diagnostic information
10	Remote NSAP address
11	Local NSAP address

ERROR SPECIFIC

8	NKETU Unit data requests from transport
9	NKRTU Unit data indications to transport
10	NKFSU Forwarded sub-net unit data indications
11	NKRDI Discarded unit data indications
12	NKREG General class error reports received
13	NKREA Address class error reports received
14	NKRES Source routing class error reports received
15	NKREL Lifetime class error reports received
16	NKRED Discard class error reports received
17	NKRER Reassembly class error reports received

THRESHOLD VIOLATION

1	Object name
2	Threshold monitor name
3	Statistics block name
4	Calculated value
5	Low expectation
6	High expectation
7	Monitor rate
8-10	Reserved for future use
11	Actual transfer rate
12	Minimum transfer rate

CLASS 7 NR

3.8 NETWORK ROUTE (CLASS 7)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first NR)
2	Name 2 (last NR)
3	State (of NRs reported)
4	Type (of NRs reported)
5	Map 1 (Class and name of TSs or NSs)
6	Map 2 (Class and name)

CLASS 7 NR

Command Format Description

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-6	Not used
7	Priority
8	Backup (BK/PR)
9	Backup priority
10	Throughput class
11	Default packet size
12	Default window size
13	Closed user group
14	Flow control negotiation (NG/FX)
15	Perm log channel id
16-17	Not Used
18	Receive Data Unit Size
19	Receive Window Size
20-24	Not Used
25	Fast Select Facility
26	Transit Delay

NR of types IPFL, IPSW and IPHD

NRVCT applies only to NR IPSW

NRCNFT, NRCFNT, NRRESH, NRRISH, NRSESH and NRSISH do not apply to NR IPSW objects.

NRMAXS applies to all types of NR

CLASS 7 NR

Command Format Description

MODIFICATION FIELD (used by UP) (cont'd)

27	9542
28	VC Life Time
29	Configuration Timer
30	Holding Timer
31	Maximum Size of SDUs
32	Configuration Notification
33	Rec ES Hello
34	Rec IS Hello
35	Send ES Hello
36	Send IS Hello

MODIFICATION FIELD (used by MP)

1	Old mapping (NS or TS)
2	New mapping (NS or TS)

RESPONSE FIELD

NB response

1	Number of Network Routes

LS response

1	Name(s) of Network Route(s)

CLASS 7 NR

RESPONSE FIELD

DA and GA responses - Common Part

1	Name
2	State
3	Type
4	Map 1 (Class and name of PL or TS)
5	Map 2 (Class and name of NS)

GA Only Response

6	Relative Priority
7	Backup (PR/BK)
8	Backup priority
9	Throughput class
10	Default maximum packet size on send
11	Default maximum window size on send
12	Closed user group
13	Flow control negotiation (NG/FX)
14	Perm log channel id
15	Initiate reverse charge (RV/NV)
16	Allow reverse charge (RV/NV)
17	Default maximum packet size on receive
18	Default maximum window size on receive
19	Primary priority
20	Send Trunks
22-23	Not Used
24	Fast Select Facility
25	Transit Delay

CLASS 7 NR

RESPONSE FIELD

GA Only Response (cont'd)

NR of types IPFL, IPSW and IPHD

NRVCT applies only to NR IPSW

NRCNFT, NRCFNT, NRRESH, NRRISH, NRSESH and NRSISH do not apply to NR IPSW objects.

NRMAXS applies to all types of NR

NR of types IPFL, IPSW and IPHD

26	9542
27	VC Lifetime
28	Configuration Timer
29	Holding Timer
30	Maximum Size of SDUs
31	Configuration Notification
32	Rec ES Hello
33	Rec IS Hello
34	Send ES Hello
35	Send IS Hello

UP response

1	Route name
2	Old attribute
3	New attribute
4	Report code

MP response

1	Route name
2	Old mapping
3	New mapping
4	Report code

Unsolicited Message Description

COMMON PART

1	Route name
2	Old state
3	New state
4	Report code
5	System specific information

CLASS 6 NS

3.9 NETWORK SUBSCRIPTION (CLASS 6)

Object type: PRoper or IMage

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first NS)
2	Name 2 (last NS)
3	State (of NSs reported)
4	type (of NSs reported)
5	Map 1 (Class and name of LLs, NRs or VCs)
6	Map 2 (Class and name)
7	Venue (PR/IM)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-7	Not used
8	Calling number
9	Maximum VC
10	VAN type
11	Maximum packet size
12	Maximum window size
13	Charge unit size
14	Reverse charge (RV/NV)
15	SVC class receive
16	SVC class emit
17	VC inactive time (in seconds)
18	Flow control negotiation (NG/FX)
19-28	Not Used
29	X25 Version
30	Fast Select Facility
31	Transit Delay
32	Address Extensions
33	QOS Priority

CLASS 6 NS

Command Format Description

RESPONSE FIELD

NB response

1	Number of Network Subscriptions

LS response

1	Name(s) of Network Subscription(s)

DA and GA response

1	Name
2	State
3	Type
4	Map 1 (Class and name of LL)
5	Not used
6	Venue (PR/IM)
7	Calling number
8	Maximum VC
9	VAN type
10	Maximum packet size
11	Maximum window size
12	Charge unit size
13	Reverse charges (RV/NV)
14	SVC class receive
15	SVC class emit
16	VC inactive time (in seconds)
17	Flow control negotiation (NG/FX)

Hyperchannel Use Only:

22	Hyperchannel name
23	Hyperchannel address
24	ASCII logical device
25	Binary logical device
26	Maximum reads
27	Maximum sends

NS X25 Objects Only:

28	X25 version
29	Fast select facility
30	Transit delay
31	Address extensions
32	QOS priority

CLASS 6 NS

Command Format Description

RESPONSE FIELD

UP response

1	Subscription name
2	Old attribute
3	New attribute
4	Report code

Unsolicited Message Description

COMMON PART

1	Subscription name
2	State
3-6	Not used
7	Report code
8	VAN diagnostic information

CLASS 75 NU

3.10 NETWORK USER (CLASS 75)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first NU)
2	Name 2 (last NU)
3	State (of NUs reported)
4	Type (of NUs reported)
5	Map 1 (class and name, typically of NRs)
6	Not used

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-7	Not used
8	Call number
9-18	Not used
19	Concurrent paths

CLASS 75 NU

Command Format Description

RESPONSE FIELD

NB response

1	Number of Network Users

LS response

1	Name(s) of Network User(s)

DA and GA response

1	Name
2	State
3	Type
4	Map 1 (Class and name of NR)
5	Not used
6	Venue (PR/IM)

GA Only response

7	Call number
8-17	Not used
18	Concurrent paths

UP response

1	User name
2	Old attribute
3	New attribute
4	Report code

CLASS 48 OP

3.11 OPERATOR (CLASS 48)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2
c	Update	UP	3	3	5	6
c	Text Broadcast	TX	3	0	50	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first OP)
2	Name 2 (last OP)
3	State (of OPs reported)
4	Type (of OPs reported)
5	Map 1 (Class and name of AGs or FLs)
6	Map 2 (Class and name)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4	Not used
5-7	Not used
8	NOI mailbox name
9	OP terminal mailbox name
10	Not used
11	Threshold

MODIFICATION FIELD (used by TX)

1	Message
2	Origin operator name

CLASS 48 OP

Command Format Description

RESPONSE FIELD

NB response

1	Number of Operators

LS response

1	Name(s) of Operator(s)

DA and GA responses - Common Part

1	Name
2	State
3	Type
4	Map 1 (Class and name of AG)
5	Not used

GA Only Response

6	Not used
7	NOI mailbox name
8	OP terminal mailbox name
9	Current operator person-id
10	Threshold

UP response

1	Operator name
2	Old attribute
3	New attribute
4	Report code

TX response

1	Name (of OP)
2	Report code

CLASS 29 PC

3.12 PHYSICAL CONNECTION (CLASS 29)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Get History	GH	0	1	4	2
u	History Report	HR	0	0	4	10
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Error	ER	0	0	14	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first PC)
2	Index 2 (last PC)
3	State (of PCs reported)
4	Type (of PCs reported)
5	Map 1 (Class and name of proper PLs, or proper LKs)
6	Map 2 (Class and names of image PLs, or image PSs)

MODIFICATION FIELD

None

CLASS 29 PC

Command Format Description

RESPONSE FIELD

NB response

1	Number of Physical Connections

LS response

1	Name(s) of Physical Connection(s)

DA and GA responses

1	Index
2	State
3	Type
4	Map 1 (Class and name of proper PLs)
5	Map 2 (Class and name of image PLs)
6	Map 3 (Index of lower connection object)
7	Map 4 (Index of upper connection object)

Unsolicited Message Description

COMMON PART

1	Index
2	Local end point (PL)
3	Remote end point (PL)
4	Supporting connection
5	Supported connection
6	Initiator/acceptor (IN/AC)

OPEN/OPEN FAILURE - SPECIFIC

7	Remote call number
8	Event duration (in ms)
9	Delay (in ms)
10	Reason code
11	System specific information

ERROR SPECIFIC

8	Reason code
9	System specific information

CLASS 29 PC

Unsolicited Message Description

HISTORY SPECIFIC

7	Number of frames sent correctly
8	Number of bytes sent
9	Number of underruns (LAN type only)
10	Number of frames received correctly
11	Number of bytes received
12	Number of overruns (LAN type only)
13	Number of FCS/checksum/parity errors (LAN type only)
14	Not used
15	Number of hardware errors signalled by controller (LAN type only)
16	Number of frames received incorrectly (not used for LAN type)
17	Number of frames sent incorrectly

NOTE: Parameters 7-9 are for outgoing traffic, 10-14 for incoming and 15 is for any traffic.

For Physical Connection type LAN CSMA only:

18	Number of transmit deferrals due to busy medium
19-20	Not used
21	Number of misaligned frames received and discarded
22	Number of correct frames received, and discarded due to lack of resources
23	Number of sends aborted due to collision detection
24	Not used
25	Number of frames for which there were one or more collisions
26	Not used
27	Number of frames discarded due to length error

NOTE: Parameters 21 to 30 may contain implementation-specific statistics.

40	Speed in bits per second

CLASS 4 PL

3.13 PHYSICAL LINE (CLASS 4)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first PL)
2	Name 2 (last PL)
3	State (of PLs reported)
4	Type (of PLs reported)
5	Map 1 (Class and name of CTs, LLs, NRs or PCs)
6	Map 2 (Class and names)
7	Venue (PR/IM)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-11	Not used
12	Speed
13	Phone number
14	Time disconnect
15	Modem type
16	High speed
27	Full duplex (YS/NO)
28-37	Not used

MODIFICATION FIELD (used by UP) : LAN CSMA, and CSM1 only

38	Length media access address (bits)
39	Media access address
40	Link type

CLASS 4 PL

Command Format Description

RESPONSE FIELD

NB response

1	Number of Physical lines

LS response

1	Name(s) of Physical line(s)

DA and GA responses - Common Part (except PL CSM2)

1	Name
2	State
3	Type
4	Map 1 (Class and name of LLs, NRs (CSM1), CB (CSMA))
5	Map 2 (Class and name of CTs, CB (CSM1), CT (CSMA))
6	Venue (PR/IM)
7	Switched (SW/DE/21)

CLASS 4 PL

Command Format Description

RESPONSE FIELD

GA Only Response : SYN, ASY, HDLC, SLCC, X21 and SX21 only

8	Hardware type
9	Hardware address
10	Priority level
11	Speed
12	Phone number
13	Inactivity timer
14	Modem type
15	High speed (HI/LO)
16	Select standby (YS/NO)
17	Line type (SWIT/LEAS)
18	Connect mode (CAIN/CALD)
19	Call mode (AUTO/MANL)
20	Answer mode (AUTO/MANL)
21	DTR mode (1/2)
22	Test mode (YS/NO)
23	Local loop (YS/NO)
24	Remote loop (YS/NO)
25	Inactivity monitor (YS/NO)
26	Transmission mode (YS=Full, NO=Half)
27	Connect timer (secs)
28	Ring timer (secs)
29	Reverse channel (YS/NO)
30	RTS depend DCD (YS/NO)
31	CTS flow control (YS/NO)
32	RTS switched (YS/NO)
33	CTS follows RTS (YS/NO)
34	New signal 136 (YS/NO)
35	Transmitter timer
36	Receiver timer

GA Only Response : LAN CSMA, and CSM1 only

38	Length media access address (bits)
39	Media access address

UP response

1	Name (of PL)
2	Old attribute
3	New attribute
4	Report code

CLASS 4 PL

Unsolicited Message Description

COMMON PART

1	Name
2	State
3	Hardware address
4-6	Not used
7	Reason code
8	Diagnostic information

CLASS 58 PS

3.14 PHYSICAL SUBSCRIPTION (CLASS 58)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
u	Map	MP	0	3	64	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1
2	Name 2
3	State
4	Type
5	Map 1 (Class and name of LLs, PSs)
6	Map 2 (Class and names of PLs, PCs)
7	Venue

CLASS 58 PS

Command Format Description

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-8	Not used
9	Speed of Line
10	Non Traffic Time Out
11	International Prefix for Subscription
12	DNIC of the Network or DCC for the Country
13	Subscription Number
14	No Incoming Calls Allowed
15	No Outgoing Calls Allowed
16	No International Incoming Calls Allowed
17	No International Outgoing Calls Allowed
18	Charge Transfer Facility
19	Charge Advice Facility
20	Direct Call Facility
21	No Queuing for Outgoing Calls
22	Calling Line Identification Used
23-25	Not used
26	Maximum Number of Outgoing Call Attempts
27	Delay on Outgoing Call Attempts
28	Fixed mapping PS RMT/PS X21
29	IDN Call Numbers (X21)
30	International Prefix Mandatory
31	No Incoming Calls Authorized from Remote
32	No Outgoing Calls Authorized from Remote
33	Release Local PS after Temporary Disconnect

MODIFICATION FIELD (used by MP)

1	Old Mapping
2	New Mapping

CLASS 58 PS

Command Format Description

RESPONSE FIELD

NB response

1	Number of PS

LS response

1	Name(s) of PS(s)

DA and GA responses - Common part

1	Name of PS
2	State
3	Type
4	Map 1 (LL or PS mapped to this PS)
5	Map 2 (LL or PS mapped to this PS)
6	Venue
7	Not Used

GA Only Response

8	Line Speed
9	Non Traffic Time Out
10	International Prefix for the Subscription
11	DNIC of Network or DCC for Country
12	Subscription Number
13	No Incoming Calls Allowed
14	No Outgoing Calls Allowed
15	No International Incoming Calls Allowed
16	No International Outgoing Calls Allowed
17	Charge Transfer Facility
18	Charge Advice Facility
19	Direct Call Facility
20	No Queuing for Outgoing Calls
21	Calling Line Identification
22-24	Not used
25	Maximum Number of Outgoing Call Attempts
26	Delay Between Outgoing Call Attempts
27	Fixed Mapping PS RMT - PS X21
28	IDN Call Numbers (X21)
29	International Prefix Mandatory
30	Incoming Calls Authorization
31	Outgoing Calls Authorization
32	Release Local PS after no traffic Disconnect

CLASS 58 PS

Command Format Description

RESPONSE FIELD

UP Response

1	PS Name
2	Old Attribute
3	New Attribute
4	Report code

MP Response

1	PS Name
2	Old Mapping
3	New Mapping
4	Report code

CLASS 111 RB

3.15 ROUTING INFORMATION BASE (CLASS 111)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2
c	Update	UP	3	0	5	6

Command Format Description

SELECTION FIELD (used by every command)

1-2	Not Used
3	State (LOCK, ENBL)
4	Type (CONS, CNLS)
5-6	Not Used
7	NSAP identifier
8	NSAP address
9	NSAP mask
10	Routing identifier
11	SNPA address
12	NR name
13	Output subnetwork
14	Type of entry (SE, DE, SN or DN)
15	Routing rank
16-20	Not used
21	System type (MN, BK)

MODIFICATION FIELD (used by UP)

1-2	Not Used
3	State
4-18	Not Used
19	MSDSG use
20	Network relay use
21	Routine way status
22-27	Not used

CLASS 111 RB

Command Format Description

RESPONSE FIELD

UP Response

1	Not used
2	Old attribute
3	New attribute
4	Report Code
5	NSAP identifier
6	Routine identifier

NB response

1	Number of RBs

DA and GA responses

1	Not Used
2	State
3	Type
4-6	Not Used
7	NSAP identifier
8	NSAP address
9	NSAP mask
10	Routine identifier
11	SNPA address or NSAP mask
12	NR Name
13	Output Subnetwork
14	Type of Entry (SE, DE, SN, DN)
15	Routine Rank
16	SNPA Mask
17	System Type (ES/IS/UN)

GA Only Response

18	MSDSG use (YS/NO)
19	Network relay use (YS/NO)
20	Routine way status (YS/NO)
21	Route type (BK, MN, UN)
22	ES timer
23	IS timer
24	CUG option
25	CUG number
26	X25 version number (80 or 84)
27	Best entry
28	NALT option

CLASS 35 SB

3.16 STATISTICS BLOCKS (CLASS 35)

			Domain	Power	Code	Level
c	Number	NB	3	1	1	0
c	List	LS	3	1	2	0
c	Display Attributes	DA	3	1	3	2
c	Get Attributes	GA	3	1	12	2
c	Update	UP	3	3	5	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first SB)
2	Name 2 (last SB)
3	State (of SBs reported)
4	Type (of SBs reported)
5	Map 1 (Class and name of AGs or monitor object)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-12	Not used
13	Monitoring interval
14-18	Not Used

CLASS 35 SB

Command Format Description

RESPONSE FIELD

NB response

1	Number of Statistics blocks

LS response

1	Name(s) of Statistics block(s)

DA and GA response - Common Part

1	Name of SB
2	State
3	Type
4-5	Not used

GA Only Response

6-10	Not used
11	Monitored object map 2
12	Monitoring interval
13-18	Not Used

UP response

1	Name (of SB)
2	Old attribute
3	New attribute
4	Report code

CLASS 30 SC

3.17 SESSION CONTROL (CLASS 30)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first SC)
2	Name 2 (last SC)
3	State (of SCs reported
4	Type (of SCs reported
5	Map 1 (Class and name of MBs, or SRs)
6	Map 2 (Class and names)
7	Venue (PR/IM)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-7	Not used
8	Foreign (YS/NO)
9	Transport Station access point
10	Network Subscriber access point

CLASS 30 SC

Command Format Description

RESPONSE FIELD

NB response

1	Number of Session Controls

LS response

1	Name(s) of Session Control(s)

DA and GA responses

1	Name
2	State
3	Type
4	Map 1 (Class and name of MBs or SRs)
6	Venue (PR/IM)
7	Foreign (YS/NO)
8	Transport station access point
9	Network subscriber access point

UP response

1	Name (of SC)
2	Old attribute
3	New attribute
4	Report code

CLASS 59 SG

3.18 SUBSCRIPTION GROUP (CLASS 59)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1
2	Name 2
3	State
4	Type
5	Map 1 (Class and name of PS)
6	Map 2 (Class and names)
7	Not Used

RESPONSE FIELD

NB response

1	Number of SGs

LS response

1	Name(s) of SG(s)

DA and GA responses

1	Name of the SG
2	State
3	Type
4	Map 4 (Class and name of the PS)

CLASS 26 SN

3.19 TERMINAL STATION (CLASS 26)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
u	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6
c	Text Broadcast	TX	0	3	50	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first SN)
2	Name 2 (last SN)
3	State (of SNs reported)
4	Type (of SNs reported)
5	Map 1 (Class and name of CDs, LDs or TXs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not Used
3	State
4-8	Not Used
9	Presentation protocol
10	New maximum session
11	CD override
12	Security reconnection
13	Form storage
14	Home mailbox
15	Idle timer

MODIFICATION FIELD (used by MP)

1	Old mapping (CD)
2	New mapping (CD)

MODIFICATION FIELD (used by TX)

1	Message

CLASS 26 SN

Command Format Description

RESPONSE FIELD

NB response

1	Number of Terminal Stations

LS response

1	Name(s) of Terminal Station(s)

DA and GA responses - Common Part

1	Name
2	State
3	Type
4	Map 1 (Class and name of TXs or MBs)
5	Map 2 (Class and name of LDs)

GA Only response

6	Map 3 (Class and name of CDs)
7	Not used
8	Presentation protocol
9	Maximum concurrent sessions
10	CD override (YS/NO)
11	Secondary network reconnection permitted (YS/NO)
12	Form storage (YS/NO)
13	Home mailbox (Class=MB)
14	Idle time
15	Encryption
16	Compression

UP response

1	Name (of SN)
2	Old attribute
3	New attribute
4	Report code

MP response

1	SN name
2	Old mapping
3	New mapping
4	Report code

CLASS 26 SN

Command Format Description

RESPONSE FIELD

TX response

1	Name (of SN)
2	Report Code

Unsolicited Message Description

None

CLASS 44 SR

3.20 SESSION ROUTE (CLASS 44)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first SR)
2	Name 2 (last SR)
3	State (of SRs reported)
4	Type (of SRs reported)
5	Map 1 (Class and name of CHs, SCs or TSs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-7	Not used
8	Priority

MODIFICATION FIELD (used by MP)

1	Old mapping (SC)
2	New mapping (SC)

CLASS 44 SR

Command Format Description

RESPONSE FIELD

NB response

1	Number of Session Routes

LS response

1	Name(s) of Session Route(s)

DA and GA response - Common Part

1	Name
2	State
3	Type
4	Map 1 (Class and name of SCs)
5	Map 2 (Class and name of CHs or TSs)

GA Only response

6	Backup (PR/BK)
7	Priority

UP response

1	Name (of SR)
2	Old attribute
3	New attribute
4	Report code

MP response

1	SR name
2	Old mapping
3	New mapping
4	Report code

CLASS 3 SU

3.21 START-UP (CLASS 3)

			Domain	Power	Code	Level
u	Start-up completed	SU	0	0	60	10

Unsolicited Message Description

1	Software release
2	System configuration

CLASS 74 SW

3.22 SOFTWARE COMPONENT (CLASS 74)

			Domain	Power	Code	Level
c	Get Attributes	GA	3	1	12	2

Command Format Description

SELECTION FIELD (used by every command)

1	Name
2-6	Reserved for future used
7	Software product identifier

RESPONSE FIELD

DA and GA responses

1	Name
2-7	Reserved for future use
8	Software product identifier
9	Software version identifier

CLASS 60 SX

3.23 STATION CONNECTION (CLASS 60)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first SX)
2	Index 2 (last SX)
3	State (of SXs reported)
4	Type (of SXs reported)
5	Map 1 (Class and name of LXs, SNs or LCs)
6	Map 2 (Class and names)

RESPONSE FIELD

NB response

1	Number of Station Connections

LS response

1	Name(s) of Station Connection(s)

DA and GA Common Part response

1	Index
2	State
3	Type
4	Map 1 (Class and name of LCs)
5	Map 2 (Class and name of LXs)

GA Only Response

6	Map 3 (Class and name of SNs)
7	Presentation protocol
8	Correspondent mailbox name
9	User-id

CLASS 60 SX

Unsolicited Message Description

COMMON PART

1	Index
2	Local end point (SN)
3	Not used
4	Supporting connection (LX)
5	Supported connections (SS)
6	Initiator/acceptor (IN/AC)
7	Not used

OPEN/OPEN/ FAILURE/CLOSE/ERROR - SPECIFIC

8	Event duration (in ms)
9	Delay (in ms)
10	Presentation control protocol (STD/NSTD)
11	Mailbox name
12	User-id
13	Reason code

CLASS 20 SY

3.24 SYSTEM (CLASS 20)

			Domain	Power	Code	Level
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Load	LD	1	3	52	6
c	Reload	GA	1	13	51	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first SY)
2	Name 2 (last SY)
3	State (of SYs reported)
4	Type (of SYs reported)

SELECTION FIELD (RL only)

1	Not Used
2	Dump
3	Not Used
4	Shutdown time
5	Version identifier
6	Configuration name
7	Reason for shutdown
8	Command cancellation

CLASS 20 SY

Command Format Description

MODIFICATION FIELD (used by UP)

1-7	Not used
8	Network time

MODIFICATION FIELD (used by LD)

1	Software-id
2	Force load (F/NF)
3	Disposition state

RESPONSE FIELD

DA and GA response - Common Part

1	Name (of SY)
2	State (of SY reported)
3	Type (of SY reported)
4-6	Not used
7	Network time
8-10	Not Used
11	Software Release
12	System Configuration

UP response

1	Name (of SY)
2	Old attribute
3	New attribute
4	Report Code

LD response

1	Report code
2	New state

RL response

1	Report code

CLASS 21 TC

3.25 TRANSPORT CONNECTION (CLASS 21)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Get History	GH	0	0	4	2
u	History Report	HR	0	0	4	10
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Error	ER	0	0	14	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first TC)
2	Index 2 (last TC)
3	State (of TCs reported)
4	Type (of TCs reported)
5	Map 1 (Class and name of CCs, LCs, NCs or TSs)
6	Map 2 (Class and names)
7	Ends (1/2)

CLASS 21 TC

Command Format Description

RESPONSE FIELD

NB response

1	Number of Transport Connections

LS response

1	Name(s) of Transport Connection(s)

DA and GA responses - Common Part

1	Index
2	State
3	Type
4	Map 1 (Class and name of proper TSs)
5	Map 2 (Class and name of image TSs)
6	Map 3 (Class and name of CCs, LCs or TCs)
7	Map 4 (Class and name of NCs or VCs)
8	Local plug number
9	Remote plug number
10	Protocol options
11	Maximum tu size
12	Maximum credit send
13	Maximum credit receive
14-28	Not Used

CONS, CLNS and IPNL only

29	QOS priority
30	Calling NSAP
31	Called NSAP
32-33	Not Used
34	QOS throughput
35	Not used
36	QOS transit delay
37	Not used
38	Expedited transport data
39	Numbering format
40	Checksum use
41	Transport relay

CLASS 21 TC

Unsolicited Message Description

COMMON PART

1	Index
2	Local end point (TS)
3	Remote end point (TS)
4	Supporting connection (NR, NC or PC)
5	Supported connections (LC, CC or TC)
6	Initiator/acceptor (IN/AC)
7	Remote plug number

OPEN/OPEN FAILURE/CLOSE/ERROR - SPECIFIC

8	Event duration (in ms)
9	Delay (in ms)
10	Option
11	Maximum credit possible
12	Maximum fragment length
13	Reason code
14	Local plug number
15	SC origin id
16	SC destination id
17-26	Not Used

CONS, CLNS and IPNL only

27	Alternative protocol class (OF TC only)
28	Number of VC failures (CL TC only)
29	QOS priority
30	Calling NSAP
31	Called NSAP
32	Calling T-Sel
33	Called T-Sel
34	QOS minimum throughput target value
35	QOS minimum throughput acceptable value
36	QOS transit delay target value
37	QOS transit delay maximum acceptable value

CLASS 21 TC

Unsolicited Messages Description

HISTORY SPECIFIC

8	Number of data fragments sent
9	Number of Control(S) and Command(C) fragments sent
10	Number of Acknowledgement Timeouts
11	Number of REJects received provoking retransmission
12	Number of data fragments retransmitted
13	Number of times window closed
14	Total time window closed
15	Number of letters received from Session Control
16	Number of data fragments correctly received
17	Number of S and C fragments received
18	Number of duplicate fragments received
19	Number of letters received
20	Average credit
21	Average window size
22	Average number of fragments emitted and awaiting Ack
23	Total round trip time
24	Number of samples
25	Nominal loss
26	Number of expedited data fragments sent
27	Number of expedited data fragments received
28	Number of data bytes sent ACKed in data fragments
29	Number of data bytes recvd acptd in data fragments
30-32	Not used

NOTE: Parameters 33 to 42 may contain implementation-specific statistics.

CLASS 51 TL

3.26 TESTS (CLASS 51)

			Domain	Power	Code	Level
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Get History	GH	0	2	4	2
c	Update	UP	0	3	5	6
c	Execute	EX	0	2	7	14
c	Text Broadcast	TX	0	2	50	6
c/u	Close	CL	0	0	8	12

Command Format Description

SELECTION FIELD (used by every command except EX)

1	Test-id
2	Test name

SELECTION FIELD (used by EX)

1	Test name
2	Subtest name
3	Not Used
4	Not Used
5	Object Name

DA, GA and GH selection

3	Sub test name
4	Not used
5	Class and Name of Object to be Tested

CLASS 51 TL

Command Format Description

EX selection

		DNS/DNS-E Parameter
3	Routine 1	-ROU1
4	Routine 2	-ROU2
5	Routine 3	-ROU3
6	Routine 4	-ROU4
7	Routine 5	-ROU5
8	Class and Name of Object to be Tested	-OBJ xx:yyy
9	Duration of test	-DLY hhmmss
10	Iteration to be performed	-RPT n
11	Inter test delay	
12	Error report level (R/S/N/D)	-ERR RSND
13	Trace option (TR/NT)	-TRC/-NTRC
14	Error action (CE/HE)	-HLT/-NHLT
15	Keys	-KEY v
16	Class/Name of Auxiliary Object for Test	-OBJ2 xx:yyyy
17	Test data size	-DATL
18	Test data value	-VAL

CLASS 51 TL

Command Format Description

MODIFICATION FIELD (used by UP)

1-10	Not used
11	Elapse time
12	Iterations
13	Inter test delay
14	Error report
15	Trace option
16	Error action
17	Reset keys
18	Not used
19	Test Data Size
20	Test Data Value

MODIFICATION FIELD (used by TX)

1	Message

RESPONSE FIELD

EX response

1	Test-id
2	Test name
3	Sub test name
6	Class and Name of Object under Test
7	Report code

CLASS 51 TL

Command Format Description

RESPONSE FIELD

UP response

1	Test-id
2	Test name
3	Old attribute
4	New attribute
5	Report code

TX response

1	Test-id
2	Test name
3	Sub test name
4	Routine number
5	Name of object under test
6	Report code

DA and GA responses

1	Test-id
2	Test name
3	Sub test name
4	Routine 1
5	Routine 2
6	Routine 3
7	Routine 4
8	Routine 5
9	Class and Name of Object to be Tested
10	Duration of test
11	Iterations to be performed
12	Inter test delay
13	Error report level (R/S/N/D)
14	Trace option (TR/NT)
15	Error action (CE/HE)
16	Keys
17	Class and Name of Second Object to be Tested
18	Test Data Size
19	Test Data Value

CLASS 51 TL

Command Format Description

RESPONSE FIELD

CL response

1	Test-id
2	Test name
3	Sub test name
4	Not used
5	Name of object under test
6	Report code

Unsolicited Message Description

COMMON PART

1	Test-id
2	Test name
3	Sub test name
4	Routine-id
5	Name of object under test

ERROR

6	Duration of test
7	Iterations number
8	Reason code
9	Error text
10	Test dependent parameters

HISTORY REPORT

6	Duration of test
7	Iterations number
8	Test specific statistics

CLASS 9 TS

3.27 TRANSPORT STATION (CLASS 9)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first TS)
2	Name 2 (last TS)
3	State (of TSs reported)
4	Type (of TSs reported)
5	Map 1 (Class and name of CHs, NRs, SCs, SRs or TCs)
6	Map 2 (Class and names)
7	Venue (PR/IM)

CLASS 9 TS

Command Format Description

MODIFICATION FIELD (used by UP)

1-2	Not Used
3	Requested-state (of TSs reported)
4-7	Not used
8	Transport address
9-12	Not used
13	Credit
14	Maximum tu size
15	Default tu size
16	Timer 1
17	Timer 2
18	Retransmit counter N1
19	Maximum paths
21	Maximum number of incoming virtual circuits
22	NSAP address for TS CONS, IPNL, CLNS
23	Preferred network service
24	Alternative route

RESPONSE FIELD

NB response

1	Number of Transport Stations

LS response

1	Name(s) of Transport Station(s)

CLASS 9 TS

Command Format Description

RESPONSE FIELD

DA and GA responses - Common Part

1	Name
2	State
3	Type
4	Map 1
5	Map 2

GA Only response

7	Transport address
8	Protocol option 1 (YS/NO)
9	Protocol option 2 (YS/NO)
10	Protocol option 3 (YS/NO)
11	Protocol option 4 (YS/NO)
12	Default credit
13	Maximum tu size
14	Default tu size
15	Timer 1
16	Timer 2
17	Retransmit counter N1
18	Number of concurrent paths
20	Maximum transport connections
21	NSAP address for TS CONS, IPNL, CLNS
22	Preferred network service
23	Alternative Route
24	Local network entity title

UP response

1	Name (of TS)
2	Old attribute
3	New attribute
4	Report code

Unsolicited Message Description

COMMON PART

1	Name
2	State
3-6	Not used
7	Reason code
8	Diagnostic information

CLASS 70 TU

3.28 TERMINAL UNIT (CLASS 70)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Map	MP	0	3	6	6
c	Update	UP	0	3	5	6
u	Error	ER	0	0	14	12

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first TU)
2	Name 2 (last TU)
3	State (of TUs reported)
4	Type (of TUs reported)
5	Map 1 (Class and name of DVs, LLs, PLs, NSs or TUs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4	Type
5-6	Not used
7	Address
8	Buffer size
9	Unit speed

MODIFICATION FIELD (used by MP)

1	Old mapping (CL or LL)
2	New mapping (CL or LL)

CLASS 70 TU

Command Format Description

RESPONSE FIELD

NB response

1	Number of Terminal Units

LS response

1	Name(s) of Terminal Unit(s)

DA and GA response - Common Part

1	Name
2	State
3	Type
4	Map 1 (Class and name of CLs or LLs)
5	Map 2 (Class and name of LLs or NSs)

GA only response

6	Address
7	Buffer size
8	Unit speed

UP response

1	Name (of TU)
2	Old attribute
3	New attribute
4	Report code

MP response

1	TU name
2	Old mapping
3	New mapping
4	Report code

Unsolicited Message Description

ERROR

1	Name
2	State
3	Type
4	Map 1 (Class and name of LLs, PLs or NSs)
5-6	Not used
7	Reason code

CLASS 66 TX

3.29 TERMINAL MAILBOX EXTENSION (CLASS 66)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first TX)
2	Name 2 (last TX)
3	State (of TXs reported)
4	Type (of TXs reported)
5	Map 1 (Class and name of SNs or MBs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4-6	Not used
7	Mailbox extension

MODIFICATION FIELD (used by MP)

1	Old-mapping
2	New-mapping

CLASS 66 TX

Command Format Description

RESPONSE FIELD

NB response

1	Number of Terminal Extensions

LS response

1	Name(s) of Terminal Extension(s)

DA and GA common part

1	Name
2	State
3	Type
4	Map 1 (Class and name of MB)
5	Map 2 (Class and name of SN)

GA only response

6	Mailbox extension

UP response

1	Name (of TX)
2	Old attribute
3	New attribute
4	Report code

MP response

1	Name (of TX)
2	Old mapping
3	New mapping
4	Report code

CLASS 63 UD

3.30 USER DESCRIPTOR (CLASS 63)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6
c	Map	MP	0	3	6	6

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1 (first UD)
2	Name 2 (last UD)
3	State (of UDs reported)
4	Type (of UDs reported)
5	Map 1 (Class and name of CDs, COs or LNs)
6	Map 2 (Class and names)

MODIFICATION FIELD (used by UP)

1-2	Not used
3	State
4	Type
5-6	Not used
7	Logon override (YS/NO)
8	Connection descriptor override (YS/NO)

CLASS 63 UD

Command Format Description

RESPONSE FIELD

NB response

1	Number of User Descriptors

LS response

1	Name(s) of User Descriptor(s)

DA and GA COMMON PART response

1	Name
2	State
3	Type
4	Map 1 (Class and names of CDs, COs or LNs)
5	Map 2 (Class and names)

GA only response

6	Logon override (YS/NO)
7	Connection descriptor override (YS/NO)

UP response

1	Name (of UD)
2	Old attribute
3	New attribute
4	Report code

CLASS 98 UT

3.31 TRANSPORT USER (CLASS 98)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2

Command Format Description

SELECTION FIELD (used by every command)

1	Name 1
2	Name 2
3	State
4	Type
5	Not used
6	Map 2 (Class and names)

RESPONSE FIELD

NB response

1	Number of UT

LS response

1	Name(s) of UT(s)

DA response

1	Name
2	State
3	Type
4	Not used
5	Map 2 (Class and name of CO or SR)
6-7	Not used
8	Local Mailbox Name

CLASS 8 VC

3.32 VIRTUAL CIRCUIT (CLASS 8)

			Domain	Power	Code	Level
c	Number	NB	0	1	1	0
c	List	LS	0	1	2	0
c	Display Attributes	DA	0	1	3	2
c	Get Attributes	GA	0	1	12	2
c	Get History	GH	0	0	4	2
u	History Report	HR	0	0	4	10
u	Open	OP	0	0	7	10
u	Close	CL	0	0	8	12
u	Error	ER	0	0	14	12
u	Open Failure	OF	0	0	17	12

Command Format Description

SELECTION FIELD (used by every command)

1	Index 1 (first VC)
2	Index 2 (last VC)
3	State (of VCs reported)
4	Type (of VCs reported)
5	Map 1 (Class and name of NS, NR, LK, DX, VC, NC, TC, IK, MK)
6	Map 2 (Class and names)

MODIFICATION FIELD

None

CLASS 8 VC

Command Format Description

RESPONSE FIELD

NB response

1	Number of Virtual Circuits

LS response

1	Name(s) of Virtual Circuit(s)

DA and GA COMMON PART response

1	Index
2	State
3	Type
4	Map 1 (Class and name of proper NSs)
5	Map 2 (Class and name of image NSs or NRs)
6	Map 3 (Class and name of LKs, DXs or MKs)
7	Map 4 (Class and name of NCs, TCs, VCs or IKs)

GA specific part

8	VC id number
9-10	Not used
11	Emit class throughput
12	Receive class throughput
13	Emit packet size
14	Receive packet size
15	Emit window size
16	Receive window size
17	Origin TS
18	Destination TS
19-28	Not used
29	QOS Priority
30	Calling NSAP
31	Called NSAP
32	QOS Throughput
33	QOS Transit Delay

CLASS 8 VC

Unsolicited Message Description

COMMON PART

1	Index
2	Local end point (NS)
3	Remote end point (NS)
4	Supporting connection (LK or MK)
5	Supported connections (TC, IK, DX, NC or VC)
6	Initiator/acceptor (IN/AC)
7	Remote call number
8	Virtual Circuit id

VIRTUAL CIRCUIT ERROR

9	Reason code
10	Network reason code
11	Number of packets sent
12	Number of packets received
13	Number of data characters sent
14	Number of data characters received

OPEN/OPEN FAILURE/CLOSE

9	Event duration (in ms)
10	Delay (in ms)
11	Facility
12	Reason code
13	Network reason code
14	Emit class throughput
15	Receive class throughput
16	Emit packet size
17	Receive packet size
18	Emit window size
19	Receive window size
20	Origin TS
21	Destination TS
22-26	Not used
27	QOS Priority
28	Calling NSAP
29	Called NSAP
30	Not used
31	QOS Throughput
32	QOS Transit Delay

CLASS 8 VC

Unsolicited Message Description

HISTORY Specific (including GH response)

9	Number of data packets sent
10	Number of expedited packets sent
11	Number of control packets sent
12	Number of data characters sent
13	Number of packet sequences sent
14	Number of times window closed
15	Total time window closed
16	Number of RNR prevents emission
17	Time during RNR in force
18	Number of accounting units sent
19	Number of data packets received
20	Number of control packets received
21	Number of data characters received
22	Number of packets sequences received
23	Number of accounting units sent
24	Number of RESETS provoked by DCE
25	Number of RESETS
26	Number of REJects
27	Average number of outstanding unACKed packets
28-34	Not used.
35-44	Implementation specific statistics
45	Number of packets received with D bit set
46	Number of packets sent with D bit set

CLASS 69 WM

3.33 WELCOME MESSAGE OF THE DAY (CLASS 69)

			Domain	Power	Code	Level
c	Get Attributes	GA	0	1	12	2
c	Update	UP	0	3	5	6

Command Format Description

SELECTION FIELD

none

MODIFICATION FIELD (used by UP)

1	Welcome message
2	File Name containing the Welcome Message (FILE)
3	Session Control where the File is Located

RESPONSE FIELD

GA response

1	Welcome message
2	File Name containing the Welcome Message (FILE)
3	Session Control where the File is Located

UP response

1	Report-code

CLASS 1 XN

3.34 CROSS NETWORK MESSAGE (CLASS 1)

This unsolicited message indicates that a link level or channel request for initialization was received from a neighbouring system.

XN Message

1	Link Name
2	Reason Code
3	ULD/DLL Specific Information

A. Summary Of Log File Messages

In this section, the Log File Messages are classified in Alphabetical order, together with their Domain, Power, Class, Code and Importance Levels.

Domn	Pwr	Class	Code	Lvl	
0	0	1	52	12	Neighbour requests initialization (unso.)
0	1	AC43 NB	1	0	Number of Administrative correspondents (resp)
0	1	AC43 LS	2	0	List Administrative correspondents (resp)
0	1	AC43 DA	3	2	Display attributes Adm. correspondents (resp)
0	3	AC43 UP	5	6	Update Administrative correspondents (resp)
0	1	AC43 GA AC TX	12	2	Get attributes Adm. correspondents (resp)
3	1	AF 15 NB	1	0	Number of Administrative function (resp)
3	1	AF 15 LS	2	0	List Administrative function (resp)
3	1	AF 15 DA	3	2	Display attributes Adm. function (resp)
3	0	AF 15	7	10	AF Administrative function system connected open successful
3	0	AF 15	8	12	AF Adm. function system disconnected
3	1	AF 15 GA	12	2	Get attributes Administrative function (resp)
3	0	AF 15	14	12	AF Administrative function connection error
3	0	AF 15	17	12	AF Adm. function system connected open failed
3	1	AG 56 NB	1	0	Number of Administrative group (resp)
3	1	AG 56 LS	2	0	List Administrative group (resp)
3	1	AG 56 DA	3	2	Display attributes Administrative group (resp)
3	1	AG 56 GA	12	2	Get attributes Administrative group (resp)
0	1	AL 95 NB	1	0	Number of Address list (resp)
0	1	AL 95 LS	2	0	List Address lists (resp)
0	1	AL 95 DA	3	2	Display attributes of Address list (resp)
0	1	AL 95 GA	12	2	Get attributes of Address list (resp)
0	1	AP 96 NB	1	0	Number of Applications (resp)
0	1	AP 96 LS	2	0	List Applications (resp)
0	1	AP 96 DA	3	2	Display attributes of Application (resp)
0	1	AP 96 GA	12	2	Get attributes of Application (resp)
0	0	AP 96 ER	14	12	Error Report (unso)
0	1	AX 97 NB	1	0	Number of Application connections (resp)
0	1	AX 97 LS	2	0	List Application connections (resp)
0	1	AX 97 DA	3	2	Display attributes of Application connection (resp)
0	1	AX 97 GA	12	2	Get attributes of Application connection (resp)
0	0	AX 97	7	10	Application connection open
0	0	AX 97	8	12	Application connection closed
0	0	AX 97	17	12	Application connection open failed
0	1	CB 90 NB	1	0	Number of Cables (resp)
0	1	CB 90 LS	2	0	List Cables (resp)
0	1	CB 90 DA	3	2	Display Attributes of Cables (resp)
0	3	CB 90 UP	5	6	Update Cable (resp)
0	1	CB 90 GA	12	2	Get Attributes of Cables (resp)

Domn	Pwr	Class	Code	Lvl	
0	1	CC 31 NB	1	0	Number of Channel Connections (resp)
0	1	CC 31 LS	2	0	List Channel Connections (resp)
0	1	CC 31 DA	3	2	Display attributes of Channel Connection (resp)
0	1	CC 31 GH	4	2	Get History of Channel Connection (resp)
0	1	CC 31 GA	12	2	Get Attributes of Channel Connection (resp)
0	0	CC 31 HR	4	10	History Report of Channel Connection (unso)
0	0	CC 31 OP	7	10	Open Channel Connection (unso)
0	0	CC 31 CL	8	12	Close Channel Connection (unso)
0	0	CC 31 ER	14	12+	Channel Connection Error or Event (unso)
0	0	CC 31 OF	17	12	Channel Connection Open Failure (unso)
0	1	CD 65 NB	1	0	Number of Connection descriptors (resp)
0	1	CD 65 LS	2	0	List Connection descriptors (resp)
0	1	CD 65 DA	3	2	Display attributes Connection descr. (resp)
0	1	CD 65 GA	12	2	Get attributes Connection descriptor (resp)
0	1	CH 25 NB	1	0	Number of Intersystem channels (resp)
0	1	CH 25 LS	2	0	List Intersystem channels (resp)
0	1	CH 25 DA	3	2	Display attributes Intersystem channel (resp)
0	3	CH 25 MP	6	6	Mapping Modification Intersystem channel (resp)
0	1	CH 25 GA	12	2	Get attributes Intersystem channel (resp)
0	0	CH 25	14	12	Intersystem channel error (unso)
0	1	CL 27 NB	1	0	Number of Terminal clusters (resp)
0	1	CL 27 LS	2	0	List Terminal clusters (resp)
0	1	CL 27 DA	3	2	Display attributes Terminal cluster (resp)
0	3	CL 27 UP	5	6	Update Terminal cluster (resp)
0	3	CL 27 MP	6	6	Mapping modification to cluster (resp)
0	1	CL 27 GA	12	2	Get attributes Terminal cluster (resp)
0	0	CL 27	14	12	Terminal cluster error
0	1	CO 57 LS	2	0	List Correspondent (resp)
0	1	CO 57 DA	3	2	Display attributes Correspondent (resp)
0	1	CO 57 GA	12	2	Get attributes Correspondent (resp)
0	1A	CT 13 NB	1	0	Number of Controller (resp)
0	1	CT 13 LS	2	0	List Controller (resp)
0	1	CT 13 DA	3	2	Display attributes Controller (resp)
0	3	CT 13 UP	5	6	Update Controller (resp)
0	1	CT 13 GA	12	2	Get attributes Controller (resp)
0	0	CT 13	14	12	Controller error
0	1	DP 68 NB	1	0	Number of Device Pools (resp)
0	1	DP 68 LS	2	0	List Device Pools (resp)
0	1	DP 68 DA	3	2	Display attributes of Device Pools (resp)
0	1	DP 68 GA	12	2	Get attributes of Device Pools (resp)
0	3	DP 68 UP	5	6	Update Device Device Pools (resp)

Domn	Pwr	Class	Code	Lvl	
0	1	DV 14 NB	1	0	Number of Terminal device (resp)
0	1	DV 14 LS	2	0	List Terminal device (resp)
0	1	DV 14 DA	3	2	Display attributes Terminal device (resp)
0	3	DV 14 MP	6	6	Mapping modification Terminal device (resp)
0	1	DV 14 GA	12	2	Get attributes Terminal device (resp)
0	0	DV 14	14	12	Terminal device error
		DV 14 TX		50	Text broadcast to device
0	1	DX 62 NB	1	0	Number of Device connection (resp)
0	1	DX 62 DA	3	2	Display attributes Device connection (resp)
0	0	DX 62	4	10	Device connection history report (unso.)
0	3	DX 62 UP	5	6	Update Device connection (resp)
0	0	DX 62	7	10	Device connection open
0	0	DX 62	8	12	Device connection closed (error)
0	1	DX 62 GA	12	2	Get attributes Device connection (resp)
0	0	DX 62	14	12	Device connection error
0	0	DX 62	17	12	Device connection open failed
1	3	EX 19	xxx	xx	Executive error or event
1	0	EX 19	160-169	xx	MOD400
1	0	EX 19	170-179	xx	GCOS8
1	0	EX 19	180-189	xx	GCOS64
1	0	EX 19	190-199	xx	MULTICS
3	1	FL 34 NB	1	0	Number of Filters (resp)
3	1	FL 34 LS	2	0	List Filters (resp)
3	1	FL 34 DA	3	2	Display attributes Filters (resp)
3	3	FL 34 UP	5	6	Update Filters (resp)
3	3	FL 34 MP	6	6	Mapping modification (resp)
3	1	FL 34 GA	12	2	Get attributes Filters (resp)
0	0	FT 54	4	10	File transfer history report (unso.)
0	0	FT 54	7	10	File transfer open
0	0	FT 54	8	10	File transfer closed
0	0	FT 54	17	10	File transfer open failed
3	0	FX 18	7	10	Administrative Function Connection Open
3	0	FX 18	8	10/12	Administrative Function Connection Close
3	0	FX 18	14	12	Administrative Function Connection Error
3	0	FX 18	17	12	Administrative Function Connection Open Failure
0	1	IK 114 NB	1	0	Number of Internet activity objects (resp)
0	1	IK 114 LS	2	0	List Internet activity objects (resp)
0	1	IK 114 DA	3	2	Display attributes Internet activity object (resp)
0	1	IK 114 GA	12	2	Get attributes Internet activity object (resp)
0	1	IK 114 GH	4	2	Get history of Internet activity object (resp.)
0	0	IK 114	4	10	Internet activity object history report (unso.)
0	0	IK 114	7	10	Internet activity object open
0	0	IK 114	8	12	Internet activity object closed
0	0	IK 114	14	12	Internet activity object error
0	0	IK 114	17	12	Internet activity open failed

Domn	Pwr	Class	Code	Lvl	
0	1	LC 12 NB	1	0	Number of Logical connection (resp)
0	1	LC 12 LS	2	0	List Logical connections (resp)
0	1	LC 12 DA	3	2	Display attributes Logical connection (resp)
0	1	LC 12 GH	4	2	Logical connection history report (resp.)
0	0	LC 12	4	10	Logical connection history report (unso.)
0	0	LC 12	7	10	Logical connection open
0	0	LC 12	8	12	Logical connection closed (error)
0	1	LC 12 GA	12	2	Get attributes Logical connection (resp)
0	0	LC 12	14	12	Logical connection error
0	0	LC 12	17	12	Logical connection open failed
0	1	LD 45 NB	1	0	Number of Logical terminal device (resp)
0	1	LD 45 LS	2	0	List Logical terminal device (resp)
0	1	LD 45 DA	3	2	Display attr. Logical terminal device (resp)
0	1	LD 45 GA	12	2	Get attributes Logical term. device (resp)
3	1	LG 49 NB	1	0	Number of Logfile (resp)
3	1	LG 49 LS	2	0	List Logfile (resp)
3	1	LG 49 DA	3	2	Display attributes Logfile (resp)
3	3	LG 49 UP	5	6	Update Logfile (resp)
3	0	LG 49	7	10	Administrative logfile open
3	0	LG 49	8	12	Administrative logfile closed
3	1	LG 49 GA	12	2	Get attributes Logfile (resp)
3	0	LG 49	14	12	Administrative logfile error
3	3	LG 49 SW	51	6	Swap Logfile (resp)
0	1	LK 28 NB	1	0	Number of Link connection (resp)
0	1	LK 28 DA	3	2	Display attributes Link connection (resp)
0	1	LK 28 GH	4	2	Link connection history report (resp.)
0	0	LK 28	4	10	Link connection history report (unso.)
0	0	LK 28	7	10	Link connection open
0	0	LK 28	8	12	Link connection closed (error)
0	1	LK 28 GA	12	2	Get attributes Link connection (resp)
0	0	LK 28	14	12	Link connection error
0	0	LK 28	17	12	Link connection open failed
0	1	LL 5 NB	1	0	Number of Logical line (resp)
0	1	LL 5 LS	2	0	List Logical line (resp)
0	1	LL 5 DA	3	2	Display attributes Logical line (resp)
0	3	LL 5 UP	5	6	Update Logical line (resp)
0	3	LL 5 MP	6	6	Mapping modification (resp)
0	1	LL 5 GA	12	2	Get attributes Logical line (resp)
0	1	LN 64 NB	1	0	Number of Logon descriptor (resp)
0	1	LN 64 LS	2	0	List Logon descriptor (resp)
0	1	LN 64 DA	3	2	Display attributes Logon descriptor
0	1	LN 64 GA	12	2	Get attributes Logon descriptor (resp)

Domn	Pwr	Class	Code	Lvl	
0	1	LX 61 NB	1	0	Number of Logical device connection (resp)
0	1	LX 61 LS	2	0	List Logical device connection (resp)
0	1	LX 61 DA	3	2	Display attr. of Log. device connection (resp)
0	0	LX 61	4	10	Log. device connection history report (unso.)
0	0	LX 61	7	10	Logical device connection open
0	0	LX 61	8	12	Logical device connection closed (error)
0	1	LX 61 GA	12	2	Get attr. Logical device connection (resp)
0	0	LX 61	14	12	Logical device connection error
0	0	LX 61	17	12	Logical device connection open failed
0	1	MB 10 NB	1	0	Number of Mailbox (resp)
0	1	MB 10 LS	2	0	List Mailbox (resp)
0	1	MB 10 DA	3	2	Display attributes Mailbox (resp)
0	3	MB 10 UP	5	6	Update Mailbox (resp)
0	1	MB 10 GA	12	2	Get attributes Mailbox (resp)
0	1	MD 71 NB	1	0	Number of Terminal model (resp)
0	1	MD 71 LS	2	0	List Terminal model (resp)
0	1	MD 71 DA	3	2	Display attributes Terminal model (resp)
0	1	MD 71 GA	12	2	Get attributes Terminal model (resp)
3	1	MK 113 NB	1	0	Number of Multilink connections (resp)
3	1	MK 113 LS	2	0	List Multilink connections (resp)
3	1	MK 113 DA	3	2	Display attributes Multilink connection (resp)
3	1	MK 113 GA	12	2	Get attributes Multilink connection (resp)
3	0	MK 113 GH	4	2	Get history of Multilink connection (resp.)
0	1	ML 112 NB	1	0	Number of Multilink objects (resp)
0	1	ML 112 LS	2	0	List Multilink objects (resp)
0	1	ML 112 DA	3	2	Display attributes Multilink object (resp)
0	3	ML 112 UP	5	6	Update Multilink object (resp)
0	3	ML 112 MP	6	6	Map Multilink object (resp)
0	1	ML 112 GA	12	2	Get attributes Multilink object (resp)
0	0	ML 112 ER	14	12	Error report on Multilink object (resp.)
3	1	MU 38 NB	1	0	Number of Mailbox users (resp)
3	1	MU 38 LS	2	0	List Mailbox users (resp)
3	1	MU 38 DA	3	2	Display attributes Mailbox user (resp)
3	1	MU 38 GA	12	2	Get attributes Mailbox user (resp)
0	1	NC 23 NB	1	0	Number of Network connection (resp)
0	1	NC 23 LS	2	0	List Network connection (resp)
0	1	NC 23 DA	3	2	Display attributes Network connection (resp)
0	1	NC 23 GH	4	2	Network connection history report (resp.)
0	0	NC 23	4	10	Network connection history report (unso.)
0	0	NC 23	7	10	Network connection open
0	0	NC 23	8	12	Network connection closed (error)
0	1	NC 23 GA	12	2	Get attributes Network connection (resp)
0	0	NC 23	14	12	Network connection error
0	0	NC 23	17	12	Network connection open failed

Domn	Pwr	Class	Code	Lvl	
3	1	NK 115 LS	2	0	List Internet network activity objects (resp)
3	1	NK 115 DA	3	2	Display attributes Internet network activity (resp)
3	1	NK 115 GA	12	2	Get attributes Internet network activity object (resp)
3	0	NK 115 GH	4	2	Get history of Internet network activity object (resp)
0	1	NR 7 NB	1	0	Number of Network route (resp)
0	1	NR 7 LS	2	0	List Network route (resp)
0	1	NR 7 DA	3	2	Display attributes Network route (resp)
0	3	NR 7 UP	5	6	Update Network route (resp)
0	3	NR 7 MP	6	6	Mapping modification of network route (resp)
0	1	NR 7 GA	12	2	Get attributes Network route (resp)
0	1	NS 6 NB	1	0	Number of Network subscription (resp)
0	1	NS 6 LS	2	0	List Network subscription (resp)
0	1	NS 6 DA	3	2	Display attributes Network subscription (resp)
0	3	NS 6 UP	5	6	Update Network subscription (resp)
0	1	NS 6 GA	12	2	Get attributes Network subscription (resp)
0	1	NU 75 NB	1	0	Number of Network Users (resp)
0	1	NU 75 LS	2	0	List Network Users (resp)
0	1	NU 75 DA	3	2	Display attributes Network User (resp)
0	3	NU 75 UP	5	6	Update Network User (resp)
0	1	NU 75 GA	12	2	Get attributes Network User (resp)
3	1	OP 48 NB	1	0	Number of Operator (resp)
3	1	OP 48 LS	2	0	List Operator (resp)
3	1	OP 48 DA	3	2	Display attributes of Operator (resp)
3	3	OP 48 UP	3	6	Update Operator (resp)
3	1	OP 48 GA	12	2	Get attributes of Operator (resp)
0	1	PC 29 NB	1	0	Number of Physical connection (resp)
0	1	PC 29 LS	2	0	List Physical connections (resp)
0	1	PC 29 DA	3	2	Display attr. of Physical connection (resp)
0	1	PC 29 GH	4	2	Physical connection history report (resp.)
0	0	PC 29	4	10	Physical connection history report (unso.)
0	0	PC 29	7	10	Physical connection open
0	0	PC 29	8	12	Physical connection closed (error)
0	1	PC 29 GA	12	2	Get attributes of Physical connection (resp)
0	0	PC 29	14	12	Physical connection error
0	0	PC 29	17	12	Physical connection open failed
0	1	PL 4 NB	1	0	Number of Physical connection (resp)
0	1	PL 4 LS	2	0	List of Physical connection (resp)
0	1	PL 4 DA	3	2	Display attributes Physical connection (resp)
0	3	PL 4 UP	5	6	Update Physical connection (resp)
0	1	PL 4 GA	12	2	Get attributes Physical connection (resp)
0	0	PL 4	14	12	Physical line error

Domn	Pwr	Class	Code	Lvl	
0	1	PS 58 NB	1	0	Number of Physical subscription (resp)
0	1	PS 58 LS	2	0	List Physical subscription (resp)
0	1	PS 58 DA	3	2	Display attributes Phys. subscription (resp)
0	3	PS 58 UP	5	6	Update Physical subscription (resp)
0	3	PS 58 MP	6	6	Mapping modif. of Phys. subscription (resp)
0	1	PS 58 GA	12	2	Get attrs. of Physical subscription (resp)
3	1	RB 111 NB	1	0	Number of Routing bases (resp)
3	1	RB 111 DA	3	2	Display attributes of Routing base (resp)
3	1	RB 111 GA	12	2	Get attributes of Routing base (resp)
3	0	RB 111 UP	5	6	Update Routing base (resp)
3	1	SB 35 NB	1	0	Number of Statistics Block (resp)
3	1	SB 35 LS	2	0	List Statistics Block (resp)
3	1	SB 35 DA	3	2	Display attributes of Statistics Block (resp)
3	3	SB 35 UP	5	6	Update Statistics Block (resp)
3	1	SB 35 GA	12	2	Get attributes of Statistics Block (resp)
0	1	SC 30 NB	1	0	Number of Session control (resp)
0	1	SC 30 LS	2	0	List of Session control (resp)
0	1	SC 30 DA	3	2	Display attributes of Session control (resp)
0	1	SC 30 GA	12	2	Get attributes of Session control (resp)
0	1	SG 59 NB	1	0	Number of Subscription Groups (resp)
0	1	SG 59 LS	2	0	List of Subscription Groups(resp)
0	1	SG 59 DA	3	2	Display Attributes Subscription Groups(resp)
0	1	SG 59 GA	12	2	Get Att. Subscription Groups control (resp)
0	1	SN 26 NB	1	0	Number of Terminal station (resp)
0	1	SN 26 LS	2	0	List Terminal station (resp)
0	1	SN 26 DA	3	2	Display attributes Terminal station (resp)
0	1	SN 26 GA	12	2	Get attributes of Terminal station
0	1	SR 44 NB	1	0	Number of Session Route (resp)
0	1	SR 44 LS	2	0	List Session Route (resp)
0	1	SR 44 DA	3	2	Display attributes Session Route (resp)
0	3	SR 44 UP	5	6	Update Session Route (resp)
0	1	SR 44 GA	12	2	Get attributes Session Route (resp)
0	1	SS 11 NB	1	0	Number of Sessions (resp)
0	1	SS 11 LS	1	0	List Sessions (resp)
0	1	SS 11 DA	3	2	Display attr.of Session (resp)
0	1	SS 11 GH	4	2	Session history report (resp)
0	1	SS 11	4	10	Session history report (resp)
0	1	SS 11	7	10	Session open
0	1	SS 11	8	12	Session closed (error)
0	1	SS 11 GA	12	2	Get attributes Session (resp)
0	1	SS 11	14	12	Session error
0	1	SS 11	17	12	Session open failure
0	0	SU 3	60	10	Start-up completed (unso.)

Domn	Pwr	Class	Code	Lvl	
0	1	SW 74 DA	3	2	Display attributes (resp)
0	1	SW 74 GA	12	2	Get attributes (resp)
0	1	SX 60 NB	1	0	Number of Station connection (resp)
0	1	SX 60 DA	3	2	Display attributes Station connect. (resp)
0	1	SX 60 GH	4	2	Station connection history report (resp.)
0	0	SX 60	4	10	Station connection history report (unso.)
0	0	SX 60	7	10	Station connection open
0	0	SX 60	8	12	Station connection closed (error)
0	1	SX 60 GA	12	2	Get attributes Station connection (resp)
0	1A	SY 20 DA	3	2	Display Attributes of System, Node (resp)
0	1	SY 20 LD		6	Load System, Node (resp)
0	3	SY 20 UP	5	6	Set time on System (Node) (resp)
0	1	SY 20 GA	12	2	Get attributes System (Node) (resp)
1	3	SY 20 RL	51	6	Reload System, Node
1	3	SY 20	52-20	6	Load System
0	1	TC 21 NB	1	0	Number of Transport connection (resp)
0	1	TC 21 LS	1	0	List Transport connections (resp)
0	1	TC 21 DA	3	2	Display attr. Transport connection (resp)
0	1	TC 21 GH	4	2	Transport connection history report (resp.)
0	0	TC 21	4	10	Transport connection history report (unso.)
0	0	TC 21	7	10	Transport connection open
0	0	TC 21	8	12	Transport connection closed (error)
0	1	TC 21	GA	12	Get attributes Transport connection (resp)
0	0	TC 21	14	12	Transport connection error
0	0	TC 21	17	12	Transport connection open failed
0	2	TL 51 DA	3	2	Display attributes IN/on line test (resp)
0	2	TL 51 GH	4	2	Get history IN/on line test (resp)
3	2	TL 51	4	12	On line Test history report (unso)
0	2	TL 51 UP	5	6	Update IN/on line test (resp)
0	2	TL 51 EX	7	14	Execute test routine
0	2	TL 51 CL	8	12	Close test routine (resp)
0	2	TL 51 GA	12	2	Get attributes IN/on line test (resp)
3	2	TL 51	14	12-24	On-line test error report
0	2	TL 51 TX	50	6	Text correspondence IN/on line test
0	1	TS 9 NB	1	0	Number of Transport station (resp)
0	1	TS 9 LS	2	0	List Transport station (resp)
0	1	TS 9 DA	3	2	Display attributes Transport station (resp)
0	3	TS 9 UP	5	6	Update Transport station (resp)
0	1	TS 9 GA	12	2	Get attributes of transport station (resp)
0	1	TU 70 NB	1	0	Number of Terminal Unit (resp)
0	1	TU 70 LS	2	0	List Terminal Unit (resp)
0	1	TU 70 DA	3	2	Display attributes Terminal Unit (resp)
0	3	TU 70 UP	5	6	Update Terminal Unit (resp)
0	1	TU 70 GA	12	2	Get attributes Terminal Unit (resp)
0	0	TU 70	14	12	Terminal unit error

Domn	Pwr	Class	Code	Lvl	
0	1	TX 66 NB	1	0	Number of Terminal MBX Extension (resp)
0	1	TX 66 LS	2	0	List Terminal MBX Extension (resp)
0	1	TX 66 DA	3	2	Display attributes Terminal MBX Ext. (resp)
0	1	TX 66 GA	12	2	Get attributes Terminal MBX Extension (resp)
0	1	UD 63 NB	1	0	Number of User descriptor (resp)
0	1	UD 63 LS	2	0	List User descriptor (resp)
0	1	UD 63 DA	3	2	Display attributes User descriptor (resp)
0	1	UD 63 GA	12	2	Get attributes User descriptor (resp)
0	1	UT 98 NB	1	0	Number of Transport users (resp)
0	1	UT 98 LS	2	0	List Transport users (resp)
0	1	UT 98 DA	3	2	Display attributes of Transport user (resp)
0	1	VC 8 NB	1	0	Number of Virtual circuit (resp)
0	1	VC 8 DA	3	2	Display attributes Virtual circuit (resp)
0	1	VC 8 GH	4	2	Get history Virtual circuit (resp)
0	0	VC 8	4	10	Virtual circuit history report (unso.)
0	0	VC 8	7	10	Virtual circuit open
0	0	VC 8	8	12	Virtual circuit closed (error)
0	1	VC 8 GA	12	2	Get attributes Virtual circuit (resp)
0	0	VC 8	14	12	Virtual circuit error
0	0	VC 8	17	12	Virtual circuit open failed
0	1	WM 69 UP	5	6	Up date Terminal message of the day (welcome message)
0	1	WM 69 GA	12	2	Get Terminal message of the day (welcome message)
x	0	xx xx	15	12-24	Threshold violation

Technical publication remarks form

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