AMENDMENT

ETS 300 153
A1

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This amendment A1 modifies
the European Telecommunication Standard ETS 300 153 (1992)

Integrated Services Digital Network (ISDN); Attachment requirements for terminal equipment to connect to an ISDN using ISDN basic access

(Candidate NET 3 Part 1)

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Foreword

This Amendment to ETS 300 153 (1992), NET 3, Part 1, was prepared by the Terminal Equipment (TE) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This Amendment to ETS 300 153 (1992) contains corrections to the Layer 1 aspects, in consultation with the Transmission and Multiplexing (TM) Technical Committee, and to the Layer 2 aspects, in consultation with the Signalling, Protocols and Switching (SPS) Technical Committee. The Technical Regulations Application Committee (TRAC) has requested that these corrections be published as a matter of urgency.

Amendments

The amendments are as follows:

Page 16, subclause 5.2, replace table 1 ("Layer 1 Static Attachment Requirements (SAR)") with the following replacement.

Table 1: Layer 1 Static Attachment Requirements (SAR)

Function to be tested	ETS 300 012 [1] annex D	SAR	Comment
Binary organisation of frame - Test A	2.1.1	M	
- Test B	2.1.2	M	
Interframe (Layer 2) time fill	3.1.1	M	
D-echo channel response	3.1.2	M	
Activation/deactivation procedure	3.2.1	M	NOTE 1
Timer for activation when receiving INFO 2	3.2.2.1	M	
Timer for activation when receiving INFO 4	3.2.2.2	M	Tests A and B
Timer for activation when receiving any signal	3.2.2.3	M	
Value of the timer T3	3.2.2.4	M	
Timer for physical deactivation	3.2.2.5	M	Tests A and B
Timer for complete deactivation	3.2.2.6	M	Tests A and B
Frame alignment procedures	3.3	M	NOTE 2
Multiframing procedures	3.4	M	
Idle channel code on the B-channels	3.5	M	
Frame rate when transmitting INFO 1	4.1	M	
TE jitter measurement characteristics - Test A	4.2.1	M	NOTE 3
TE output phase deviation - Test B	4.2.2	M	NOTE 3
TE transmitter output impedance - Test A	4.3.1	M	
- Test B	4.3.2	M	
- Test C	4.3.3	M	
- Test D	4.3.4	M	
- Test E	4.3.5	M	
Pulse shape and amplitude	4.4	M	
Pulse amplitude	4.5.1	M	
Pulse unbalance of an isolated couple of pulses	4.5.2	M	
Voltage on other test loads - Test A	4.6.1	M	400 Ohm
- Test B	4.6.2	M	5,6 Ohm

(continued)

Table 1 (continued): Layer 1 Static Attachment Requirements (SAR)

Longitudinal conversion loss of tranmitter output	4.7	M	
TE Receiver input impedance - Test A	4.8.1.1	M	
- Test B	4.8.1.2	M	
- Test C	4.8.1.3	M	
- Test D	4.8.1.4	M	
Receiver sensitivity - noise and distortion immunity	4.8.2	M	
Unbalance about earth of receiver input	4.8.3	M	
Normal power provision - Test A	5.1.1.1	O	
- Test B	5.1.1.2	O	
- Test C	5.1.1.3	O	
- Test D	5.1.1.4	O	
- Test E	5.1.1.5	O	
Restricted power provision - Test A	5.1.2.1	O	
- Test B	5.1.2.2	O	
- Test C	5.1.2.3	O	
- Test D	5.1.2.4	O	
- Test E	5.1.2.5	O	
- Test F	5.1.2.6	O	
Current transient	5.1.3	O	
Current/time limitation for TE	5.1.4.1	O	designated TE
Current/time limitation for TE when connecting	5.1.4.2	O	non-desig. TE
Behaviour of a TE using a connection detector	5.1.4.3	O	disconnecting
Power start-up test after removal of short circuit	5.1.4.4.1	O	
Power start-up at low input voltage	5.1.4.4.2	O	
Protection against short term interruption	5.1.4.5.1	O	Normal mode
	5.1.4.5.2	O	Restr. mode
Behaviour at the switch-over	5.1.4.6.1	O	Normal mode
	5.1.4.6.2	O	Restr. mode
DC unbalance of TEs using power sink 1	5.1.4.7	O	
Effect of current unbalance	5.1.4.8	M	
Power source 2 - optional third pair	5.2	O	

NOTE 1: ETS 300 012 [1] is due for revision. Until such a time that it is, the table to annex D, subclause D.3.2.1 of ETS 300 012 [1], state 46 shall be amended to read "F3" in the NEXT STATE column and "Deactivated" in the COMMENT column.

NOTE 2: For frame alignment procedures do not refer to the 1992 edition of ETS 300 012 [1], annex D, subclause D.3.3 but to the following text:
- n comprised between 2 and 5 (inclusive), for detection loss of synchronisation;
- m comprised between 3 and 5 (inclusive), for recovery of synchronisation.

(continued)

Table 1 (concluded): Layer 1 Static Attachment Requirements (SAR)

The results in subclause D.3.3 are changed to:

	Stimulus	Results	Comments
a)	1 bad frame	INFO 3	No loss of framing
b)	5 bad frames	INFO 0	Framing lost
c)	2 good frames	INFO 0	Framing not regained
d)	6 good frames	INFO 3	Framing regained within 5 frames

Delete NOTE 3 and also the last sentence of NOTE 4.

NOTE 3: For a phantom powered TE (normal mode only) the tests shall be performed with a feeding voltage of 42 Volts and 24 Volts. A phantom powered TE also supporting the restricted mode power application shall be additionally tested with 32 Volts in restricted mode. For jitter tests in the case of a locally powered TE, only one feeding value is required.

Page 17, subclause 5.2, amend the first 2 unnumbered bullet points of the text to read as follows:

"Locally powered TEs using a connected detector shall pass the following tests:

- D.5.1.1.4, D.5.1.2.5, D.5.1.4.2 and D.5.1.4.3.

Locally powered TEs not using a connected detector shall pass the following tests:

- D.5.1.1.5, D.5.1.2.5 and D.5.1.4.2."

Page 19, subclause 8.2 ("Static Attachment Requirements (SAR)"), replace table 3 by the new table 3 given below:

Table 3: Protection requirements

Requirement	ETS 300 047-3	SAR
Overvoltage surge simulation at interface I_a	5.5	GID
- Common mode test	5.5.1	N/A
- Transverse mode test	5.5.2	N/A
Mains overvoltage simulation	5.6	GID
- Common mode test	5.6.1	N/A
- Transverse mode test	5.6.2	N/A
Impulse transfer	5.7	GID
- From mains to interface I_a	5.7.1	M
- From auxiliary interface	5.7.2	O
- Conversion of common to transverse mode	5.7.3	M
Electrostatic discharge	5.8	N/A
Interface miswiring resistibility test	5.9	N/A
Voltage and current limitation under single fault conditions	5.10 (NOTE)	M
Enhanced requirements and test levels for extra-strength equipment	annex A	N/A
NOTE: Compliance with this requirement shall be declared by the manufacturer to the Type Approval Authority in a Manufacturers Declaration.		

Page 54, annex A, subclause A.2.2.8.3 (Receipt of modulo 8 frames during modulo 128 operations).

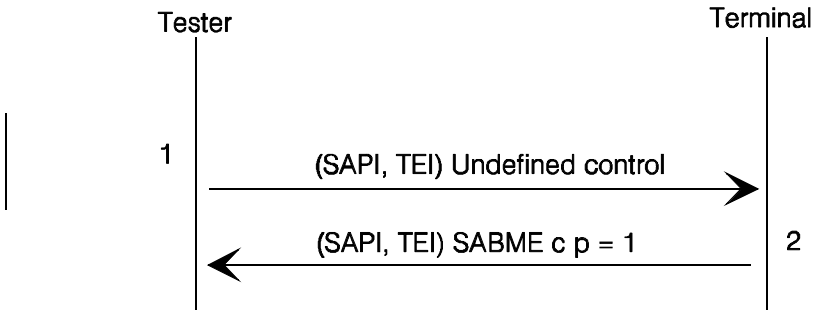
Delete test of subclause A.2.2.8.3.

Page 61, annex A, subclause A.2.2.8.8.1 (Receipt of a command or response field that is undefined or not implemented), delete text and replace with the following:

A.2.2.8.8.1 Receipt of a command or response field that is undefined or not implemented

Purpose: ensures the terminal shall reset the data link on receipt of an undefined or not implemented frame.

Expected sequence:



Precondition: the data link should be in the MF established state. V(S) and V(R) should be reset to 0 by performing test A.2.2.1.5.

Frame contents to terminal:

1, 3 octet UNDEFINED U-format-frame (SAPI = 0, TEI = Current TEI) c = 1, p = 1.

8	7	6	5	4	3	2	1	
0	0	0	0	0	0	1	0	SAPI
X	X	X	X	X	X	X	1	Chosen TEI
random undefined			1	value		1	1	Control
FCS								
FCS								

and

1, 4 octet UNDEFINED S-format-frame (SAPI = 0, TEI = Current TEI) c = 0, p = 1.

8	7	6	5	4	3	2	1	
0	0	0	0	0	0	1	0	SAPI
X	X	X	X	X	X	X	1	Chosen TEI
random undefined value						0	1	Control
X	X	X	X	X	X	X	1	Control
FCS								
FCS								

2, 3 octet SABME-frame (SAPI = O, TEI = Current TEI) C = 0, P = 1.

Refer to: ETS 300 125 [2], Part 2, of CCITT Recommendation A.921 [12], subclauses 3.6.11 and 5.8.5.

History

Document history	
September 1992	First Edition of ETS 300 153
January 1995	Amendment 1 to First Edition of ETS 300 153
December 1995	Converted into Adobe Acrobat Portable Document Format (PDF)
Note :	The references to the changed pages in the standard refer to an old presentation. See history box at the end of the standard itself. The new presentation format applied from 1 December 1995 might have different page numbering. The clause numbering has not changed.