



AMENDMENT

ETS 300 104

A1

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**This amendment A1 modifies
the European Telecommunication Standard ETS 300 104 (1991)**

**Integrated Services Digital Network (ISDN);
Attachment requirements for terminal equipment to connect to
an ISDN using ISDN basic access
Layer 3 aspects**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

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Foreword

This Amendment to ETS 300 104 (1991) has been produced by the Signalling Protocols and Switching (SPS) Technical Committee of the European Telecommunications Standards Institute (ETSI) and was adopted after having passed through the ETSI standards approval procedure.

This Amendment contains changes to twelve subclauses of ETS 300 104 (1991) as detailed below:

Subclauses 2.2.1.2, 2.2.1.3, 2.2.2.4 and Annex A, section 1, subclause 1.3.7:

An inconsistency between ETS 300 102-1 (1990) and ETS 300 104 (1991) regarding the restart procedure has been resolved.

Subclause 2.2.2.1 and Annex A, section 0, Clause 2:

An inconsistency between ETS 300 102-1 (1990) and ETS 300 104 (1991) regarding the capacities for a TE to receive the SETUP message via the broadcast data link or via the point-to-point data link has been resolved.

Annex A, section 1, subclauses 1.1.2.1 and 1.1.2.2:

An inconsistency between ETS 300 102-1 (1990) and ETS 300 104 (1991) regarding the compatibility checking if the TE is a NT2 has been resolved.

Annex A, section 2, subclause 8.10 and section 3, subclauses 11.1 and 13.4.2:

Some editorial mistakes have been corrected.

Annex A, section 6, subclause 19.2:

A test case from the test schedule was specified in a wrong way. As no reason was identified to keep this test case, it has been removed.

Full details of the amendments to the above mentioned subclauses are given below.

Amendments

Page 9, amendment to subclause 2.2.1.2, table 2

Replace the first part of table 2 by:

Table 2: Layer 3 Call States Requirements

FUNCTIONAL CHARACTERISTICS			
Function = Call States	ETS	SAR	COMMENTS
Overview of Call Control	§2	GID	Background Info.
Circuit Switched Calls	§2.1	GID	
Call states of the user side of the interface	§2.1.1	GID	
Null state (U0)	§2.1.1.1	M	
Call Initiated (U1)	§2.1.1.2	M	
Overlap sending (U2)	§2.1.1.3	O	
Outgoing call proceeding (U3)	§2.1.1.4	NOTE 1	
Call delivered (U4)	§2.1.1.5	NOTE 1	
Call present (U6)	§2.1.1.6	M	Transitory state
Call receiving (U7)	§2.1.1.7	O	M if alerting used
Connect request (U8)	§2.1.1.8	M	
Incoming call proceeding (U9)	§2.1.1.9	O	M if call proc. used
Active (U10)	§2.1.1.10	M	
Disconnect request (U11)	§2.1.1.11	M	
Disconnect indication (U12)	§2.1.1.12	M	
Suspend request (U15)	§2.1.1.13	O	M if call rearrangement used
Resume request (U17)	§2.1.1.14	O	M if call rearrangement used
Release request (U19)	§2.1.1.15	M	
Overlap receiving (U25)	§2.1.1.16	O	M if overlap receiving used
Call states at the network side of the interface	§2.1.2	N/A	
Packet mode access connections	§2.2	N/A	see NOTE in scope
Temporary signalling connections	§2.3	N/A	see NOTE in scope

Page 10, amendment to subclause 2.2.1.2, table 2

Replace the concluding part of table 2 by:

Table 2 (concluded): Layer 3 Call States Requirements

FUNCTIONAL CHARACTERISTICS			
Function = Call States	ETS	SAR	COMMENTS
States associated with the global call reference	§2.4	0)
Call states at the user side of the interface	§2.4.1	0)
Null (Rest 0)	§2.4.1.1	0 (NOTE 2)) M if Restart procedure used.
Restart request (Rest 1)	§2.4.1.2	0)
Restart (Rest 2)	§2.4.1.3	0 (NOTE 2))
Call states at the network side of the interface	§2.4.2	N/A)

Page 10, amendment to subclause 2.2.1.2, Note to table 2

Delete: "Note to table 2:"

Replace with: "Notes to table 2:"

Delete: "NOTE:"

Replace with: "NOTE 1:"

Add the following NOTE 2 after NOTE 1:

"NOTE 2: It is mandatory for a TE, declared by the supplier to operate in a point-to-point configuration and which is configured to operate in such a mode, to support this call state."

Page 11, amendment to subclause 2.2.1.3, Notes to table 3

Add the following paragraph to the existing text of NOTE 3:

"It is mandatory for a TE, declared by the supplier to operate in a point-to-point configuration and which is configured to operate in such a mode, to answer a received RESTART message with a RESTART ACKNOWLEDGE message."

Page 13, amendment to subclause 2.2.2.1, table 6

Replace the first part of table 6 by:

Table 6: Layer 3 Call Establishment Requirements

INTERFACE PROCEDURES			
Procedure = Call Establishment	ETS	SAR	COMMENTS
Circuit Switched Call Control Procedures	§5	NOTE 1	
Call Establishment at Origination Interface	§5.1	M	
Call Request	§5.1.1	M	
B-channel Selection - originating	§5.1.2	M	
Overlap Sending	§5.1.3	O	NOTE 2
Invalid Call Information	§5.1.4	N/A	
Call Proceeding	§5.1.5		
Call Proceeding, enbloc sending	§5.1.5.1	M	NOTE 2
Call Proceeding, overlap sending	§5.1.5.2	M	
Notification of interworking at the originating interface	§5.1.6		
- receipt of		M	
- generation of		O	M for NT2 if interworking occurs
Call Confirmation Indication	§5.1.7	M	
Call Connected	§5.1.8	M	
Call Rejection	§5.1.9	N/A	
Transit Network Selection	§5.1.10	N/A	refer to network operations only
Call Establishment at Destination Interface	§5.2	M	NOTE 4
Incoming Call	§5.2.1	M	NOTE 4
Compatibility Checking	§5.2.2	M	NOTE 4
B-channel Selection - destination	§5.2.3		NOTE 4
SETUP message delivered by point-to-point data link	§5.2.3.1	M	NOTE 4
SETUP messages delivered by broadcast data link	§5.2.3.2	M	NOTE 4
Overlap Receiving	§5.2.4	O	NOTE 4
Call Confirmation	§5.2.5		NOTE 4
Response to en-bloc SETUP or	§5.2.5.1	M	NOTE 4
Completion of Overlap Receiving			
Receipt of CALL PROCEEDING and ALERTING	§5.2.5.2	N/A	NOTE 4
Called user clearing during call establishment	§5.2.5.3	N/A	NOTE 4: refer to network operations only
Call Failure Procedures	§5.2.5.4	N/A	NOTE 4
Notification of interworking at terminating interface	§5.2.6		NOTE 4
- receipt of		M	NOTE 4
- generation of		O	NOTE 4: M for NT2 if interworking occurs
Call Accept	§5.2.7	M	NOTE 4
Active Indication	§5.2.8	M	NOTE 4
Non-selected User Clearing	§5.2.9	M	NOTE 4
Call collision	§5.7	M	
Compatibility Checking	Annex B	M	
Transit Network Checking	Annex C	O	
Extension for Symmetric Call	Annex D	N/A	
Network Specific facility selection	Annex E	N/A	
D channel backup procedures	Annex F	N/A	
Cause definitions	Annex G	GID	
Examples of information element coding	Annex H	GID	
Use of Progress indicator	Annex I	M	

Page 14, amendment to subclause 2.2.2.1, table 6

Replace the concluding part of table 6 by:

Table 6 (concluded): Layer 3 Call Establishment Requirements

INTERFACE PROCEDURES			
Procedure = Call Establishment	ETS	SAR	COMMENTS
Examples of cause value and location for busy condition	Annex J	N/A	NOTE 3
Message segmentation procedures	Annex K	N/A	
Low Layer Information coding principles	Annex L	M	
Low Layer Compatibility negotiation	Annex M	O	
Procedures for Establishment of Bearer Connection prior to Call Acceptance	Annex N	O	
Optional Procedures for bearer service change	Annex O	N/A	

Page 14, amendment to subclause 2.2.2.1, Notes to table 6, NOTE 4

Replace NOTE 4 with:

"NOTE 4: For terminals declared by the supplier to operate in a point-to-multipoint configuration, the capacity to receive the SETUP message via the broadcast data link is mandatory. For terminals declared by the supplier to operate in a point-to-point configuration, the capacity to receive the SETUP message via the point-to-point data link is mandatory. Terminals declared by the supplier to operate in either configuration shall support receiving the SETUP message via the broadcast data link as well as via the point-to-point data link. The ability to receive SETUP messages other than those described above is outside the scope of this ETS.

For terminals with the capacity to operate in a point-to-multipoint configuration, only the point-to-multipoint procedures, as described in subclause 5.2 and subsequent subclauses of ETS 300 102-1 [2], shall apply. For terminals with the capacity to operate in a point-to-point configuration only the point-to-point procedures, as described in subclause 5.2 and subsequent subclauses of ETS 300 102-1 [2], shall apply. Procedures which are common to both point-to-multipoint and point-to-point configurations shall also apply."

Page 15, amendment to subclause 2.2.2.4, table 9

Replace table 9 by:

Table 9: Layer 3 Restart Requirements

INTERFACE PROCEDURES			
Procedure = Restart	ETS	SAR	COMMENTS
Restart Procedure	§5.5	O	NOTE
Sending RESTART	§5.5.1	O	
Receiving RESTART	§5.5.2	O	NOTE

Insert the following text after table 9:

"Note to table 9:

NOTE: It is mandatory for a TE declared by the supplier to operate in a point-to-point configuration, and which is configured for this mode, to answer a received RESTART message with a RESTART ACKNOWLEDGE message."

Page 25, amendment to Annex A, section 0, Clause 2, item 4

Delete the following part of item 4:

"4: For those tests in which a SETUP message is sent to the TE simulating an incoming call, the SETUP message shall be sent via the broadcast data link and shall contain a valid call reference selected in accordance with the procedures specified in subclause 4.3 of ETS 300 102-1 [2] and those information elements required for compatibility checking (see Annex B of ETS 300 102-1 [2] coded in accordance with terminal NETs and the apparatus supplier's information provided so that the incoming call will be compatible with the TE's characteristics (see subclause 1.5 of this ETS regarding this apparatus supplier's information).

In addition, for those terminals supporting the capacity to receive a SETUP message in the point-to-point configuration the test specified in section 1 (incoming call handling tests) shall be repeated using point-to-point data link connection."

Replace with:

"4: For those tests in which a SETUP message simulating an incoming call is sent to the TE supporting the point-to-multipoint configuration only (as declared by the supplier) the SETUP message shall be sent via the broadcast data link.

For those tests in which a SETUP message simulating an incoming call is sent to the TE supporting the point-to-point configuration only (as declared by the supplier) the SETUP message shall be sent via the point-to-point data link.

For those TEs supporting the point-to-multipoint as well as the point-to-point configuration (as declared by the supplier) the SETUP message shall be sent via the broadcast data link and the tests specified in section 1 (incoming call handling tests) shall be repeated using the point-to-point data link.

In all cases, the SETUP message shall contain a valid call reference selected in accordance with the procedures specified in subclause 4.3 of ETS 300 102-1 [2] and those information elements required for compatibility checking (see Annex B of ETS 300 102-1 [2]) coded in accordance with terminal NETs and the apparatus supplier's information provided so that the incoming call will be compatible with the TE's characteristics (see subclause 1.5 of this ETS regarding apparatus supplier's information)."

Page 31, amendment to Annex A, section 1, subclause 1.1.2.1, "Purpose:"

Add the following paragraph after the existing "Purpose:" text:

"Where the IUT is a NT2, this requirement shall apply only if the NT2 is capable of determining whether the bearer capability is incompatible."

Page 33, amendment to Annex A, section 1, subclause 1.1.2.2, "Purpose:"

Add the following paragraph after the existing "Purpose:" text:

"Where the IUT is a NT2, this requirement shall apply only if the NT2 is capable of determining whether the content of the high layer compatibility information element is incompatible."

Page 40, amendment to Annex A, section 1, new subclause

Insert after subclause 1.3.6:

"1.3.7 Receipt of a RESTART message

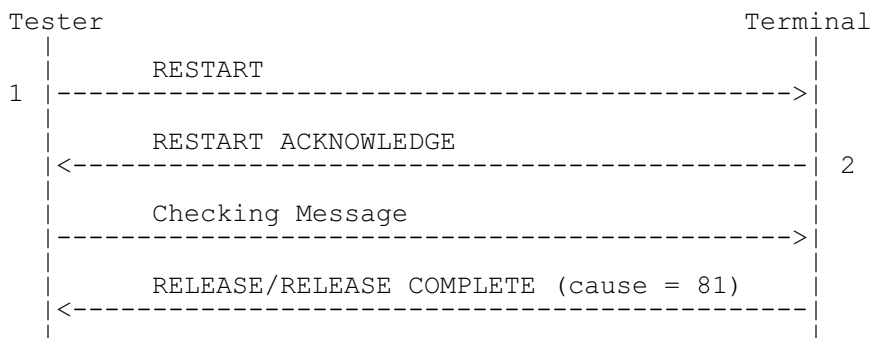
Purpose: Ensures that on receipt of a RESTART message the specified channel is returned to the idle condition, the call reference is returned to the Null state, and a RESTART ACKNOWLEDGE is sent.

NOTE: This test shall only be performed on those terminals declared by the supplier to operate in a point-to-point configuration, and which are configured for this mode.

Precondition:

- a) One call using call reference X and B-channel Y shall be in the active state.
- b) Current state associated with the global call reference shall be Rest 0.

Test case sequence:



Test description:

- 1) Transmit a RESTART message indicating B-Channel Y.
- 2) Expect a valid RESTART ACKNOWLEDGE message.

Result checking:

Transmit a checking message containing call reference X.

Expect a RELEASE or a RELEASE COMPLETE message, cause = 81 (invalid call reference value) indicating the terminal has entered the Null state.

Postamble: If a RELEASE message has been received transmit a RELEASE COMPLETE message.

Refer to: ETS 300 102-1 [2], subclause 5.5.2."

Page 90, amendment to Annex A, section 2, subclause 8.10, "Result Checking:", last line

Delete: "state 15 (Suspend request)".

Replace with: "state 10 (Active)".

Page 99, amendment to Annex A, section 3, subclause 11.1, "Purpose:"

Replace the existing "Purpose:" text with:

"Purpose: Ensures on receipt of a DISCONNECT message that the terminal responds with a RELEASE message and moves into the Release Request state (U19)."

Page 127, amendment to Annex A, section 3, subclause 13.4.2, "Test description:", item 5), last line

Delete: "state 3 (Outgoing Call Proceeding)".

Replace with: "state 4 (Call Delivered)".

Page 167, amendment to Annex A, section 6, subclause 19.2

Replace the complete contents of subclause 19.2 with:

"19.2 Timer T303

No test identified."

History

Document history	
July 1991	First Edition of ETS 300 104
June 1994	Amendment 1 to First Edition of ETS 300 104
December 1995	Converted into Adobe Acrobat Portable Document Format (PDF)
Note :	<p>The references to the changed pages in the standard refer to an old presentation. See history box at the end of the standard itself.</p> <p>The new presentation format applied from 1 December 1995 might have different page numbering. The clause numbering has not changed.</p>