



TELENOR

SPECIFICATION

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Specification of the network side of the user-network interface for ISDN Basic Access (BA) - physical layer (layer 1)

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Abstract : The delivery of ISDN BA ISDN-NT1 is according to ETS 300 012-1.

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ANNEX 1: Pin allocation for NT1 with RJ 45.

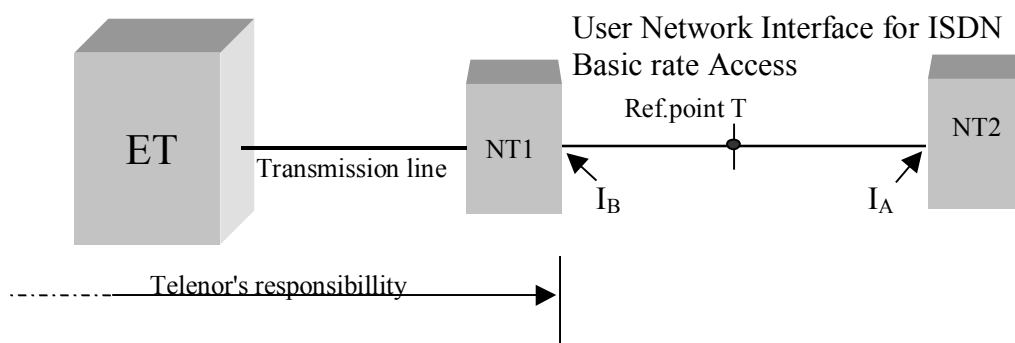
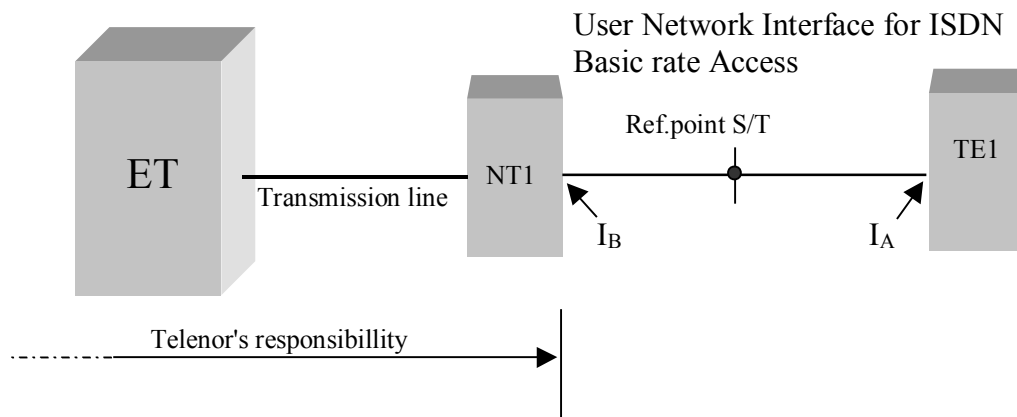
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1 Scope

This specification “Specification of the network side of the user-network interface for ISDN Basic rate Access (BA) NT1 equipment” describes the physical layer of the ISDN BA.

Section 4 of this document is formed as an application document to ETS 300 012. Comments are given where requirements deviate from the ETS or where options given in the ETS are selected. The ETS sections not mentioned shall be interpreted as compliant.

In no event shall Telenor be liable to other parties for any direct, indirect, special, incidental, or consequential damages resulting from errors or defects in these specifications.



2 References

2.1 Normative references

- [1] ETS 300 012-1. Integrated Services Digital Network (ISDN); Basic User Network Interface (UNI) Part 1: Layer 1 specification, October 1998.

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3 Definitions and abbreviations

NT	Network Termination
TE	Terminal Equipment
ET	Exchange Termination

4 Compliance to ETS 300 012 [1]

4.1 Comments to ETS 300 012 [1]

The ISDN BA is compliant to ETS 300 012 [1], with the following clarifications:

Section 3.1.5.2 NT states

Compliant

- State G1 (DEACTIVATED):
In case of point-to-multipoint configuration the NT1 will be in the low-power consumption mode. In case of point-to-point configuration the NT1 will be in the permanent consumption mode.
- State G4 (PENDING Deactivation):
After layer 2 deactivation, the network will wait for a timer to expire before layer 1 deactivation.

Section 5.2.1 Wiring polarity integrity

Compliant

The second paragraph is not applicable

Section 5.2.2 NT and TE associated wiring

Compliant

The location of the terminating resistors are selectable by switches internally in the NT.

Section 10 Power feeding

Compliant

Telenor supports only power feeding via the phantom circuit.

Only power source 1 (PS1 normal and PS1 restricted) is provided. Thus only points in the ETS that deals with PS1 are further commented.

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Section 10.1 Reference configuration

Compliant

The optional leads a, b, g and h is not used.

Power source in normal mode derives its power from mains, while restricted power is derived from the network. It is not allowed to connect a separate power source to the phantom mode power

Section 10.1.1 Functions specified at the access leads

- i) The access leads pair c-d and e-f provides the power transfer.

Section 10.1.2 Provision of power sources and sinks

Compliant

Power source 1 is supported as an integral part of the NT.

Section 11 Interface connector contact

The parallel set of I_B interfaces is delivered on two EN 60603-7 (ISO 8870, RJ45) jacks and these are wired in accordance with ETS 300 012-1, p. 61 (see pin assignments for the EN 28877 jack in annex 1.)

Appendix C.3 Test loopback reference configuration

Compliant

The NT only support loop 2

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4.2 Comments to Annex G

G.1 Multiframeing

Not supported for NT

5 HISTORY

Edition	Published	Comments
1.0	30.10.2000	First stable version
2.0	15.12.2010	Template/header/footer updates



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Annex 1

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ANNEX 1: RJ 45 pin-to-function assignment for NT1 I_B interface.

The pin-to-function assignment for NT1 is according to ETS 300 012.

Pin nr.	Function TE	Function NT
1	Unused	Unused
2	Unused	Unused
3	Transmit	Receive
4	Receive	Transmit
5	Receive	Transmit
6	Transmit	Receive
7	Unused	Unused
8	Unused	Unused