



**T**ELENOR

**S**PECIFICATION

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# Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA) – physical layer (layer 1)

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**Abstract** : The delivery of ISDN PRA (ISDN-UT) is according to ETS 300 011-1.

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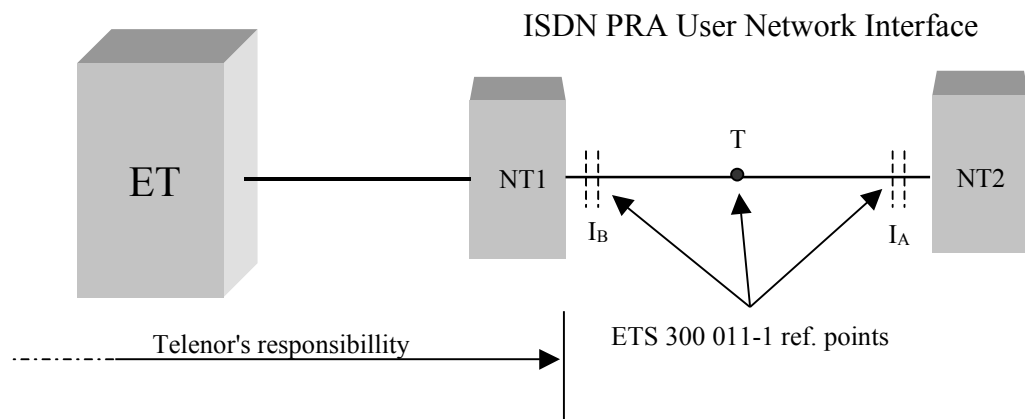
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## 1 Scope

This specification “Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA) – physical layer (layer 1)” describes the physical layer of the 2,048 Mb/s ISDN PRA delivered by Telenor Nett AS in Norway.

Section 4 of this document is formed as an application document to ETS 300 011. 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 300 011-1 (March 1998) Integrated Services Digital Network (ISDN); Primary rate User-Network Interface (UNI); Part 1: Layer 1 specification

### 2.2 Informative references

None

## 3 Definitions and abbreviations

NT	Network Termination
TE	Terminal Equipment
ET	Exchange Termination
HDSL	High-bit-rate Digital Subscriber Line
HDB3	High Density Bipolar of order 3 code

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## **4 Compliance to ETS 300 011 [1]**

### **4.1 Comments to ETS 300 011 [1]**

The ISDN PRA is compliant to ETS 300 011 [1], with the following clarifications:

#### Section 3.1 Definitions

Compliant

The network option 2 shall be used; i.e. support of CRC-4 procedure is required

#### Section 4.1 Point-to-point

Compliant

ISDN PRA is only used in a point-to-point configuration.

#### Section 4.1 Location of interface

Compliant

According to Technical Instruction, TIR-A-23, the Network Termination equipment (NT) may be installed on the user's premises foundation wall or near by the user's terminal equipment.

#### Section 4.1 Interface connector

Compliant

Telenor provides a 120 ohm terminal block for the in-house network connection of the terminal equipment.

1. Telenor provides a RJ45 (EN 60603-7) jack. The pin assignment in the jack is according to the ETS 300 011 [1]. See also Annex 1 for details.
2. Telenor provides a wiring box.

#### Section 7.2.1 Introduction

Compliant

Only the option of no CRC processing in the transmission link is available

#### Section 7.3.3.3 Consequent actions

Compliant

When an excessive CRC error rate is detected, the interface is taken out of service by the network.

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## Section 9.1 Provision of power

### Compliant

The NT1 can be delivered as

- GEN 80 equipment powered from the network
- HDSL equipment. Normally powered from the network, but local power is available on demand.

## Annex B.2, Tabell 19

The Telenor network does not use Loop 2

## **5 HISTORY**

<b>Edition</b>	<b>Published</b>	<b>Comments</b>
1.0	29.09.2000	First stable version
2.0	15.12.2010	Template/header/footer updates



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# TELENOR NETT SPECIFICATION

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**Annex 1**

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## **ANNEX 1: NT User-Interface RJ45 connector pin assignment.**

Pin no.	Function
1&2	Transmit pair
3	Unused
4&5	Receive pair
6	Unused
7	Unused
8	Unused

NOTE: The transmit pair is the output from the network interface. The receive pair is the input to the network interface