



**T**ELENOR

**S**PECIFICATION

**Specification no.:** A42

**Edition:** 3.0

**In force from:** 15.12.2010

---

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

---

**Document ID** : TNS/NT.NX-A42/990326-1

**Archive no.** :

**Index words** : ISDN, primary rate access, user-network interface, T-ref. Point

**Abstract** : Public ISDN of Telenor, primary rate access description

Telenor  
N-1331 Fornebu, Norway  
Telephone: +47 810 77 000

<b>TELENOR SPECIFICATION</b>		
<b>Specification A42:</b>		<b>Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA)</b>
<b>Date:</b> 15.12.2010	<b>Edition:</b> 3.0	<b>Page:</b> 2 of 6

**CONTENT**

**1 SCOPE.....3**

**2 REFERENCES .....3**

2.1 NORMATIVE REFERENCES .....3

2.2 INFORMATIVE REFERENCES .....3

**3 DEFINITIONS AND ABBREVIATIONS.....4**

3.1 DEFINITIONS .....4

3.2 ABBREVIATIONS .....4

**4 CPE CONFORMITY ASSESSMENT PROCEDURES.....4**

**5 GENERAL INFORMATION ABOUT THE PUBLIC ISDN OF TELENOR .....4**

**6 OVERVIEW OF RELATED TELENOR NETT SPECIFICATIONS .....5**

**7 HISTORY.....6**

<b>TELENOR SPECIFICATION</b>		
<b>Specification A42:</b>		<b>Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA)</b>
<b>Date:</b> 15.12.2010	<b>Edition:</b> 3.0	<b>Page:</b> 3 of 6

## 1 Scope

This specification describes the network implementation of the ISDN Primary Rate Access (PRA) interface at the T reference point in the public ISDN of Telenor. The purpose of this document is to inform suppliers of user equipment about the characteristics of the user-network interface, to which ISDN user equipment can be attached.

This specification is supplemented by a number of specifications (A4y-x) which describe various aspects of the technical characteristics of the ISDN user-network interface. An overview of the specifications which are relevant for the ISDN Primary Rate Access (PRA) is given in clause 6 of this document.

This specification, which covers the ISDN Primary Rate Access (PRA), and the Telenor Nett Specifications A41 [1] and A43 [2], together with their related specifications (A41-x and A43-x), which covers the ISDN Basic Access (BA) and ISDN packet mode service, describe in total the technical characteristics of the network side of the ISDN user-network interface.

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]	Telenor Nett Specification A41: "Specification of the network side of the user-network interface for ISDN Basic Access (BA)".
[2]	Telenor Nett Specification A43: "Specification of the network side of the ISDN Virtual Circuit Service for ISDN Basic Access (BA) and Primary Rate Access (PRA)."
[3]	ETS 300 403-1 (November 1995 and Corrigendum June 1996): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification. [ITU-T recommendation Q.931 (1993), modified]"
[4]	ETS 300 402-2 (November 1995): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Data Link Layer; Part 2: General protocol specification [ITU-T Recommendation Q.921 (1993), modified]"

### 2.2 Informative references

None.

<b>TELENOR SPECIFICATION</b>		
<b>Specification A42:</b>		<b>Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA)</b>
<b>Date:</b> 15.12.2010	<b>Edition:</b> 3.0	<b>Page:</b> 4 of 6

### **3 Definitions and abbreviations**

#### **3.1 Definitions**

- User:** The DSS1 protocol entity at the user side of the user-network interface.
- Network:** The DSS1 protocol entity at the network side of the user-network interface.
- User Equipment:** An equipment that can be connected to the user's side of the ISDN user-network interface.

#### **3.2 Abbreviations**

- AXE:** Exchange system produced by Ericsson
- DSS1:** Digital Subscriber Signalling System No. one
- ETS:** European Telecommunication Standard, issued by ETSI
- ETSI:** European Telecommunication Standards Institute
- ISDN:** Integrated Services Digital Network
- NPT:** Norwegian Post and Telecommunications Authority
- S12:** Exchange system produced by Alcatel (System 12)

### **4 CPE conformity assessment procedures**

Refer *Directive 99/5/EC of the European Parliament and of the Council relating radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity – R&TTE directive.*

### **5 General information about the public ISDN of Telenor**

Telenor Nett provides ISDN services based on the network infrastructure implemented in Alcatel's S12 exchanges and Ericsson's AXE exchanges. While the "basic call" part of the DSS1 layer 2 complies to ETS 300 402-2 [4], the DSS1 layer 3 protocol complies to ETS 300 403-1 [3] in both systems. It is intended that this specification, together with its associated specifications, shall describe the functionality provided by both the AXE and S12 systems.

Generally, the functionality of the public network of Telenor will be upgraded at certain times. In some cases this may affect the functionality of user equipment. In due time before such upgrades takes place, Telenor Nett will inform the suppliers of user equipment about the content of the network upgrade. This will allow suppliers to prepare their user equipment for the new functionality offered by the network.

<b>TELENOR SPECIFICATION</b>		
<b>Specification A42:</b>		<b>Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA)</b>
<b>Date:</b> 15.12.2010	<b>Edition:</b> 3.0	<b>Page:</b> 5 of 6

## 6 Overview of related Telenor Nett Specifications

This specification is supplemented by a number of specifications which describe the technical details for the ISDN Primary Rate Access.

- Telenor Nett Specification A42-1: “Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA) - physical layer (layer 1)”.
- Telenor Nett Specification A42-2: “Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA) - data link layer (layer 2)”.
- Telenor Nett Specification A42-3: “Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA) - network layer (layer 3)”.
- Telenor Nett Specification A42-4: “Specification of the network’s handling of number information, Primary Rate Access (PRA)”.
- Telenor Nett Specification A42-5: “Specification of the bearer services and teleservices supported in the public ISDN of Telenor, Primary Rate Access (PRA)”.
- Telenor Nett Specification A44: “Circuit switched supplementary services”.
- Telenor Nett Specification A44-1: “DSS1 generic keypad protocol”.
- Telenor Nett Specification A44-2: “DSS1 generic functional protocol”.
- Telenor Nett Specification A44-3: “ETSI standardised supplementary services supported in the public ISDN of Telenor; Basic Access (BA) and Primary Rate Access (PRA)”.
- Telenor Nett Specification A44-4: “Supplementary services defined by Telenor and supported in the public ISDN of Telenor; Basic Access (BA) and Primary Rate Access (PRA)”.

# TELENOR SPECIFICATION

**Specification A42:** Specification of the network side of the user-network interface for ISDN Primary Rate Access (PRA)

**Date:**  
15.12.2010

**Edition:**3.0

**Page:** 6 of 6

## 7 History

<b>Edition</b>	<b>Published</b>	<b>Comments</b>
1.0	26.03.1999	First stable version
2.0	28.09.2000	Modified chapter 4
3.0	15.12.2010	Template/header/footer updates



Telenor  
N-1331 Fornebu Norway  
Telephone: +47 810 77 000