

**SLOVENSKI STANDARD  
SIST-V ETSI/EG 201 189 V1.4.1:2003  
01-november-2003**

---

8 ][ ]HUbca fYyY'n]bhY[ f]fUb]a ]gkcf]hj Ua ]fHG8 BŁ! Dfc hc\_c ``X][ ]HUbYbUfc b]y\_Y g][ bU]nUWYyHr%fB GG%k!'; `Uj b]gYnbUa \_cX]fb]\`hc \_]b`cVfUrcj Ub]\`j fYXbcgh]

Integrated Services Digital Network (ISDN) - Digital Subscriber Signalling System No. one (DSS1) protocol - Master list of codepoints and operation values

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

**Ta slovenski standard je istoveten z:** [SIST-V ETSI/EG 201 189 V1.4.1:2003](https://standards.iteh.ai/catalog/standards/sist/51c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003)  
<https://standards.iteh.ai/catalog/standards/sist/51c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003>

---

**ICS:**

33.080	Digitalno omrežje z integriranimi storitvami (ISDN)	Integrated Services Digital Network (ISDN)
--------	---	--

**SIST-V ETSI/EG 201 189 V1.4.1:2003** en

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST-V ETSI/EG 201 189 V1.4.1:2003](#)

<https://standards.iteh.ai/catalog/standards/sist/51c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003>

# ETSI EG 201 189 V1.4.1 (2000-09)

*ETSI Guide*

## **Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Master list of codepoints and operation values**

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

[SIST-V ETSI/EG 201 189 V1.4.1:2003](#)

<https://standards.iteh.ai/catalog/standards/sist/51c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003>



---

Reference

REG/SPAN-05205

---

Keywords

ISDN, DSS1, coding, ASN.1

***ETSI***

650 Route des Lucioles  
 F-06921 Sophia Antipolis Cedex - FRANCE

---

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C  
 Association à but non lucratif enregistrée à la  
 Sous-Préfecture de Grasse 06 N° 7303/88

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST-V ETSI/EG 201 189 V1.4.1:2003](#)

<https://standards.iteh.ai/catalog/standards/sist/51c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003>

---

***Important notice***

Individual copies of the present document can be downloaded from:  
<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.  
 Information on the current status of this and other ETSI documents is available at <http://www.etsi.org/tb/status/>

If you find errors in the present document, send your comment to:  
[editor@etsi.fr](mailto:editor@etsi.fr)

---

***Copyright Notification***

No part may be reproduced except as authorized by written permission.  
 The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2000.  
 All rights reserved.

---

## Contents

Intellectual Property Rights .....	4
Foreword.....	4
1 Scope .....	5
2 References .....	5
3 Definitions and abbreviations.....	8
3.1 Definitions .....	8
3.2 Abbreviations .....	8
4 DSS1 message codepoints.....	9
5 DSS1 information element codepoints.....	11
5.1 Codeset 0 .....	11
5.2 Codeset 4 .....	12
5.3 Codeset 5 .....	13
6 Protocol discriminator values.....	14
7 Notifications .....	15
7.1 Notification indicator values .....	15
7.2 Notification indicators defined by global value.....	16
8 Progress indicator values.....	16
9 State values.....	17
10 Operations .....	18
10.1 Operations defined by local value.....	18
10.2 Operations defined by global value.....	20
11 Errors .....	23
11.1 Errors defined by local value.....	23
11.2 Errors defined by global value .....	25
12 Contents of messages .....	27
History .....	31

---

## Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://www.etsi.org/ipr>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

---

## Foreword

This ETSI Guide (EG) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

An ETSI Guide (EG) is an ETSI deliverable, containing informative elements, adopted for publication by the ETSI membership.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST-V ETSI/EG 201 189 V1.4.1:2003](#)

<https://standards.iteh.ai/catalog/standards/sist/51c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003>

## 1 Scope

The present document provides an overview of the codepoints used by the Digital Subscriber Signalling System No. one (DSS1) protocol for the pan-European Integrated Services Digital Network (ISDN) as provided by European public telecommunications operators at the T reference point or coincident S and T reference point (as defined in ITU-T Recommendation I.411 [3]).

This overview is related to messages, information elements, protocol discriminator values, notification indicator values, progress indicator values, state values, operation and error values which are used for basic call, packet mode call, and supplementary services specified so far by ETSI. In addition, the operations and errors identified by an ETSI object identifier are included in a separate table.

All codepoints currently specified either by ETSI or ITU-T are shown in the following tables. When a codepoint is specified for use in networks conforming to an ETSI specification, a reference is included in the table to indicate the ETSI specification where the particular codepoint is defined.

Other codepoint values are indicated by the note: "Not applicable in networks conforming to ETSI specifications". This note applies to values, which are used in ITU-T Recommendations, but are not currently specified for use by ETSI in any ETSI specification.

**NOTE:** A future version of the present document is expected to contain the operations and errors for the Remote Control service and possibly the Trunk Hunting supplementary service.

Clause 12 of the present document shows the relationship between messages and the information elements that each message may carry. Tables 14 to 17 only provide an overview of possible message contents but do not indicate which information element or combinations of information elements are present in a particular message for a specific purpose (e.g. basic call, a certain supplementary service).

(standard preview  
(standards.iteh.ai))

## 2 References

SIST-V ETSI/EG 201 189 V1.4.1:2003

<https://standards.iteh.ai/catalog/standards/sist/51c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003>

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] ITU-T Recommendation I.112 (1993): "Vocabulary of terms for ISDNs".
- [2] ITU-T Recommendation I.210 (1993): "Principles of telecommunication services supported by an ISDN and the means to describe them".
- [3] ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - Reference configurations".
- [4] ITU-T Recommendation X.25 (1993): "Interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit".
- [5] ETSI ETS 300 007 (1991): "Integrated Services Digital Network (ISDN); Support of packet-mode terminal equipment by an ISDN".
- [6] ETSI EN 300 058-1 (V1.2): "Integrated Services Digital Network (ISDN); Call Waiting (CW) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

- [7] ETSI EN 300 097-1 (V1.2): "Integrated Services Digital Network (ISDN); Connected Line Identification Presentation (COLP) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [8] ETSI EN 300 130-1 (V1.2): "Integrated Services Digital Network (ISDN); Malicious Call Identification (MCID) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [9] ETSI EN 300 138-1 (V1.3): "Integrated Services Digital Network (ISDN); Closed User Group (CUG) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [10] ETSI EN 300 141-1 (V1.2): "Integrated Services Digital Network (ISDN); Call Hold (HOLD) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [11] ETSI EN 300 182-1 (V1.3): "Integrated Services Digital Network (ISDN); Advice of Charge (AOC) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [12] ETSI EN 300 185-1 (V1.2): "Integrated Services Digital Network (ISDN); Conference call, add-on (CONF) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [13] ETSI EN 300 188-1 (V1.2): "Integrated Services Digital Network (ISDN); Three-Party (3PTY) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [14] ETSI EN 300 195-1 (V1.4): "Integrated Services Digital Network (ISDN); Supplementary service interactions; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".  
**iTEK STANDARD PREVIEW**  
**(standards.iteh.ai)**
- [15] ETSI EN 300 196-1 (V1.2): "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".  
SIST-V ETSI/EG 201 189 V1.4.1:2003  
<https://standards.iteh.ai/catalog/standards/sist-v/1c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003>
- [16] ETSI EN 300 207-1 (V2.0): "Integrated Services Digital Network (ISDN); Diversion supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [17] ETSI EN 300 210-1 (V1.2): "Integrated Services Digital Network (ISDN); Freephone (FPH) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [18] ETSI EN 300 286-1 (V1.2): "Integrated Services Digital Network (ISDN); User-to-User Signalling (UUS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [19] ETSI EN 300 324-1 (V2.1): "V interfaces at the digital Local Exchange (LE); V5.1 interface for the support of Access Network (AN); Part 1: V5.1 interface specification".
- [20] ETSI EN 300 347-1 (V2.2): "V interfaces at the digital Local Exchange (LE); V5.2 interface for the support of Access Network (AN); Part 1: V5.2 interface specification".
- [21] ETSI EN 300 359-1 (V1.2): "Integrated Services Digital Network (ISDN); Completion of Calls to Busy Subscriber (CCBS) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [22] ETSI EN 300 362 (V1.2): "Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Call offer supplementary service [ISO/IEC 14843 (1996), modified]".
- [23] ETSI EN 300 364 (V1.2): "Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Do not disturb and do not disturb override supplementary services [ISO/IEC 14844 (1996), modified]".

- [24] ETSI EN 300 369-1 (V1.2): "Integrated Services Digital Network (ISDN); Explicit Call Transfer (ECT) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [25] ETSI EN 300 403-1 (V1.3): "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]".
- [26] ETSI EN 300 426 (V1.2): "Private Integrated Services Network (PISN); Inter-exchange signalling protocol; Call intrusion supplementary service [ISO/IEC 14846 (1996), modified]".
- [27] ETSI EN 300 443-1 (V1.3): "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2931 (1995), modified]".
- [28] ETSI EN 300 745-1 (V1.2): "Integrated Services Digital Network (ISDN); Message Waiting Indication (MWI) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [29] ETSI EN 301 001-1 (V1.2): "Integrated Services Digital Network (ISDN); Outgoing Call Barring (OCB) supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [30] ETSI EN 301 002-1 (V1.2): "Integrated Services Digital Network (ISDN); Security tools (SET) procedures; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [31] ETSI EN 301 005-1 (V1.1); **iTik STANDARD REVIEW**  
**(standardbatch.ai)**  
[31] ETSI EN 301 005-1 (V1.1); "Interfaces at the digital Service Node (SN); Interfaces at the VB5.1 reference point for the support of broadband or combined narrowband and broadband Access Networks (ANs); Part 1: Interface specification".
- [32] ETSI EN 301 060-1 (V1.2); **SIST-V ETSI/EG 201-189 V1.4.1:2003**  
**https://standards.etsi.org/catalog/standards/v15/c002c7-e496-8efaa35e  
aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003**  
ETSI EN 301 060-1 (V1.2); "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Basic call control; Enhancement at the "b" service entry point for Virtual Private Network (VPN) applications; Part 1: Protocol specification".
- [33] ETSI EN 301 061-1 (V1.2): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Generic functional protocol for the support of supplementary services at the "b" service entry point for Virtual Private Network (VPN) applications; Part 1: Protocol specification".
- [34] ETSI EN 301 065-1 (V1.2): "Integrated Services Digital Network (ISDN); Completion of Calls on No Reply (CCNR) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [35] ETSI EN 301 141-1 (V1.2) "Integrated Services Digital Network (ISDN); Narrowband Multi-service Delivery System (NMDS); Part 1: NMDS interface specification".
- [36] ETSI EN 301 144-1 (V1.1): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) and Signalling System No.7 (SS7); Signalling application for the mobility management service on the alpha interface; Part 1: Protocol specification".
- [37] ETSI EN 302 094-1 (V1.1): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol and Signalling System No. 7 (SS7) protocols; Call Forwarding on Not Reachable (CFNRC) supplementary service for Cordless Terminal Mobility (CTM) phase 1; Part 1: Protocol specification".
- [38] ETSI EN 301 484-1 (V1.1): "Integrated Services Digital Network (ISDN); Line Hunting (LH) supplementary service; Digital Subscriber Signalling System No. one (DSS1); Part 1: Protocol specification".
- [39] ITU-T Recommendation Q.931 (1998): "ISDN user-network interface layer 3 specification for basic call control".

- [40] ITU-T Recommendation Q.2931 (1995): "Broadband Integrated Services Digital Network (B-ISDN) - Digital Subscriber Signalling System No. 2 (DSS 2) - User-Network Interface (UNI) - Layer 3 specification for basic call/connection control".

## 3 Definitions and abbreviations

### 3.1 Definitions

For the purposes of the present document, the following definitions apply:

**Integrated Services Digital Network (ISDN):** see ITU-T Recommendation I.112 [1], definition 308

**network:** DSS1 protocol entity at the network side of the user-network interface

**service; telecommunication service:** see ITU-T Recommendation I.112 [1], definition 201

**supplementary service:** see ITU-T Recommendation I.210 [2], subclause 2.4

**user:** DSS1 protocol entity at the user side of the user-network interface

### 3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

<b>iTeh STANDARD PREVIEW (standards.iteh.ai)</b>	
3PTY	Three-Party
ASN.1	Abstract Syntax Notation one
BER	Basic Encoding Rules
CCBS	Completion of Calls to Busy Subscriber
CCNR	Completion of Calls <del>on No Reply</del> <a href="#">EG 201 189 V1.4.1:2003</a>
CFNRC	Call <del>Forwarding on Not Reachable</del> <a href="#">standards.sist/51c0b2c7-e49f-48ef-a25e-0a0070d314/sist-v-etsi-eg-201-189-v1-4-1-2003</a>
CONF	Conference call <del>add-on</del> <a href="#">0a0070d314/sist-v-etsi-eg-201-189-v1-4-1-2003</a>
CUG	Closed User Group
DSS1	Digital Subscriber Signalling System No. one
ECT	Explicit Call Transfer
FPH	Freephone
HOLD	Call Hold
ISDN	Integrated Services Digital Network
LH	Line Hunting
MWI	Message Waiting Indication
OCB	Outgoing Call Barring
SCF	Selective Call Forwarding
SET	Security Tools
USBS	User Signalling Bearer Service
UUS	User-to-User Signalling

## 4 DSS1 message codepoints

The DSS1 messages and their associated codepoints are shown in table 1. The reference indicates the ETSI specification that contains the message definition.

**Table 1: DSS1 message codepoints**

Message type								Message	Reference
8	7	6	5	4	3	2	1		
0	0	0	0	0	0	0	0	Escape to nationally specific message type	EN 300 403-1 [25]
0	0	0	-	-	-	-	-	<b>Call establishment messages</b>	
			0	0	0	0	1	ALERTING	ETS 300 007 [5], EN 300 403-1 [25]
			0	0	0	1	0	CALL PROCEEDING	ETS 300 007 [5], EN 300 403-1 [25]
			0	0	0	1	1	PROGRESS	ETS 300 007 [5], EN 300 403-1 [25]
			0	0	1	0	1	SETUP	ETS 300 007 [5], EN 300 403-1 [25]
			0	0	1	1	1	CONNECT	ETS 300 007 [5], EN 300 403-1 [25]
			0	1	1	1	1	CONNECT ACKNOWLEDGE	ETS 300 007 [5], EN 300 403-1 [25]
			0	1	1	0	1	SETUP ACKNOWLEDGE	EN 300 403-1 [25]
0	0	1	-	-	-	-	-	<b>Call information phase messages</b>	
			0	0	0	0	0	USER INFORMATION	EN 300 286-1 [18]
			0	0	0	0	1	SUSPEND REJECT	EN 300 403-1 [25]
			0	0	0	1	0	RESUME REJECT	EN 300 403-1 [25]
			0	0	1	0	0	HOLD	EN 300 196-1 [15]
			0	0	1	0	1	SUSPEND	EN 300 403-1 [25]
			0	0	1	1	0	RESUME	EN 300 403-1 [25]
			0	1	0	0	0	HOLD ACKNOWLEDGE	EN 300 196-1 [15] (etsi-eg-201-189-v1-4-1-2003)
			0	1	1	0	1	SUSPEND ACKNOWLEDGE	EN 300 403-1 [25]
			0	1	1	1	0	RESUME ACKNOWLEDGE	EN 300 403-1 [25]
			1	0	0	0	0	HOLD REJECT	EN 300 196-1 [15]
			1	0	0	0	1	RETRIEVE	EN 300 196-1 [15]
			1	0	0	1	1	RETRIEVE ACKNOWLEDGE	EN 300 196-1 [15]
			1	0	1	1	1	RETRIEVE REJECT	EN 300 196-1 [15]
0	1	0	-	-	-	-	-	<b>Call clearing messages</b>	
			0	0	0	0	0	DETACH	(note)
			0	0	1	0	1	DISCONNECT	ETS 300 007 [5], EN 300 403-1 [25]
			0	0	1	1	0	RESTART	EN 300 403-1 [25]
			0	1	0	0	0	DETACH ACKNOWLEDGE	(note)
			0	1	1	0	1	RELEASE	ETS 300 007 [5], EN 300 196-1 [15], EN 300 403-1 [25]
			0	1	1	1	0	RESTART ACKNOWLEDGE	EN 300 403-1 [25]
			1	1	0	1	0	RELEASE COMPLETE	ETS 300 007 [5], EN 300 196-1 [15], EN 300 403-1 [25]

Message type Bit 8 7 6 5 4 3 2 1								Message	Reference
0 1 1 - - - -								<b>Miscellaneous messages</b>	
0 0 0 0 0 0 0 0								SEGMENT	EN 300 403-1 [25]
0 0 0 1 0 0 0 0								FACILITY	EN 300 196-1 [15]
0 0 1 0 0 0 0 0								REGISTER	EN 300 196-1 [15]
0 1 1 1 0 0 0 0								NOTIFY	EN 300 196-1 [15], EN 300 403-1 [25]
1 0 1 0 1 0 0 0								STATUS ENQUIRY	ETS 300 007 [5], EN 300 196-1 [15], EN 300 403-1 [25]
1 1 0 0 1 0 0 0								CONGESTION CONTROL	EN 300 286-1 [18]
1 1 0 1 1 0 0 0								INFORMATION	EN 300 403-1 [25]
1 1 1 0 1 0 0 0								STATUS	ETS 300 007 [5], EN 300 196-1 [15], EN 300 403-1 [25]

NOTE: This message codepoint is obsolete, but the value is reserved for reasons of backwards compatibility.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST-V ETSI/EG 201 189 V1.4.1:2003](https://standards.iteh.ai/catalog/standards/sist/51c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003)  
<https://standards.iteh.ai/catalog/standards/sist/51c0b2c7-e49f-48ef-a25e-aa3c074ed314/sist-v-etsi-eg-201-189-v1-4-1-2003>