

STN	Digitálne televízne vysielanie (DVB). Špecifikácia informácií o službe (SI) v systémoch DVB.	STN EN 300 468 V1.15.1 87 0468
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Digital Video Broadcasting (DVB); Specification for Service Information (SI) in DVB systems

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Digital Video Broadcasting (DVB); Specification for Service Information (SI) in DVB systems

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DVB[®]
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Foreword

This European Standard (EN) has been produced by Joint Technical Committee (JTC) Broadcast of the European Broadcasting Union (EBU), Comité Européen de Normalisation ELECtrotechnique (CENELEC) and the European Telecommunications Standards Institute (ETSI).

NOTE: The EBU/ETSI JTC Broadcast was established in 1990 to co-ordinate the drafting of standards in the specific field of broadcasting and related fields. Since 1995 the JTC Broadcast became a tripartite body by including in the Memorandum of Understanding also CENELEC, which is responsible for the standardization of radio and television receivers. The EBU is a professional association of broadcasting organizations whose work includes the co-ordination of its members' activities in the technical, legal, programme-making and programme-exchange domains. The EBU has active members in about 60 countries in the European broadcasting area; its headquarters is in Geneva.

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The Digital Video Broadcasting Project (DVB) is an industry-led consortium of broadcasters, manufacturers, network operators, software developers, regulatory bodies, content owners and others committed to designing global standards for the delivery of digital television and data services. DVB fosters market driven solutions that meet the needs and economic circumstances of broadcast industry stakeholders and consumers. DVB standards cover all aspects of digital television from transmission through interfacing, conditional access and interactivity for digital video, audio and data. The consortium came together in 1993 to provide global standardization, interoperability and future proof specifications.

National transposition dates	
Date of adoption of this EN:	15 March 2016
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Date of withdrawal of any conflicting National Standard (dow):	31 December 2016

Modal verbs terminology

In the present document **"shall"**, **"shall not"**, **"should"**, **"should not"**, **"may"**, **"need not"**, **"will"**, **"will not"**, **"can"** and **"cannot"** are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"must" and **"must not"** are **NOT** allowed in ETSI deliverables except when used in direct citation.

1 Scope

The present document specifies the Service Information (SI) data which forms a part of DVB bitstreams, in order that the user can be provided with information to assist in selection of services and/or events within the bitstream, and so that the Integrated Receiver Decoder (IRD) can automatically configure itself for the selected service. SI data for automatic configuration is mostly specified within ISO/IEC 13818-1 [18] as Program Specific Information (PSI).

The present document specifies additional data which complements the PSI by providing data to aid automatic tuning of IRDs, and additional information intended for display to the user. The manner of presentation of the information is not specified in the present document, and IRD manufacturers have freedom to choose appropriate presentation methods.

It is expected that Electronic Programme Guides (EPGs) will be a feature of Digital TV transmissions.

The definition of an EPG is outside the scope of the present document (i.e. the SI specification), but the data contained within the SI specified in the present document may be used as the basis for an EPG.

Rules of operation for the implementation of the present document are specified in ETSI TS 101 211 [i.2].

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are necessary for the application of the present document.

- [1] ETSI EN 300 231: "Television systems; Specification of the domestic video Programme Delivery Control system (PDC)".
- [2] ETSI EN 300 401: "Radio Broadcasting Systems; Digital Audio Broadcasting (DAB) to mobile, portable and fixed receivers".
- [3] ETSI EN 300 706: "Enhanced Teletext specification".
- [4] ETSI EN 301 192: "Digital Video Broadcasting (DVB); DVB specification for data broadcasting".
- [5] ETSI EN 301 210: "Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for Digital Satellite News Gathering (DSNG) and other contribution applications by satellite".
- [6] ETSI EN 301 775: "Digital Video Broadcasting (DVB); Specification for the carriage of Vertical Blanking Information (VBI) data in DVB bitstreams".
- [7] ETSI EN 301 790: "Digital Video Broadcasting (DVB); Interaction channel for satellite distribution systems".
- [8] ETSI EN 302 307-1: "Digital Video Broadcasting (DVB); Second generation framing structure, channel coding and modulation systems for Broadcasting, Interactive Services, News Gathering and other broadband satellite applications; Part 1: DVB-S2".
- [9] ETSI TS 101 154: "Digital Video Broadcasting (DVB); Specification for the use of Video and Audio Coding in Broadcasting Applications based on the MPEG-2 Transport Stream".
- [10] ETSI TS 102 005: "Digital Video Broadcasting (DVB); Specification for the use of Video and Audio Coding in DVB services delivered directly over IP protocols".

- [11] ETSI TS 102 006: "Digital Video Broadcasting (DVB); Specification for System Software Update in DVB Systems".
- [12] ETSI TS 102 114: "DTS Coherent Acoustics; Core and Extensions with Additional Profiles".
- [13] ETSI TS 102 323: "Digital Video Broadcasting (DVB); Carriage and signalling of TV-Anytime information in DVB transport streams".
- [14] ETSI TS 102 366: "Digital Audio Compression (AC-3, Enhanced AC-3) Standard".
- [15] ETSI TS 102 812: "Digital Video Broadcasting (DVB); Multimedia Home Platform (MHP) Specification 1.1.1".
- [16] ISO/IEC 10646: "Information technology -- Universal Coded Character Set (UCS)".
- [17] ISO/IEC 11172-3: "Information technology -- Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s -- Part 3: Audio".
- [18] ISO/IEC 13818-1: "Information technology -- Generic coding of moving pictures and associated audio information: Systems".
- [19] ISO/IEC 13818-2: "Information technology -- Generic coding of moving pictures and associated audio information: Video".
- [20] ISO/IEC 13818-3: "Information technology -- Generic coding of moving pictures and associated audio information -- Part 3: Audio".
- [21] ISO/IEC 14496-3: "Information technology -- Coding of audio-visual objects -- Part 3: Audio".
- [22] ISO/IEC 6937: "Information technology -- Coded graphic character set for text communication -- Latin alphabet".
- [23] ISO/IEC 8859-1: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 1: Latin alphabet No. 1".
- [24] ISO/IEC 8859-2: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 2: Latin alphabet No. 2".
- [25] ISO/IEC 8859-3: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 3: Latin alphabet No. 3".
- [26] ISO/IEC 8859-4: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 4: Latin alphabet No. 4".
- [27] ISO/IEC 8859-5: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 5: Latin/Cyrillic alphabet".
- [28] ISO/IEC 8859-6: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 6: Latin/Arabic alphabet".
- [29] ISO/IEC 8859-7: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 7: Latin/Greek alphabet".
- [30] ISO/IEC 8859-8: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 8: Latin/Hebrew alphabet".
- [31] ISO/IEC 8859-9: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 9: Latin alphabet No. 5".
- [32] ISO/IEC 8859-10: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 10: Latin alphabet No. 6".
- [33] ISO/IEC 8859-11: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 11: Latin/Thai alphabet".
- [34] ISO/IEC 8859-13: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 13: Latin alphabet No. 7".

- [35] ISO/IEC 8859-14: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 14: Latin alphabet No. 8 (Celtic)".
 - [36] ISO/IEC 8859-15: "Information technology -- 8-bit single-byte coded graphic character sets -- Part 15: Latin alphabet No. 9".
 - [37] CENELEC EN 50221: "Common interface specification for conditional access and other digital video broadcasting decoder applications".
 - [38] IEC 61883 (parts 1 and 4): "Consumer audio/video equipment -- Digital interface".
 - [39] IEEE™ 1394.1: "IEEE™ Standard for High Performance Serial Bus Bridges".
 - [40] ISO 8601: "Data elements and interchange formats -- Information interchange -- Representation of dates and times".
 - [41] ISO 3166 (all parts): "Codes for the representation of names of countries and their subdivisions".
 - [42] ISO 639-2: "Codes for the representation of names of languages -- Part 2: Alpha-3 code".
 - [43] Recommendation ITU-R BS.1196 (appendix 3): "Audio coding for digital broadcasting".
- NOTE: Appendix 3 contains additional information on the AC-3 audio encoding algorithm and decoding requirements, relevant to the present document.
- [44] KSX1001: "Code for Information Interchange (Hangeul and Hanja)", Korean Agency for Technology and Standards, Ref. No. KSX 1001-2004.
- NOTE: Available at <http://unicode.org/Public//MAPPINGS/OBSOLETE/EASTASIA/KSC/KSX1001.TXT>.
- [45] ETSI ES 201 812: "Digital Video Broadcasting (DVB); Multimedia Home Platform (MHP) Specification 1.0.3".
 - [46] ETSI TS 102 825 (parts 1 to 5, 7, 9 and 10): "Digital Video Broadcasting (DVB); Content Protection and Copy Management (DVB-CPCM)".
 - [47] ETSI EN 302 755: "Digital Video Broadcasting (DVB); Frame structure channel coding and modulation for a second generation digital terrestrial television broadcasting system (DVB-T2)".
 - [48] Void.
 - [49] ETSI TS 102 770: "Digital Video Broadcasting (DVB); System Renewability Messages (SRM) in DVB Systems".
 - [50] ETSI EN 302 583: "Digital Video Broadcasting (DVB); Framing Structure, channel coding and modulation for Satellite Services to Handheld devices (SH) below 3 GHz".
 - [51] ETSI TS 102 772: "Digital Video Broadcasting (DVB); Specification of Multi-Protocol Encapsulation - inter-burst Forward Error Correction (MPE-iFEC)".
 - [52] IETF RFC 2045: "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies".
 - [53] ETSI EN 302 769: "Digital Video Broadcasting (DVB); Frame structure channel coding and modulation for a second generation digital transmission system for cable systems (DVB-C2)".
 - [54] ETSI TS 101 547-2: "Digital Video Broadcasting (DVB); Plano-stereoscopic 3DTV; Part 2: Frame Compatible Plano-stereoscopic 3DTV".
 - [55] ETSI TS 101 547-3: "Digital Video Broadcasting (DVB); Plano-stereoscopic 3DTV; Part 3: HDTV Service Compatible Plano-stereoscopic 3DTV".
 - [56] ETSI TS 102 809: "Digital Video Broadcasting (DVB); Signalling and carriage of interactive applications and services in Hybrid Broadcast/Broadband environments".
 - [57] ETSI TS 102 773: "Digital Video Broadcasting (DVB); Modulator Interface (T2-MI) for a second generation digital terrestrial television broadcasting system (DVB-T2)".

- [58] GB2312-1980: "Code of Chinese graphic character set for information interchange, primary set".
- [59] IETF RFC 3986: "Uniform Resource Identifiers (URI): Generic Syntax".
- [60] ETSI TS 102 034: "Digital Video Broadcasting (DVB); Transport of MPEG-2 TS Based DVB Services over IP Based Networks".
- [61] ETSI TS 103 190 (V1.1.1): "Digital Audio Compression (AC-4) Standard".
- [62] ETSI TS 101 547-4: "Digital Video Broadcasting (DVB); Plano-stereoscopic 3DTV; Part 4: Service frame compatible Plano-stereoscopic 3DTV for HEVC coded services".

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI TS 101 162: "Digital Video Broadcasting (DVB); Allocation of identifiers and codes for Digital Video Broadcasting (DVB) systems".
- [i.2] ETSI TS 101 211: "Digital Video Broadcasting (DVB); Guidelines on implementation and usage of Service Information (SI)".
- [i.3] ETSI TS 102 727: "Digital Video Broadcasting (DVB); Multimedia Home Platform (MHP) Specification 1.2.2".
- [i.4] ETSI TR 102 825 (parts 6, 8, 11 to 13): "Digital Video Broadcasting (DVB); Content Protection and Copy Management (DVB-CPCM)".
- [i.5] ETSI TS 102 201: "Digital Video Broadcasting (DVB); Interfaces for DVB Integrated Receiver Decoder (DVB-IRD)".
- [i.6] ETSI EN 300 429: "Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for cable systems".
- [i.7] ETSI EN 300 421: "Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for 11/12 GHz satellite services".
- [i.8] ETSI EN 300 744: "Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for digital terrestrial television".
- [i.9] DVB BlueBook A165: "Digital Video Broadcasting (DVB); Extensions to the CI Plus Specification".
- [i.10] DVB BlueBook A167-2: "Digital Video Broadcasting (DVB); Companion Screens and Streams; Part 2: Content Identification and Media Synchronisation".
- [i.11] ISO/IEC 14496-10: "Information technology -- Coding of audio-visual objects -- Part 10: Advanced Video Coding".

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