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Digital Video Broadcasting (DVB); Guidelines on implementation and usage of Service Information (SI)

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Contents

Intellectual Property Rights	6
Foreword.....	6
1 Scope	7
2 References	7
2.1 Normative references	7
2.2 Informative references.....	7
3 Definitions and abbreviations.....	9
3.1 Definitions.....	9
3.2 Abbreviations	10
4 Rules of operation	12
4.1 Service Information (SI) table information	12
4.1.1 Network Information Table (NIT) information	12
4.1.2 Bouquet Association Table (BAT) information.....	13
4.1.3 Service Description Table (SDT) information.....	14
4.1.4 Event Information Table (EIT) information	14
4.1.4.1 EIT Present/Following information	14
4.1.4.2 EIT Schedule information	15
4.1.4.2.1 EIT Schedule structure	15
4.1.4.2.2 EIT scrambling.....	16
4.1.5 Time and Date Table (TDT)	16
4.1.6 Time Offset Table (TOT)	16
4.1.7 Running Status Table (RST).....	17
4.1.8 Stuffing Table (ST).....	17
4.1.9 Transport Stream Description Table (TSDT).....	17
4.1.9.1 Digital Satellite News Gathering (DSNG)	17
4.1.10 Table update mechanism	18
4.1.11 Table segmentation	18
4.1.11.1 Generic segmentation rules	18
4.1.11.1.1 General rules.....	18
4.1.11.1.2 NIT and BAT.....	19
4.1.11.1.3 SDT and EIT	19
4.1.11.2 Segmentation rules for DVB-H and DVB-SH systems.....	19
4.1.11.2.1 General rules.....	19
4.1.11.2.2 NIT and BAT for DVB-SH and DVB-H.....	19
4.1.11.2.3 SDT for DVB-SH and DVB-H.....	21
4.2 SI descriptor allocation and usage.....	21
4.2.1 Descriptors of the Network Information Table (NIT).....	21
4.2.1.1 First descriptor loop	21
4.2.1.1.1 Linkage descriptor	21
4.2.1.1.2 Multilingual network name descriptor.....	22
4.2.1.1.3 Network name descriptor.....	22
4.2.1.1.4 Cell list descriptor.....	22
4.2.1.1.5 Network change notify descriptor	22
4.2.1.2 Second descriptor loop.....	23
4.2.1.2.1 Delivery system descriptors.....	23
4.2.1.2.2 Service list descriptor	23
4.2.1.2.3 Frequency list descriptor	23
4.2.1.2.4 Cell frequency link descriptor	23
4.2.2 Descriptors of the Bouquet Association Table (BAT).....	23
4.2.2.1 First descriptor loop	24
4.2.2.1.1 Bouquet name descriptor	24
4.2.2.1.2 CA identifier descriptor	24
4.2.2.1.3 Country availability descriptor	24
4.2.2.1.4 Linkage descriptor	24

4.2.2.1.5	Multilingual bouquet name descriptor	24
4.2.2.2	Second descriptor loop	25
4.2.2.2.1	Service list descriptor	25
4.2.3	Descriptors of the Service Description Table (SDT)	25
4.2.3.1	Announcement support descriptor	25
4.2.3.2	CA identifier descriptor	25
4.2.3.3	Component descriptor	25
4.2.3.4	Country availability descriptor	26
4.2.3.5	Data_broadcast_descriptor	26
4.2.3.6	Linkage descriptor	26
4.2.3.7	Mosaic descriptor	26
4.2.3.8	Multilingual service name descriptor	27
4.2.3.9	NVOD reference descriptor	27
4.2.3.10	Service descriptor	27
4.2.3.11	Service availability descriptor	27
4.2.3.11.1	Network Implementation Considerations	28
4.2.3.11.2	IRD implementation considerations	28
4.2.3.12	Service relocated descriptor	29
4.2.3.13	Telephone descriptor	29
4.2.3.14	Time shifted service descriptor	29
4.2.4	Descriptors of the Event Information Table (EIT)	30
4.2.4.1	CA identifier descriptor	30
4.2.4.2	Component descriptor	30
4.2.4.3	Content descriptor	31
4.2.4.4	Data_broadcast_descriptor	31
4.2.4.5	Extended event descriptor	31
4.2.4.6	Linkage descriptor	31
4.2.4.7	Multilingual component descriptor	31
4.2.4.8	Parental rating descriptor	32
4.2.4.9	PDC descriptor	32
4.2.4.10	Short event descriptor	32
4.2.4.11	Telephone descriptor	32
4.2.4.12	Time shifted event descriptor	32
4.2.5	Descriptors of the Time Offset Table (TOT)	33
4.2.5.1	Local time offset descriptor	33
4.2.6	Descriptors of the Program Map Table (PMT)	33
4.2.6.1	AC-3 descriptor	34
4.2.6.2	Adaptation field data descriptor	34
4.2.6.3	Ancillary data descriptor	34
4.2.6.4	Data broadcast id descriptor	34
4.2.6.5	Mosaic descriptor	34
4.2.6.6	Service move descriptor	34
4.2.6.7	Stream identifier descriptor	35
4.2.6.8	Subtitling descriptor	35
4.2.6.9	Teletext descriptor	35
4.2.6.10	VBI data descriptor	35
4.2.6.11	VBI teletext descriptor	35
4.2.7	Other descriptors	36
4.2.7.1	Private data specifier descriptor	36
4.2.7.2	Stuffing descriptor	36
4.2.7.3	Data_broadcast_descriptor	36
4.2.7.4	Transport_stream_descriptor	36
4.2.7.5	Target_region and target_region_name descriptors	37
4.2.7.5.1	General Description	37
4.2.7.5.2	Region selection by the IRD	37
4.2.8	ISO/IEC 13818-1 descriptors	38
4.2.9	Unknown descriptors	38
4.3	Program Specific Information (PSI) and DVB SI operational interaction states	38
4.4	Minimum repetition rates	39
4.4.1	Satellite and cable delivery systems	39
4.4.2	Terrestrial delivery systems	40
4.5	Terrestrial systems	40

4.5.1	The use of alternative frequencies for multiplexes	41
4.5.2	Regional or local services	42
4.5.3	Hand-over	43
4.5.3.1	General description of the requirements	43
4.5.3.2	Hand-over by means of the frequency_list_descriptor	44
4.5.3.3	The occurrence of tuning failures	45
4.5.3.4	Hand-over methods with a reduced risk of tuning failures	46
4.5.3.4.1	Local SI insertion	47
4.5.3.4.2	Cell identification	47
4.5.3.4.3	Performance enhancement with GPS data	47
4.5.3.4.4	Two front-end solution	47
4.5.3.5	Performance considerations	48
4.5.3.6	Receiver guidelines for hand-over	48
4.5.3.6.1	Hand-over by means of the frequency_list_descriptor	48
4.5.3.6.2	Hand-over by means of cell identification	49
4.5.3.6.3	Hand-over by means of cell description and GPS position	49
4.5.3.6.4	Hand-over with two-front-end solutions	50
4.5.3.7	Additional linkage modes	50
4.5.3.8	Additional remarks	51
4.6	Text string formatting	51
4.6.1	Use of control codes in names	51
4.6.2	Use of control codes in text	52
4.6.3	Use of UTF-8	52
5	Applications	52
5.1	NVOD services	52
5.2	Mosaic services	54
5.2.1	General considerations	54
5.2.2	Relationship between mosaic service and SI/PSI Tables	55
5.3	Transitions at broadcast delivery media boundaries	56
5.3.1	Seamless transitions	56
5.3.2	Non-seamless transitions without re-multiplexing	57
5.3.3	Transitions with re-multiplexing	57
5.4	Announcements	58
6	Storage media	58
6.1	Program Association Table (PAT)	58
6.2	Program Map Table (PMT)	58
6.3	SI tables (NIT, SDT, EIT, BAT, RST, TDT, TOT)	58
6.4	Selection Information Table (SIT)	59
6.5	Discontinuity Information Table (DIT)	59
Annex A (informative):	Bibliography	60
History		61

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Foreword

This Technical Specification (TS) 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 standardisation, interoperability and future proof specifications.

1 Scope

The present document provides implementation guidelines for the use and implementation of the DVB Service Information (SI) coding in a DVB digital TV environment including satellite- cable- and terrestrial networks.

The guidelines are intended to be highly recommended rules for the usage of the DVB SI syntax specified in EN 300 468 [i.1]. As such, they facilitate the efficient and reliable implementation of basic user-interaction functions in Integrated Receiver-Decoders (IRD).

The rules apply to broadcasters, network operators as well as manufacturers.

The rules are specified in the form of constraints on the DVB SI streams or in terms of intended interpretation by IRDs.

The specification of these functions in no way prohibits IRD manufacturers from including additional features, and should not be interpreted as stipulating any form of upper limit to the performance.

The guidelines do not cover features related to user-interface details or advanced Electronic Program Guides (EPG). Such issues are left to the marketplace.

NOTE: It is highly recommended that the IRD should be designed to allow for future compatible extensions to the DVB SI syntax. All the fields "reserved" (for ISO), "reserved_future_use" (for ETSI), and "user defined" in the EN 300 468 [i.1] should be ignored by IRDs designed not to make use of them. The "reserved" and "reserved_future_use" fields may be specified in the future by the respective bodies, whereas the "user defined" fields will not be standardized.

The present document uses the terminology defined in EN 300 468 [i.1] and should be read in conjunction with that EN.

2 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 reference document (including any amendments) applies.

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NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

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

Not applicable.

2.2 Informative references

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 EN 300 468: "Digital Video Broadcasting (DVB); Specification for Service Information (SI) in DVB systems".
- [i.2] ISO/IEC 13818-1: "Information technology - Generic coding of moving pictures and associated audio information: Systems".
- [i.3] ETSI EN 300 472: "Digital Video Broadcasting (DVB); Specification for conveying ITU-R System B Teletext in DVB bitstreams".