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

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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".