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Technical Specification

Digital Video Broadcasting (DVB); Head-end implementation of DVB SimulCrypt

Reference
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Foreword

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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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Founded in September 1993, the DVB Project is a market-led consortium of public and private sector organizations in the television industry. Its aim is to establish the framework for the introduction of MPEG-2 based digital television services. Now comprising over 200 organizations from more than 25 countries around the world, DVB fosters market-led systems, which meet the real needs, and economic circumstances, of the consumer electronics and the broadcast industry.

1 Scope

The present document of DVB-Simulcrypt addresses the requirements for interoperability between two or more conditional access systems at a head-end. It specifies the system architecture, timing relationships, messaging structures, extended interoperability and control.

The components within the system architecture represent functional units. The boundaries between physical units are not required to match the boundaries between functional units. It is possible that the SCS could be in the MUX or the SCS and MUX could be built independently. Neither architecture is mandated.

1.1 Common scrambling algorithm

The DVB-Simulcrypt group has looked at issues relating to the concepts of the common scrambling algorithm, within the DVB-Simulcrypt environment.

The DVB-Simulcrypt system is based on the concept of a shared scrambling and descrambling method. The group has looked at the possible constraints, which the DVB-Simulcrypt architecture might impose on the use of such a shared scrambling and descrambling method. No problems were noted.

1.2 Language

The word "shall" is used in a normative statement that can be verified and is mandatory. The word "should" is used in the context of a recommendation or a statement that cannot be verified or is not mandatory (it may be optional).

2 References

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