

Unified Test Summary for CI+ v.1.3 conditional access modules for Finnish market

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1 Introduction

1.1 General

This document summarizes the Unified test requirements for CI+ v.1.3 conditional access modules for the Finnish Digital Terrestrial and Cable Television market. The CI+ v.1.3 modules shall be compliant and interoperable with IRDs certified for the Finnish market according to Finnish Unified IRD Requirements ver. 2.0 and ver. 3.0 (and NorDig Unified IRD Requirements ver. 2.4 and ver. 2.5.1).

1.2 Version History

Version	Date	Comments
3.0	5.6.2015	1 st release version

1.3 Test categories

Test cases are divided into two main categories: laboratory tests and field tests with live DVB-T/T2 and DVB-C broadcast TV signals.

2 Test summary for CI+ v.1.3 conditional access modules

The CI+ module, i.e. the Device Under Test (DUT), shall be tested in laboratory and live network conditions, both DVB-T/T2 and DVB-C, so that compatibility with the following requirements can be adequately verified.

2.1 Entitlement management testing

The DUT shall be compatible with entitlement management in all scrambled Finnish DVB-T/T2 and DVB-C networks. The DUT shall authenticate and handle subscription and entitlement control of these services using the selection of various versions of (Conax) smart cards in use by the operators in Finland. The DUT shall also support simulcrypting in local live conditions.

2.2 Interoperability and compatibility testing

The DUT shall be interoperable with various new and legacy Antenna Ready HD and Cable Ready HD IRDs (IDTVs and STBs) equipped with CI+ versions 1.0 or higher.

2.3 User Interface testing

The DUT appearance (stickers, stamps, serial numbers, chip IDs) shall follow the Finnish requirements. The physical interface of the DUT shall be compatible with the IRDs in the Finnish market. The user menus and the user messages of the DUT shall be available, accessible and provide the intended functionality.

2.4 PVR interoperability testing

The DUT shall support Personal Video Recorder (PVR) functionality of various IRDs, in single and multi tuner environments, with scrambled and free-to-air services, with smart card inserted and ejected, including proper demultiplexing and multi-component descrambling resource management.

2.5 Firmware update testing

The DUT, while inserted in various IRDs, shall support over-the-air (OTA) upgrade functionality in both terrestrial and cable TV networks.

2.6 Endurance and durability testing

The DUT shall support extensive zapping over longer period of time, without losing or distorting main TV components (video, audio, subtitling in their various formats and priority orders)