

**INTERNATIONAL ELECTROTECHNICAL COMMISSION**

TECHNICAL COMMITTEE No. 100: AUDIO, VIDEO AND MULTIMEDIA SYSTEMS AND EQUIPMENT

Liaison Statement from IEC/TC 100 to ISO/IEC JTC 1/SG-DCMP**1. Background**

TC 100 received the liaison report of ISO/IEC JTC 1 Plenary meeting in Nara, November 2008 from Ms. Kate Grant at its AGS and AGM meetings in Sao Paulo, November 2008. During the meetings, TC 100 officers recognised the activity in JTC 1 on digital content management and protection. Recently, TC 100 secretaries found the meeting notice of JTC 1/SG on DCMP in mid July, 2009 and decided to send the liaison statement to SG DCMP based on the tight liaison ship between ISO/IEC JTC 1 and IEC/TC 100 reporting the activities in TC 100 relevant to SG DCMP.

2. Activities in TC 100 relevant to ISO/IEC JTC 1/SG DCMP

TC 100 and its Technical Area 1, 8 and 9, have many International Standardization activities relevant to SG DCMP. The followings are the title and scope of one International Standard, one Maintenance Team and two Project Teams:

IEC 62227 (2008-06):

Title: Digital Multimedia Home Server Systems – Digital Rights Permission Codes

Scope: This international standard defines the permission code, a set of permission related information in short code form, primarily intended for home server systems. The permission code is comprised of common ID system (content ID, issuer ID, receiver ID, device ID etc.) and a narrowly-defined permission code.

The common ID system is used to systematically identify every entity, device and content that would be involved in the course of digitally distributing content. The permission code can express various sets of permission information and permission conditions necessary for content transmission in a remarkably short code form. The permission code is not defined from a technical perspective, but rather on the basis of permission information that rights holders actually employ in the field. Even after, the permission code is recognized for its technical effectiveness with respect to digital distribution of content.

IEC 62481-3 at ACDV (100/1553/DC):

Title: Digital Living Network Alliance (DLNA) Home Networked Device Interoperability Guidelines. Part 3: Link Protection (100/1553/DC)

Scope: This part of IEC 62481 specifies the DLNA Link Protection guidelines, which are an extension of the DLNA guidelines. DLNA Link Protection is defined as the protection of a content stream between two devices on a DLNA network from illegitimate observation or interception using the protocols defined within this standard.

Content protection is an important mechanism for ensuring that commercial content is protected from piracy and illegitimate redistribution. Link Protection is a technique that enables distribution of protected commercial content on a home network, thus resulting in greater consumer flexibility while still preserving the rights of copyright holders and content providers.

The guidelines in this standard reference existing technologies for Link Protection and provide mechanisms for interoperability between different implementations as well as integration with the DLNA architecture.

This standard is organized to align with the overall structure of IEC 62481-1 and IEC 62481-2.

IEC 62455 Ed.2 (MT 62455) at CCDV (100/1551/CDV) in TA 1:

Title: Internet protocol (IP) and transport stream (TS) based service access

Scope: This International Standard specifies the terminal for a service purchase and protection system for digital broadcasts, called the 18Crypt system. It is applicable in all countries and regions with suitably compliant broadcasting and multimedia distribution systems. Guidelines for compatible broadcast services are given in this standard. The service purchase and protection functions operate in a pure broadcast environment that may be combined with a bidirectional interactivity channel.

This standard is applicable to the following broadcast systems.

a) IP datacast over DVB-H systems

IP datacast over DVB-H is an end-to-end broadcast system for delivery of any type of digital content and services using IP-based mechanisms optimized for devices with limitations on computational resources and battery. An inherent part of the IP datacast system is that it comprises a unidirectional DVB broadcast path that may be combined with a bi-directional mobile/cellular interactivity path. IP datacast is thus a platform that can be used for enabling the convergence of services from broadcast/media and telecommunications domains (for example, mobile/cellular). This standard specifies service purchase and protection for IP datacast over DVB-H systems (see B.11.3 for an overview of references to one such system).

b) DVB T/C/S systems

DVB T/C/S systems are end-to-end broadcast systems for audio/video data that employ an MPEG2 transport stream and use terrestrial, cable or satellite broadcast networks. This standard specifies a system for the protection of these broadcasts in a pure broadcast environment. In addition, this standard specifies how purchasing, key management and registration may be carried out over an optional interactivity channel. The protection technologies offered by this standard are designed to operate within an existing DVB SimulCrypt environment (see B.11.2 for an overview of references).

c) MPEG2 TS-based IP systems

MPEG2 TS-based IP systems employ bi-directional IP networks for the (broadcast) delivery of MPEG2 transport streams. This standard specifies a system for the purchase and protection of services and content delivered via these networks. This standard is applicable to, for example, DVB-IPI systems (see B.11.4 for an overview of references).

d) Non-MPEG2 TS-based IP systems

Non-MPEG2 TS-based IP systems employ bi-directional IP networks for the (broadcast) delivery of audio/video or other data using IP protocols instead of an MPEG2 transport stream. This standard specifies a system for the purchase and protection of services and content delivered via these networks (see B.11.4 for an overview of references).

IEC 62579 at 1CD (100/1533/CD) in TA 8:

Title: Multimedia home server systems – conceptual model for domain management

Scope: This document defines the conceptual model of domain management, which includes terms, requirements and reference models. The domain is a set of devices, users, and/or other entities which can share contents. Entities within a domain are allowed to play, copy & move content and usage rules to other entities within the same domain.

Some existing systems have been proposed in this field of domain, but various vocabularies and models are specified. This situation causes confusion and misunderstanding of systems, and disturbs interoperability. This document is intended to standardize the vocabularies and clarify such models.

In this scope, all kinds of digital content, including broadcast content which needs to be protected, are intended to be handled in the domain. On the other hand, rights management and content protection technology are out of scope.

3. Request for establishing the liaison ship between ISO/IEC JTC 1/SG DCMP and IEC/TC 100

TC 100 secretaries wish to establish a liaison ship between ISO/IEC JTC 1/SG DCMP and IEC/TC 100.

Also, TC 100 secretaries provide the information of one International Standards (IEC 62227) and three documents (100/1553/DC, 100/1551/CDV and 100/1533/CD) to SG DCMP for your consideration.

4. Contact:

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