

**EBU Requirements
Content Protection and Copy Management (CPCM) for Free-to-Air**

Geneva, 5 October 2004

1. Introduction

This document contains the EBU requirements for Free-to-Air (FTA) that have been further developed by the relevant EBU groups in compliance with the EBU Memorandum on Digital Rights Management.

2. Summary of main principles

The CPCM requirements presented in this document are based on the following principles that are further detailed in the EBU Memorandum on DRM:

A CPCM solution should

- enrich and not restrict the current user experience;
- respect the freedom of services within the European Union Internal Market;
- respect copyright laws including the European Copyright Directives
- respect exceptions or limitations under national copyright laws and practices;
- allow for the making of personal copies of radio and television programmes, in particular for time-shifting purposes;
- propose a reasonably effective remedy ("keep honest viewers honest") with respect to the unlawful redistribution of premium content over the Internet, while maintaining the possibility for free-to-air broadcasters to make their own content available for redistribution if they so wish;
- have no adverse effect in the transition from analogue to digital broadcasting and associated services;
- be equally suitable to all forms of broadcast delivery (e.g. terrestrial, satellite, cable, UMTS, IP simulcasting) in order to ensure the availability of FTA broadcasting services to the public over a variety of different media platforms;
- take into account legacy in order to maintain user access to FTA services with privileges equivalent to those experienced with analogue broadcasting;
- not prejudice legitimate privacy interests.

2. FTA CPCM requirements

FTA requirements have been collected in a two-dimensional matrix. One dimension symbolizes the different CPCM usage modes (content viewing, copying, moving and redistribution). The other dimension covers the different delivery modes (broadcasting, pure IP streaming and IP downloading).

	Broadcast	Pure IP Streaming	IP Download
Viewing	Always	Always	Always
Copying	Always according to national laws and practices for content and/or users	n.a.	Not systematically and otherwise subject to national laws and practices incl. for users such as schools and businesses, optionally within a particular window of time availability
Moving	Always on removable medias and portable devices	n.a.	See above and incl. on removable and portable devices
Redistribution over IP	Not systematically and otherwise subject to national laws and practices incl. for users such as schools and businesses	n.a.	Not systematically and otherwise subject to national laws and practices incl. for users such as schools and businesses

Table 1: Synthetic view of FTA CPCM requirements

Clarification on modes of delivery:

- Broadcast corresponds to on-air delivery within the area where signal can be received, including cable delivery and IP-streaming as simulcasts within the area served by the cable operator and Internet Service Provider respectively offering the service (e.g. xDSL).
- xDSL uses IP streaming for simulcasting MPEG2 or transcoded streams (in opposition to pure IP streaming) that allows recording.
- IP is the Internet Protocol.
- Pure IP-Streaming is to be understood as a particular case of webcasting which technically does not allow for permanent storage.
- IP Download corresponds to copying a particular resource (e.g. a video clip) to a user receiver via IP.
- FTA Broadcasters do not need geographical identification tools

Clarification on usage modes:

- FTA broadcasters never restrict users from viewing

- Copying encompasses several notions such as private copying, time shift viewing, copyright exceptions for the benefit of e.g. professional users. Different national laws and practices may apply when restricting copying. Any DVB CPCM system must take this into account.
- In the case of IP download, existing services rely on the possibility to accurately define certain windows of time for the offering of the service.
- Moving is interpreted here in its DVB sense
- In this matrix, redistribution covers only redistribution over the Internet. Redistribution using removable media or portable devices is addressed through the "moving" usage mode above. Although broadcasters understand that some right owners may wish to restrict redistribution of their premium content over the Internet, FTA broadcasters must be able to either allow or prevent any such redistribution of their own content.

Other essential requirements that do not appear in the matrix are:

- It must not be required to scramble FTA broadcast signals. If signals are not scrambled, CPCM protection shall be selectively ensured via signalling securely bound to content associated to agreed compliance rules that define when signalling is to be accessed and interpreted, and the corresponding behaviour of user appliances.
- If FTA broadcast signals aren't scrambled and signalled as "do not scramble", neither encryption in devices nor encryption on interfaces should be applied. Summing up: Content shall remain in its original form on local storage and when transmitted over interfaces. "Do not scramble" signalling shall remain securely bound to the associated content.
- As there will be transmissions of content between different devices via IP in the consumers home in the future, such transmissions shall always be allowed. However it shall be possible to prevent transmission via IP over the internet or wide local area networks, if there is a respective signalling transmitted together with the content..
- Compliance rules must be subject to agreement by FTA broadcasters. More particularly, it must be ensured that revocation of protection technology does not result in preventing access to FTA services for their users. Access to previously recorded FTA broadcast content must be maintained.
- FTA broadcasters shall only be prepared to accept delivering the appropriate signalling bound to the associated content.

2. FTA CPCM signalling

FTA broadcasters are working on the definition of a format for signalling that meets the abovementioned requirements.

Mapping of FTA signalling to other signalling formats, such as DVB Usage Signalling Information for compliant electronics devices, needs to be assessed before the EBU can endorse these technologies.