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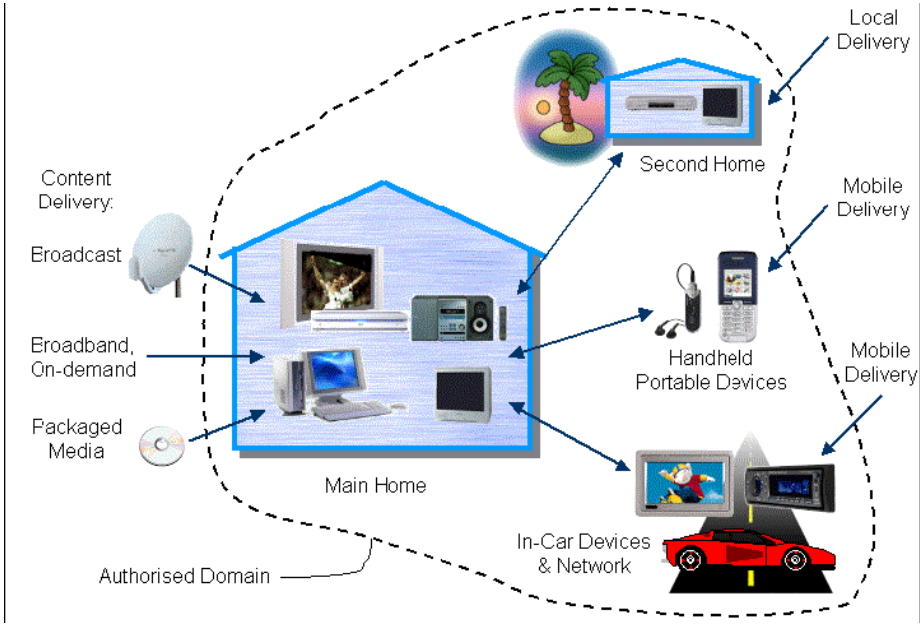
DVB-CPCM Frequently Asked Questions

1	What is DVB-CPCM?	DVB-CPCM is a system for Content Protection and Copy Management of commercial digital content delivered to consumer products. It protects audio-visual works, including films and television programmes AFTER they have been received by a consumer to ensure that the usage is managed in accordance with rights granted by the content owner or broadcaster. The first parts of the CPCM specification were published in DVB Bluebook A094 in November 2005. This document contains the CPCM Reference Model, Abbreviations, Definitions and Terms, and the CPCM Usage State Information. The complete specification, to be finalised mid-2007, will include; Authorised Domain Management, Security Toolbox, and the System Specification. Supporting documents; Implementation and Compliance and Robustness regime guidelines will follow.
2	Why is DVB developing DVB-CPCM?	The initial “analogue” assumption in place when DVB first began defining terrestrial, cable and satellite TV transmission and reception standards are no longer true. Consumer’s are increasingly receiving content from multiple sources, enjoying it on multiple devices around their home and even accessing it or carrying it along with them while on the road. Films and television programmes are delivered in a variety of ways to consumers with different usage “offers”. Today’s technology has the ability to allow consumers to enjoy films and TV in an incredible variety of ways. Current mechanisms for protecting content within the home environment fall short of the needs of many stakeholders including consumers and content producers, in that they are too simplistic for today’s multi-device, networked homes. DVB-CPCM corrects that disconnect between the functionality of devices and the management of content usage offers. DVB-CPCM manages the content in accordance with rights granted by the content providers or distributor. It allows for the elaboration of distinct, flexible offers. DVB-CPCM therefore allows content providers to offer more choices to consumers.

3	Who, if anyone, represented the views and rights of consumers in the working groups that developed DVB-CPCM?	Each DVB member company lives or dies based upon its ability to deliver what consumers want. The broad membership of DVB ensures that the needs of the consumer are considered from many different viewpoints.
4	Why is DVB-CPCM better than other protection systems?	The purpose of DVB-CPCM is to provide an interoperable, end-to-end, open standard system. It is the result of consensus between a very wide range of organisations in the industry. It will solve the problem of interconnecting devices implementing varying content protection mechanisms by developing the appropriate interfaces. . Such an approach is beneficial to consumers, prevents the unnecessary intervention of third parties, and protects privacy.
5	How does DVB-CPCM work?	Simply, all content moves through the system with a well-defined usage offer described through appropriate signalling. All relevant devices will interact with the content accordingly. Content is acquired into the CPCM system. It might be stored and processed during its stay. And it leaves the CPCM system when consumed or exported to another content protection system. CPCM also enables analogue outputs to support legacy displays and audio equipment.
6	How does DVB-CPCM know what usage is allowed?	The Authorised Usage of content protected by the DVB-CPCM system is described by Usage State Information which is derived on acquisition and conveyed in the content licence which is tightly bound to the content. The mapping of content usage from outside the AD to that inside it is beyond the scope of the DVB.
7	How does DVB-CPCM ensure that the Content is secure?	The DVB-CPCM specification defines security tools such as a Local Scrambling Algorithm (LSA) and a standardised external digital interface between DVB-CPCM compliant devices such that content can be securely exchanged between two or more DVB-CPCM devices
9	Will DVB-CPCM be compatible with other protection systems?	The DVB-CPCM system can interact with other content management systems in a manner such that the rights delivered with the content are preserved providing convenient interoperability for the consumer.
10	Will DVB-CPCM only work when connected to a Conditional Access system?	The DVB-CPCM system will function with or without a CA system. A CA system may be used to deliver content to the consumer.

11	Will DVB-CPCM manage all the content in a consumer device?	No, only films, television and other forms of commercial content that directed by the content owners, broadcasters and other distributors toward a content protection system such as CPCM. A consumer's device might also include home video recordings or other user generated content that would not be managed by CPCM.
12	Will DVB-CPCM stop consumers from copying their private content, such as home video recordings, or sending them to friends and family over the internet?	No. DVB-CPCM is intended to protect commercial Content and will only apply to Content that is identifiable as being DVB-CPCM protected. Non-commercial content may also be present on a CPCM-compliant device, however will never enter the DVB-CPCM system. (e.g. be scrambled or marked as to be managed by CPCM)
13	Will legacy content previously acquired be affected by CPCM restrictions?	No. In the absence of appropriate signalling requesting protection, such content will not fall under CPCM protection and will not be subject to any CPCM usage restriction.
14	How will I be sure that a device I acquire will work with DVB CPCM	This will be clearly defined. It is typically achieved via a device certification and badging scheme (c.f. DVB MHP) however at the time of writing this has not yet been defined for DVB-CPCM.
15	What will DVB-CPCM change for traditional FTA television?	Content protection shall remain completely unnoticed by most FTA TV viewers. It will remain always possible to view copy and move content (inc. on removable medias). The only restriction that might apply to certain content (premium content such as films or live sport events) is the restriction made to redistribute or remotely access this content from the Internet, although this will still be allowed between devices recognised by CPCM as belonging to the same household (see the following definition of the Authorised Domain). In other words, this would not affect the private copying of FTA content.

16	What is the Authorised Domain?	The fundamental boundaries of management within CPCM are the local environment and the Authorised Domain (AD). The AD is defined as a distinguishable set of DVB-CPCM compliant devices, which are owned, rented or otherwise controlled by members of a single household. DVB makes no assumptions regarding the composition or types of households Where relevant, Usage State Information which describes how content can be used relative to this Authorised Domain. This concept is fundamentally different from today's CA and DRM techniques which normally operate on a single device basis. The diagram below shows the scope of CPCM, and how this relates to the Authorised Domain.  There is a key advantage for the consumer in that in some circumstances content flow is not restricted to a single device in the home and can be accessed from a remote location

17	Will all CPCM devices have to belong to an Authorised Domain?	No. However, some functional benefits such as remote access may not be available to such devices.
18	Will all CPCM devices have to support AD functionalities?	No. In the case of CPCM devices not implementing the AD functionalities, usage will be restricted to the interconnection of devices within the same proximity.
19	What happens if I want to split my authorised domain into 2 domains, or merge 2 domains.	These use cases are not yet directly supported within the specification. In the meantime a service supplier may offer this service to their customers.
20	How will consumers be informed of content specific usage rights?	CPCM ensures that the usage offer for each movie or TV show can be made known to the consumer. It is important for the product vendors and content distributors to pass this information along to the consumers in an easy to understand manner.
22	Will DVB-CPCM prevent consumers from using a PVR to record content for later viewing?	DVB-CPCM will not interfere with traditional notions of private copying or time shifting. In any event most content offers allow recording. There are only a few types of on-demand "strictly view only" offers that disallow recording.
23	Will DVB-CPCM prevent consumers from transferring content from the device where it was received to other devices that they own?	All legitimately made CPCM copies can be moved from one device to another with certain additional functionalities to enable or disable transfers to remote locations and strangers.
24	Will consumers be allowed to make recordings on removable recordable media such as DVD?	Yes. For instance, CPCM devices will support the transfer of content from a PVR onto a DVD or portable media player.
25	Will DVB-CPCM prevent consumers from viewing content preloaded onto portable devices outside of certain pre-defined geographical areas, perhaps using GPS receivers built into such devices?	No. Geographical restriction, if signalled, applies only to movement of content between two devices. This means that content that is preloaded onto a portable device is always available for consumption on that device, whatever is its location and even if the content is geographically restricted.

26	Will consumers be able to access content in their home from a remote location?	Yes, DVB-CPCM was specifically designed with this in mind. In some circumstances there may be some short delay between the time when content is acquired and this possibility is granted .
27	Can CPCM limit how many displays I have in my home	No. In some circumstances the DVB-CPCM system might limit the number of concurrent live/direct viewing sessions on a content by content basis as indicated by the originating external authority that securely hands over management of the content to the DVB-CPCM system (typically a CA). This constraint will only be enforced for content that was initially delivered by, and is still managed by, an external authority to the DVB-CPCM compliant system. The purpose is to give pay-tv operators a means to manage the number of active displays associated with a single subscription. A limit may also be placed on the number of CPCM devices in an Authorised Domain but this will be fixed by licencing entity in such a way that it will not be noticed by most consumers.
28	What is Revocation?	The process of denying access to content by a device which has been compromised in terms of its compliance or security Revocation will be in respect to particular content, service or group of services and will not inhibit the operation of the device entirely. For example it will still receive content and services for which the device has not been revoked. Also, device revocation only affects the ability of the device to access content which is distributed after the revocation. Content acquired before the revocation will still be accessible.
29	How does revocation work?	Compliant devices, including those which do not use on-line authentication, can be capable of being denied specific content in accordance with a revocation list which may be distributed by a number of means.

30	Will DVB-CPCM make it possible for broadcasters or content owners to affect how devices owned by consumers operate through, for example, blocking the operation of certain connections on a digital TV?	Only if signalled by the broadcaster, and only for specific cases. The DVB anticipates that most well-designed protected interfaces will qualify as “trusted” and will therefore be permanently enabled.
31	Will rights owners be able to change the restrictions attached to their content whenever they want to, without notice to the consumer	No. Rights granted upon acquisition may not be later changed by the right owners. There are circumstances were rights can expire (e.g. end of a rental period) or be extended (e.g. ability to transfer the content to a remote location after the match has ended). These rights changes happen without any intervention of the rights owner.