



The Digital Interoperability Forum (DIF) is a cross-sector forum engaged in the promotion of industry-led solutions to interoperability. It includes stakeholders representing all parts of the broadcasting and multimedia value chain, including transmission, hardware, software, middleware, platform operation and content provision. DIF members are working together to deliver broad consumer choice in a competitive environment and to achieve interoperability through market-led solutions.

DIF members have considerable experience with content protection systems using both Conditional Access (CA) and Digital Rights Management (DRM). DIF suggests that the Commission should use the occasion of the review of directives concerning electronic communications networks and services to reassess regulations concerning interoperability of television services. In particular, DIF is concerned that regulations such as article 24 of the Universal Service Directive (USD), which mandates a specific standard, have the potential to hinder the development of new and innovative technology and services. As stated in recital 32 of the USD, it must be possible to adapt standards to further technological and service developments. DIF believes that the legislator should not favour particular technologies, but should give industry the flexibility to choose and the freedom to develop new solutions.

Interoperability: Universal Service Directive – Annex VI

Annex VI of the Universal Services Directive (USD) requires all consumer equipment intended for the reception of digital television signals to allow the descrambling of such signals according to the common European scrambling algorithm (CSA), developed by DVB and administered by ETSI. Although this requirement was appropriate at the time the USD was initially drafted, it is too inflexible to address today's more complex technology landscape. DVB has recently developed the next generation of common scrambling algorithm (CSA3), whilst the extension of digital television systems to IPTV and mobile TV has resulted in the protection of content by the use of Digital Rights Management (DRM) systems in place of Conditional Access (CA).

The upcoming review of the USD should be used to avoid inappropriate requirements endangering planned IPTV and mobile TV deployments.

For IPTV this risk is already very concrete: the German regulatory authority Bundesnetzagentur may require CSA to be implemented in IPTV solutions. This is contrary to the common IPTV industry practice of using DRM-based content protection. Imposing a technical approach based on one-way connectivity such as satellite broadcasts will exclude important new content delivery business models possible with IPTV systems. The same problem could also arise for Mobile TV, where non CSA-based content protection is the norm. For example, the DVB-IPDC specification includes a Service Purchase Protection

System using either the Open Security Framework or the 18Crypt solution, whilst OMA BCAST allows the use of either the DRM Profile or the Smart Card Profile.

DIF endorses the use of CSA where it is appropriate, e.g. on services carried via DVB-T, DVB-C or DVB-S, but in general it is unhelpful for the Commission to mandate the use of specific technical standards. DIF supports choice and diversity to make audio-visual services accessible on a wide choice of platforms. Therefore, the specifications in Annex VI of the USD should be modified to permit new services such as IPTV or mobile TV to use the most appropriate content protection technologies without the risk of interference from the legislator or national regulatory authorities.

Content protection is a very complex topic, where different technical solutions are appropriate under different circumstances. As with other developing areas, imposing specific technical approaches constrains innovation, blunting or blocking investment in new technologies and business models. Indeed, in submitting its Content Protection and Copy Management (CPCM) specifications to ETSI, the DVB (of which DIF is a staunch supporter) recognised that numerous co-operative solutions will be required to support varying business models in the convergent future of digital entertainment. History shows that solutions imposed or mandated are prone to failure, whilst those developed through industry-led collaboration tend to succeed.