

About ETSI

ETSI is one of the world's leading standards development organizations for Information and Communication Technologies (ICT). Founded initially to serve European needs, ETSI has grown rapidly to become highly-respected as a producer of technical standards for worldwide use.

ETSI membership is composed of manufacturers and network operators – all the “big names” and many smaller companies too – plus national administrations, ministries, regulators, universities, research groups, consultancies and user organizations. A powerful and dynamic mix of skills, resources and ambitions, all working together to bring the very best ICT solutions to the global marketplace. Geographically, our membership of over 700 companies and organizations is drawn from more than 60 countries on 5 continents.

ETSI is independent of all other organizations and structures, a key feature for ensuring neutrality and trustworthiness. That brings benefits not only in the acceptance of our standards and other publications, but also in our growing range of ancillary services, such as interoperability testing. And because standardization inevitably draws upon the bright ideas of our members, we have an Intellectual Property Rights (IPR) policy in place that has become the model for many other organizations.

Your company can be part of this dynamic organization. For more information, please visit and contact:

ETSI BROADCAST: <http://portal.etsi.org/BROADCAST>

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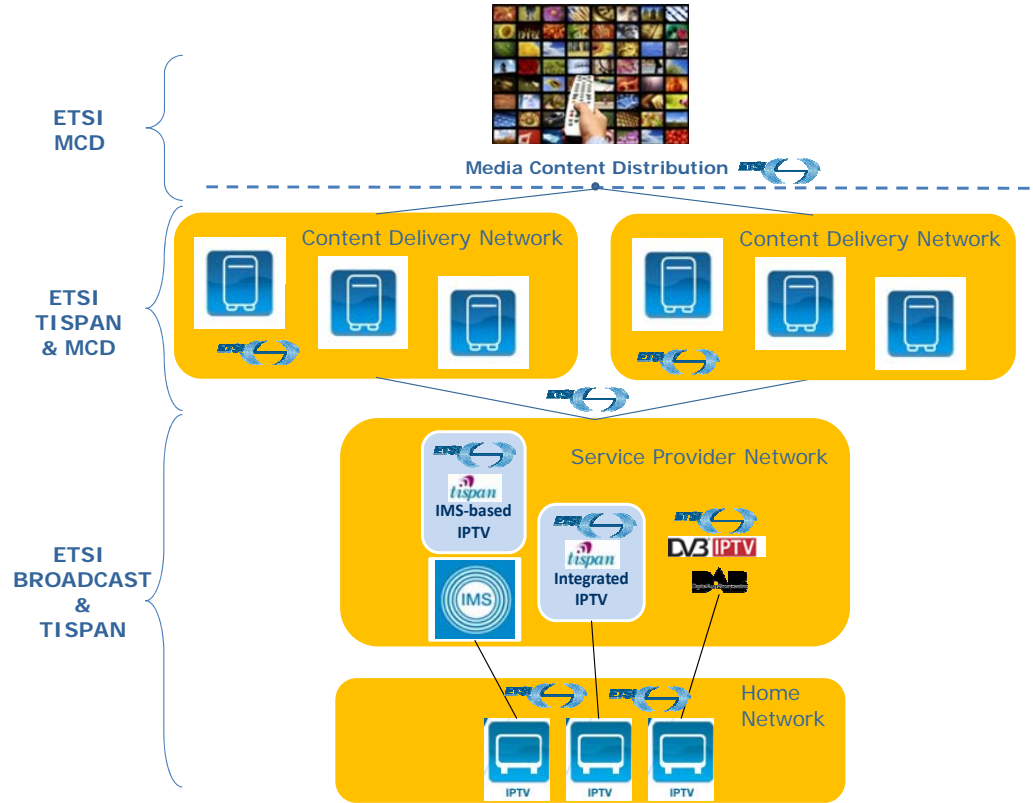
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IPTV Standards



ETSI activities cover the critical elements of the IPTV ecosystem: the customer network, the content delivery network, the service provider network and the media content distribution. For each of these elements, ETSI works on standardizing use cases, functions and interfaces that will allow interoperability and interworking between equipment vendors, network service providers and media content distributors.



Service Provider Network

As part of its NGN (Next Generation Networks) Release 2 series of specifications, ETSI TISPAN (Telecommunications and Internet converged Services and Protocols for Advanced Networking) has defined the integration of IPTV services in an NGN architecture to answer the needs of network service providers and equipment vendors. TISPAN defines two solutions (see opposite) for the integration of IPTV in the NGN architecture. Those two solutions define the IPTV Service Control functions, the IPTV Media Control functions, and the IPTV Media Delivery functions.

Integrated IPTV Subsystem

The IPTV dedicated subsystem focuses on the integration of existing market solutions in an NGN environment. Network service providers benefit from the cost advantages of a Next Generation Network without strong modification of their current IPTV service. For instance, the NGN integrated IPTV subsystem reuses all applicable DVB-IPTV technologies.

IMS-Based IPTV

The IMS-based IPTV solution allows blending of TV services with other telecommunication services (e.g. voice, presence, and data services). Network services providers can take full benefit of the IP Multimedia Subsystem (IMS) architecture while providing key end-user services.

Joint Technical Committee (JTC) Broadcast defines **DVB IPTV** deliverables, specifying technologies on the interface between a managed IP network and retail receivers, enabling the end user to buy a DVB-IPTV receiver in any shop, take it home, connect it to a broadband network, choose and consume DVB services available over the IP network. DVB's interactive middleware specifications, DVB-MHP and GEM, also include IPTV profiles.

JTC Broadcast also defines the DAB (Digital Audio Broadcasting) IPDC (IP Data Cast) solution which is intended mainly for mobile TV services but applies to fixed networks as well.

Content Delivery Network

TISPAN defines the Content Delivery Network (CDN) architecture and its interconnection with TISPAN IPTV architectures. The CDN allows the optimization of the network use through a distribution of the content delivery servers in the physical network, and the optimization of the storage resources through a popularity-based distribution of the content on the content servers. ETSI's Media Content Distribution technical committee (TC MCD) is running a global study on the various CDN solutions and defines the use cases and requirements for CDN interconnection.

Home Network

To further enhance the IPTV support by the NGN, TISPAN defines the architecture, interfaces, and protocols of home network devices to enable NGN IPTV services. The current solution focuses on IMS-based IPTV services.

JTC Broadcast also covers home networks, defining high-level technical requirements for Quality of Service (QoS) for DVB Services in the home network.

Media Content Distribution

ETSI's MCD Technical Committee addresses the issues of the fragmentation and non interoperability of solutions for content distribution across platforms e.g. IPTV, web TV, mobile TV. This new technical committee has a strong representation by the content provision industry e.g. broadcasters, studios, TV channels.