

**ITU-EBU Joint Workshop on Accessibility to  
Broadcasting and IPTV ACCESS for ALL  
(In cooperation with the EU project DTV4All)  
Geneva, 23 – 24 November 2010**

**Standardization to deliver  
Accessibility**

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# Accessibility / Broadcasting in ETSI

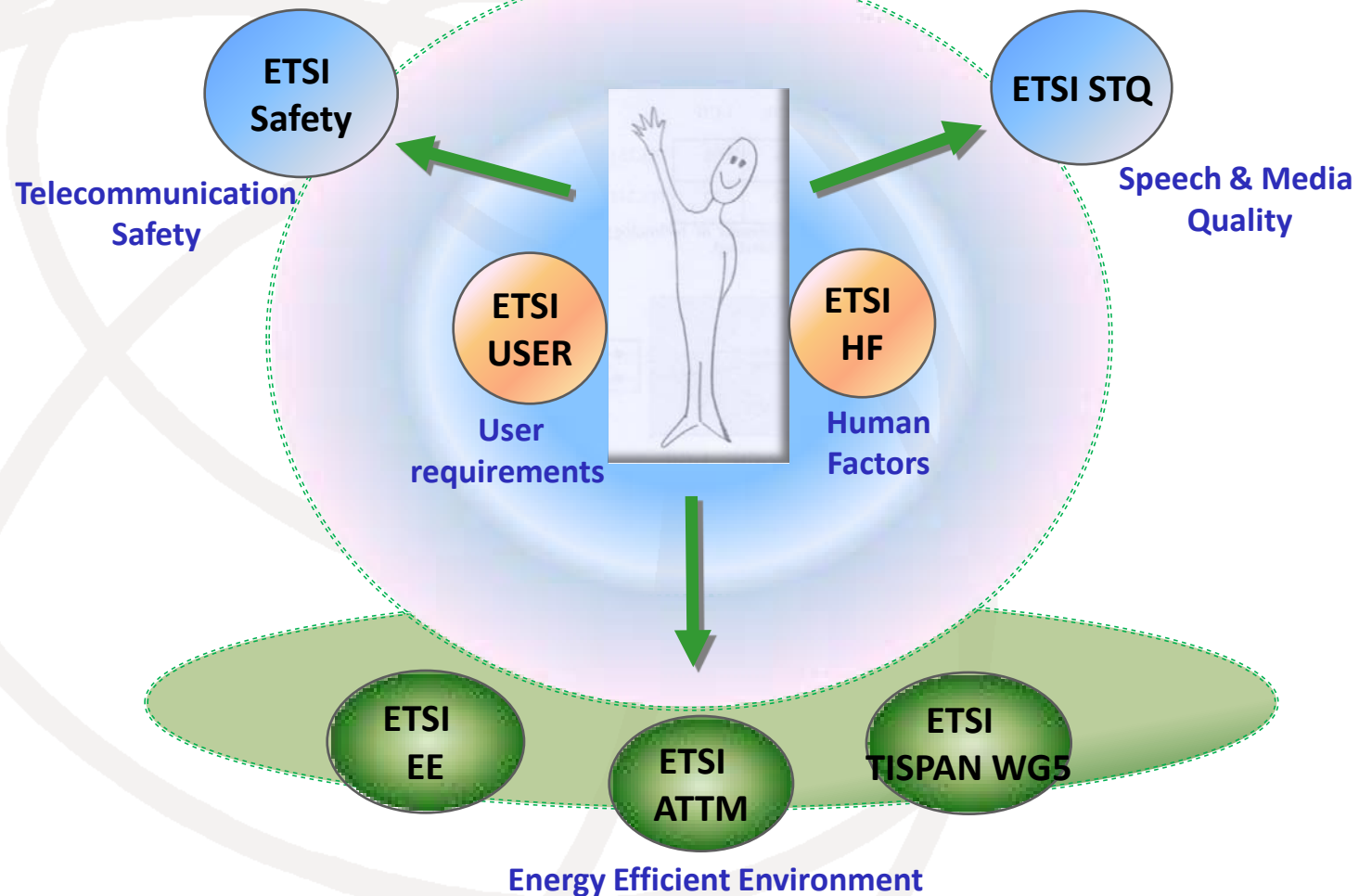
- Better living with ICT cluster
- TC HF
- Content delivery cluster
- TC TISPAN / TC MCD / JTC Broadcast

# Clusters of technical activities in ETSI



ETSI has introduced the cluster concept to provide a simplified, yet comprehensive, introduction to its activities in ICT standardization. This new approach is aimed at enabling the audience to easily grasp ETSI's endeavours in a variety of domains, all contributing to the overall vision of a connected world.

# Better living with ICT cluster



# Content delivery cluster



- Serving content users across different business areas
- Facilitating content consumption whatever the platforms

# ETSI ' approaches to Accessibility

## ❑ ETSI's approach to Accessibility

- ETSI aims to help industry to avoid creating technologies that exclude users from the information society
- It also aims to help them increase the quality and usability of products and services for everyone
- It addresses both these aims as part of an overall "Design for All" approach that assures accessibility

## ❑ Technical Committee Human Factors (TC HF)

- ETSI TC HF is the committee responsible for standards and guidelines dealing with
  - Ease of use and accessibility of telecommunication equipment and services
  - Including the requirements of older and disabled people
  - Broad range of issues which arise from the interaction between people and the technology they use
- ETSI TC HF has been producing numerous deliverables dealing with accessibility issues for ICT domain (mainly guidelines and technical reports, also some normative documents)

# TC Human Factors: Achievements

## ❑ Design for all Guidelines

- ETSI Guide 202 116: Guidelines for products and services “Design for all”
- Intended to encourage a ‘Design for All’ approach so as to make products and services accessible to as many people as possible
- Applicable to ICT products with a user interface that are connectable to all kinds of fixed and mobile telecommunication networks
- To help designers to maximize the level of usability of products and services by providing a comprehensive set of Human Factors design guidelines
- A key document that is widely referenced and used by ETSI members, car manufacturers, standards bodies, UN Committee on Human Rights, academic institutions etc

## ❑ Guidelines for the user interface of mobile phone

- Recommend keypad layout for elderly and disabled people, tactile identifiers for blind people, etc



# TC Human Factors: Recent & Ongoing activities

## ❑ Personalization and User Profile Management

- Personalization can allow every customer to have the personalized experience that they greatly value, whilst simultaneously providing support for a wide range of specialized accessibility solutions

## ❑ Future User Interaction Technologies

- 'eServices' in the next 10 years (Special Task Force 377)
- Looking at future interaction technologies and accessibility issues associated with them
- Producing roadmaps of the predicted deployment of the user interaction technologies
- Producing an analysis of each technology identifying its benefits to all users, potential problems for some users, and ways around the problems



# TC Human Factors: Recent & Ongoing activities

## □ M376 Phase II

- **Standardization Mandate M/376** was proposed by the European Commission in support of European Accessibility requirements for public procurement of products and services in the ICT domain
- **Objectives of Mandate**
  - to harmonise and facilitate the public procurement of accessible ICT products and services by identifying a set of functional European accessibility requirements for public procurement of products and services in the ICT domain, and
  - to provide a mechanism through which the public procurers have access to an electronic toolkit, enabling them to make use of these harmonised requirements in procurement process.
- **Now Joint Working Group** was proposed among ESOs to work on phase II of M376
- **This joint work** will deliver an EN, a number of guidelines and technical reports

# ETSI Standardization for Content Delivery

## ❑ Technical Committee Media Content Distribution

- Addresses the issues associated with the fragmentation and non-interoperability of solutions for content distribution across platforms in a converged environment – supporting IPTV, web TV, mobile TV and broadcast TV

## ❑ Technical Committee TISPAN (Telecommunications and Internet converged Services and Protocols for Advanced Networking)

- Responsible for the fixed telecommunication networks.
- Regarding content delivery, TISPAN focuses on the IPTV service delivery for fixed next generation networks (NGN) and defines two solutions (IMS-based and Integrated) for the integration of IPTV in the NGN architecture

# ETSI Standardization for Content Delivery

## ❑ Broadcast Joint Technical Committee

- JTC Broadcast issue standards for broadcast systems for television, radio, data and other services via satellite, cable and terrestrial transmitters.
- This Committee has delivered standards on technologies such as DAB/DAB+, DRM/DRM+, DMB, DVB-C/C2, DVB-T/T2, DVB-H, DVB-SH, DVB-S/S2, Media Forward Link Only, MHEG-5, DVB-MHP, Hybrid Broadcast Broadband TV

# Examples of ETSI deliverables for accessibility applicable for IPTV

- EG 202 116: Guidelines for ICT products and services; 'Design for All'
- EG 201 472: Usability evaluation for the design of telecommunication systems, services and terminals
- ES 202 432: Access symbols for use with video content and ICT devices
- EG 202 048: Guidelines on the multimodality of icons, symbols and pictograms
- EG 201 379: Framework for the development, evaluation and selection of graphical symbols
- EG 202 670: User experience guidelines for real-time communication services expressed in Quality of Service terms

# Examples of deliverables that could facilitate accessibility

- **Subtitles**

- JTC Broadcast: DVB subtitling systems (EN 300 743). Published.
- MCD Subtitles distribution, situation and perspectives (TR 102 989). To be published beginning 2011.

- **Programme Guide information**

- MCD Programme guide information distribution, situation and perspective (TR 102 988). To be published beginning 2011.