

Connected TV Accessibility

Pilar Orero

Digital Single Market



- Standards at the center of: communication, file exchange, etc
- Language accessibility at the center of content exchange and distribution
- Accessibility for social cohesion
- Accessibility for learning
- Accessibility for inclusion

Mainstreaming accessibility





- Just beginning to realise how technology can be used to offer increased accessibility
- In HBB4ALL we brought very traditional access content (e.g. subtitles produced for broadcast TV) to on-demand services (HbbTV and PC/mobile) and made them operational for minimal extra costs. so you can re-use what is there
- HBB4ALL demonstrated there is lots of potential for innovation based on automation
- Then there is potential of using new technology throughout the whole production process



HBB4ALL we proved:

First: The new great shiny world MUST be accessible

Second: We can create great NEW things for the new world (OTT etc.) but also the "old" world (traditional linear TV)





More new services

- **Avatars**
- **Clean Audio**
- Automatic translation subtitles
- User preferences





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Sign Language preferences



Genre	Size	Position	Layout
Sport	Very large	Bottom right	TV not rotated, signer overlapping
News	Very large	Bottom right	TV rotated, signer not overlapping
Documentary	Very large	Bottom right	TV not rotated, signer overlapping





Subtitling Format Conversion Framework to convert subtitle formats (STL → EBU-TT → EBU-TT-D) developed by IRT
→ Used by project partners RBB and RTP
→ Available on GitHub under an Apache 2.0 licence
→ https://github.com/IRT-Open-Source/scf

End-to-end subtitle workflow testing environment developed by IRT
 Test files for EBU-TT-D rendering

•CCMA HbbTV Subtitling Software available as Open Source on GitHub *Plus commercial solution:*

 Screen have developed proprietary tools to convert live subtitles and make available to connected HbbTV services using EBU-TT-D



Should you start a company with an access service product?

Yes - No

Yes....there is demand and there a lot of opportunities that have not yet been used

No....there are not enough paying customers

There will be more market potential since the new revised AVMSD will come into action in 2017 and also the European Accessibility Act



Thank you

Further information: <u>www.hbb4all.eu</u> <u>Pilar.Orero@uab.cat</u>