Access Services

- Subtitling
- Same Language subtitling/captioning
- Spoken subtitles/captions

- Audio description
- Audio description + spoken subtitles/captions

- Clean Audio + all above services

- Sign Language

- Technology access in general: user interaction
Pilots & their relationship

Pilot A: Multi-platformSubtitle Services
- Subtitles tailored to the specific needs of the end-users in terms of channels, platforms and consumption requirements.
- HbbTV-based news service allowing users to access live content automatically subtitles and translated to multiple languages.

Pilot B: Alternative Audio Production & Distribution
- Transmitting additional language streams with HbbTV 2.0.
- Personalized Clean Audio service via IP to enhance the dialogue intelligibility.
- Automatically generated speech synthesis of audio description and spoken subtitles.

Pilot C: Automatic User Interface Adaptation
- Hub-based service that would allow the personalisation and adaptation of user interfaces for people with specific needs.
- Different ConnectedTV services running on HbbTV 1.5 and HBBTV 2.0 platforms targeting elderly people as their main user group.

Pilot D: Sign Language Translation Service
- HbbIP TV-based SL services allowing users to customise the size and positioning of sign language interpretation in an overlaid window.
- An HbbTV-based avatar signing service in Spanish.
Standardisation

- Access services: examples
  - Best second device to read
  - No. characters per line in subtitles
  - Best font to read on screen

Report back to EU Broadcasting Union on HbbTV2.0 deployment

Example
- Double decoder
- Multiple text

User interaction: subtitle format

The legibility of subtitles depends on issues such as font, size, colour and effects like boxing and edging.
Request for IEC

- Anybody would like us to perform tests?
- Anybody would like to lend us their systems to test them?
- Any information re. connected /Smart TV and access services

Request for IEC

- [http://www.hbb4all.eu/](http://www.hbb4all.eu/) Project Website
- [http://www.hbb4all.eu/deliverables/](http://www.hbb4all.eu/deliverables/) Deliverables
Thank you

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