HBB 4 all

Connected TV Accessibility

Smart Access Services for Connected TV
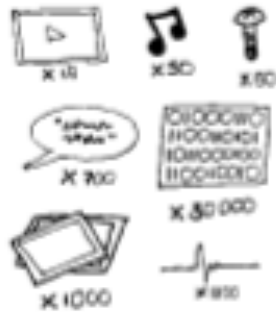
Pilar Orero
29 May 2015

2 Academic Institutions	UAB Universitat Autònoma de Barcelona · caiac · Universidad Politécnica de Madrid
4 Public Broadcasters	rbb RUNDFUNK BERLIN-BRANDENBURG · RTP RADIOTELEVISÃO PORTUGUESA · 3 TELEVISIÓ DE CATALUNYA · SWISS TXT
2 Research Institutes	Institut für Rundfunktechnik IRT · vicomtech IK4 Research Alliance
4 SMEs	vsonix · PEOPLE'S PLAYGROUND · SCREEN SYSTEMS · Holken Consultants & Partners

SEVENTH FRAMEWORK PROGRAMME · cip competitiveness and innovation framework programme 2007-2013

TRADITIONAL BROADCASTING

1

2

3

4
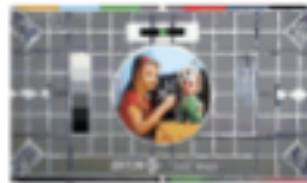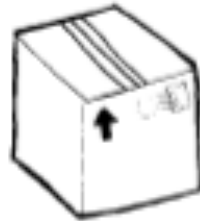
The programme is made in the traditional way.

The programme is turned into a piece of linear media.
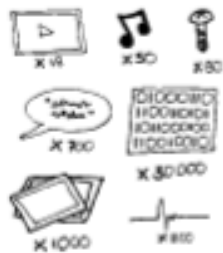
This is broadcast to everyone.

The same content is played back on all devices, resulting in compromises on some devices.

Corbis

OBJECT BASED BROADCASTING

1

The programme is made in the traditional way.

2

The programme is turned into a collection of media objects along with some metadata to describe how it should be assembled. All of this data is broadcast to everyone.

3

The device inside the viewer's home re-assembles the media objects according to the metadata.

4

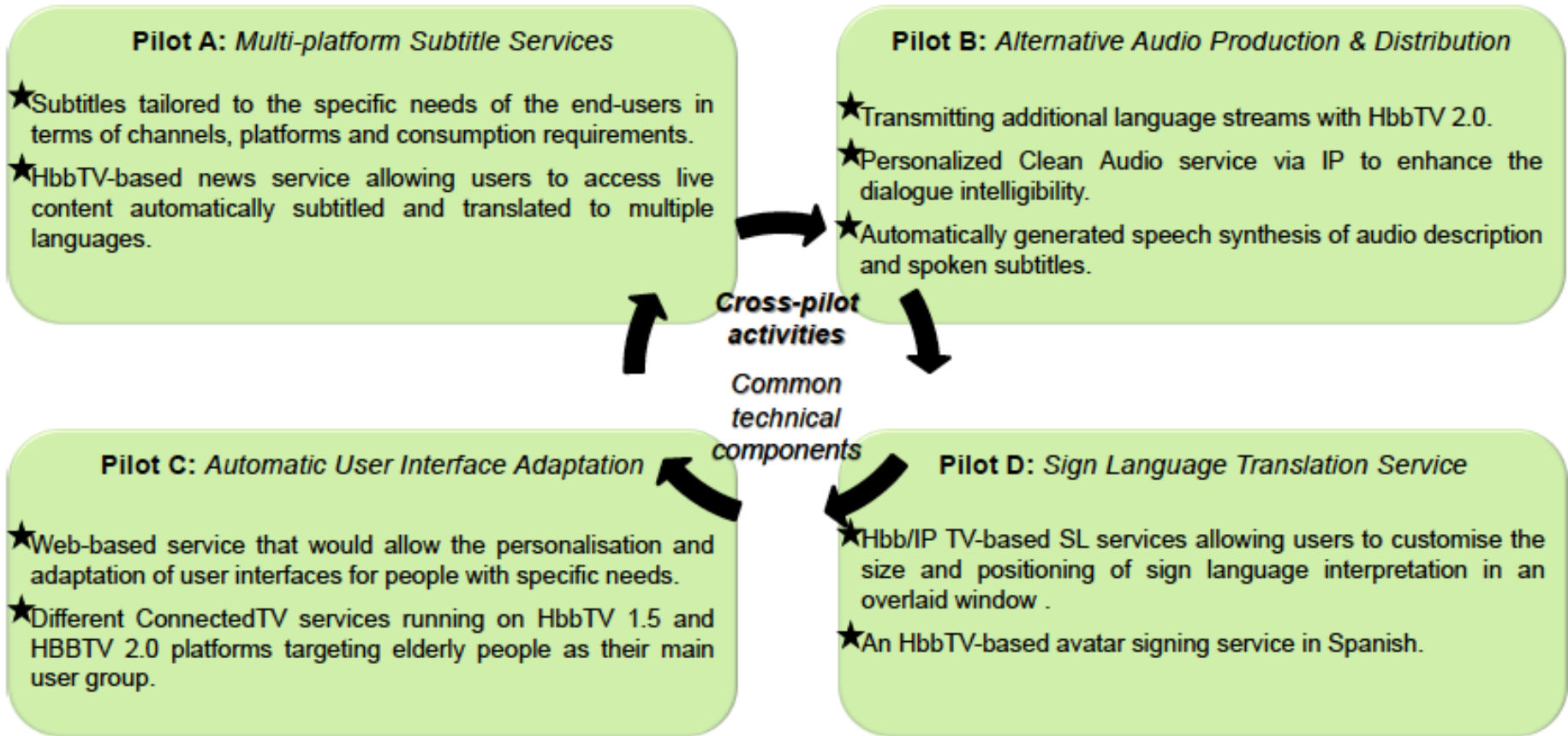The objects can be assembled differently (based on the original metadata). optimising the experience depending on local factors relating to the device, environment and viewer.

HBB 4 all

Connected TV Accessibility

Access Services

- Subtitling/Captioning
- Audio description
- Spoken subtitles
- Sign language → avatars
- Clean Audio
- Clean audio + audio description

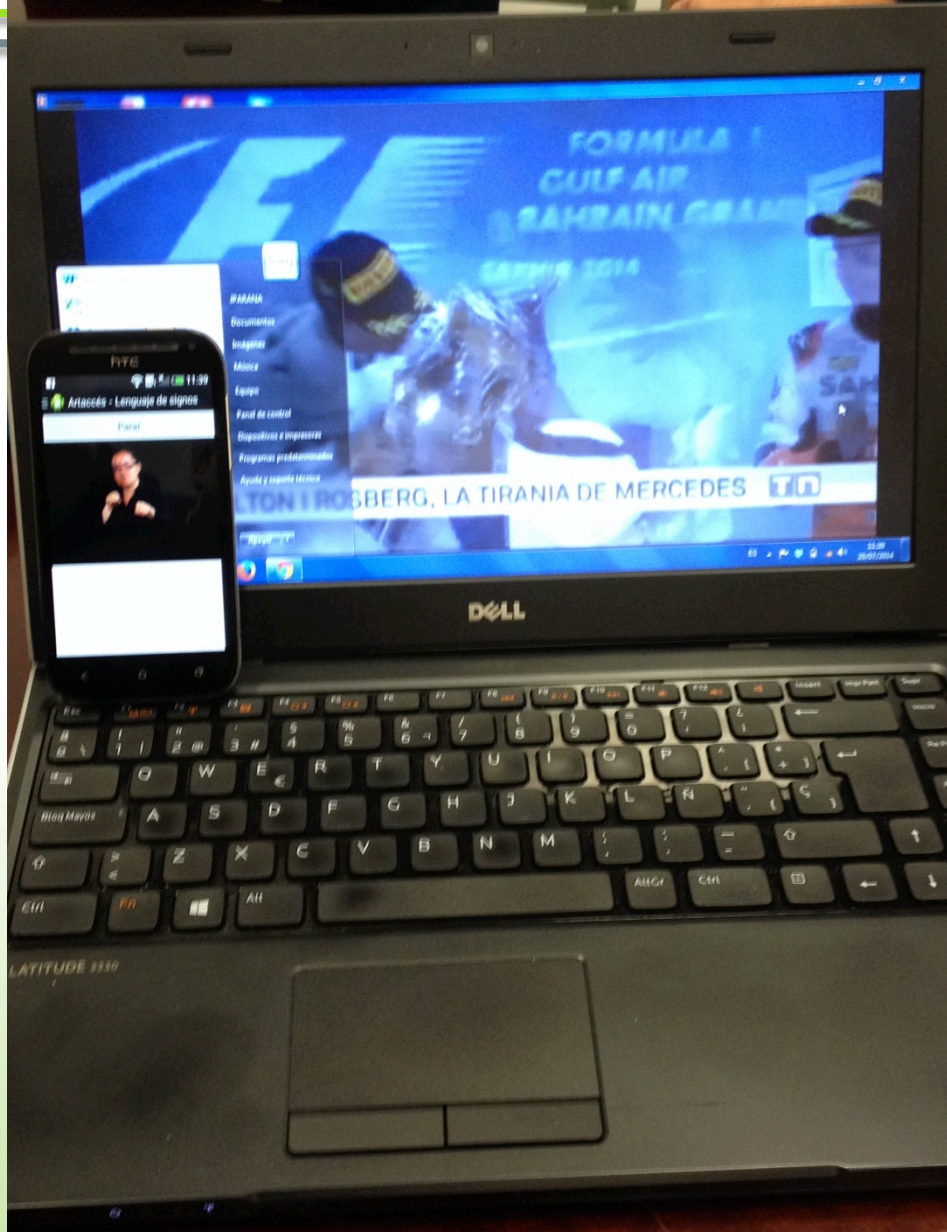- Technology access in general: user interaction

Pilots & their relationship

Pilot A: *Multi-platform Subtitle 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 subtitled 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.

Cross-pilot activities

Common technical components

Pilot C: *Automatic User Interface Adaptation*

★Web-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*

★Hbb/IP 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.

Multilanguage/simmultaneous

HBB4ALL year 1

www.hbb4all.eu