Delivering Accessibility Services using HbbTV

EBU Technical Report 065
This report offers suggestions for how HbbTV can be used to provide accessibility services for those with sensory differences.

It is important to note that the options described in this report are not the only options available to television services for providing accessibility services (AS). They are specifically those that may be available where the viewer has a television set equipped with HbbTV (Hybrid broadcast broadband TV) and a working broadband internet connection, and where the HbbTV services are available. All these suggested solutions are based on the technologies currently available in European consumer equipment.
Accessibility using HbbTV - technical aspects

A3. USER EXPERIENCE OF AUDIO DESCRIPTIONS DELIVERY USING HBBTV
A4. USER EXPERIENCE OF ‘ACCESSIBLE AUDIO EXPERIENCES’ DELIVERY USING HBBTV

Appendix B: Guidance on the practical Implementation of Systems in Appendix A
B1. IMPLEMENTATION OF SUBTITLING SYSTEMS (A1) USING HbbTV
B2. IMPLEMENTATION OF SLI
B3. IMPLEMENTATION OF AUDIO DESCRIPTION
B4. IMPLEMENTATION OF AN ACCESSIBLE AUDIO EXPERIENCE

Annex 1: Potential Accessibility Service Options for the longer term
1A. Options for using DVB-I together with HbbTV
2A. Options for using Additional Apps for an HbbTV environment
B1. Implementation of Subtitling Systems

2 basic technical approaches:

Native rendering
- transmitting subtitles via a predefined and standardised delivery protocol
- standardised coding of characters and related display options such as colour and position
- actual rendering by the terminal, based on these standardised formats.

Rendering via HbbTV app
- Rendering the subtitles by HbbTV apps
- HbbTV apps implemented by broadcaster
- loaded ‘on the fly’ when changing the programme