

## Press Release

### **IRT shows MPEG-DASH and EBU-TT-D subtitles with HbbTV 2.0**

- **Showcases at IFA 2015 and IBC 2015**
- **HbbTV 2.0 prototype combines live streaming of MPEG-DASH streams with EBU-TT-D subtitles**
- **Results of the EU-funded pilot project HBB4ALL**

**[Munich / Berlin / Amsterdam – August 31<sup>st</sup>, 2015]**

Achieving the best possible picture quality on SmartTVs whilst managing the huge variance in Internet data rates is challenging. It is even a greater challenge to add support for internet-based accessibility of services such as subtitles. This is where the novel features and applications of HbbTV 2.0 provide solutions. IRT shows the potential of these new technologies and presents first HbbTV 2.0 showcases at IFA 2015 in Berlin at the ARD booth “Digitale Welt“ in hall 2.2, and at IBC 2015 in Amsterdam at IRT’s booth 10.F51 in hall 10.

A prototype service was developed by IRT in close cooperation with the Innovation Projects of ARD broadcaster Rundfunk Berlin-Brandenburg (rbb) and TV manufacturer Samsung. It combines live streaming using MPEG-DASH (Dynamic Adaptive Streaming over HTTP) and subtitles based on the EBU-TT-D specification. The work was carried out in the scope of HBB4ALL, a European co-funded project on media accessibility in a connected TV environment.

In the last couple of years, IRT has been one of the leading contributors to the new standards HbbTV 2.0 and EBU-TT-D, which are merging the broadcast and broadband world.

The HbbTV 2.0 specification was published early this year. It supports the latest web standards like HTML 5, TTML subtitles (EBU-TT-D), the DVB profile of MPEG-DASH and the new video codec HEVC enabling new formats up to UHD. Beyond that, HbbTV 2.0 allows for new applications that will connect devices like tablet PCs or smart phones with the TV to extend the user experience to multi-view and multi-user applications. Market launch for first HbbTV 2.0 devices is expected for 2016.

TV subtitles have been an established service for decades, but in the Internet, subtitles for live streaming are still limited due to the lack of a standardised solution. In combination with MPEG-DASH, EBU-TT-D provides such a solution and also enables a common subtitle format to be used for video on demand services like catch-up TV (Mediathek) of the broadcasters.

Several partners from broadcasting and industry have contributed to the showcase. While Samsung provides a prototype TV based on their current HbbTV development, rbb supplies sample A/V and subtitle material for the demonstrations. The ARD broadcaster Bayerischer Rundfunk streams the TV channel „Das Erste“ to the Internet in accordance with the new HbbTV 2.0 specification. To demonstrate that the HbbTV solution can be used on PCs and mobile devices, Bitmovin extended their HTML5-based media player bitdash. Encoding of streams and content was enabled by GPAC, Elemental, Keepixo, Media Excel and G&L. This broad engagement by industry partners shows the large interest in open standards to facilitate TV services on a wide range of user devices.

IRT supports broadcasters and manufacturers implementing HbbTV, MPEG-DASH and EBU-TT-D. At IFA and IBC, IRT provides the latest news around HbbTV 2.0 and – as part of its commercial offerings – informs about consulting services and seminars.

The showcase was established as part of the HBB4ALL project, a European project funded by the Competitiveness and Innovation Framework Program (CIP) of the European Commission. Besides rbb and IRT, ten further partners from broadcasters to universities work on the introduction of new technologies to offer accessibility services like subtitles, audio description, clean audio and sign-language interpreter in TV services and their adoption for PC, mobile devices and TV sets.

**More information about HBB4ALL:** [www.hbb4all.eu](http://www.hbb4all.eu)

**More information about HbbTV:** [www.hbbtv.org](http://www.hbbtv.org)

## **IRT**

With its head office in Munich, the IRT supports broadcasting on a national and international scale with its spectrum of services. Its associates are the broadcasting companies ARD, ZDF, DRadio, ORF and SRG/SSR. The IRT is also cooperating with numerous clients from the broadcasting, media, communications and information technology industries as well as various research institutions and academies. Since its foundation in 1956, the IRT has been committed to preserving broadcasting and accompanying the adjustment of the broadcasting idea to new market environments and requirements.

## **Contact and additional information**

### **Publisher**

IRT - Institut fuer Rundfunktechnik GmbH  
Floriansmuehlstrasse 60  
80939 Munich - Germany

Web [www.irt.de](http://www.irt.de)

Twitter <https://twitter.com/IRTpresse>

### **Contact Public Relations**

Head of Public Relations  
Thomas Schierbaum  
PR-Assistant Carola Schmidle  
Phone +49 (0) 89 - 323 99 - 204  
Fax +49 (0) 89 - 323 99 - 205  
E-Mail [presse@irt.de](mailto:presse@irt.de)