Invitation
to the International Intensive Seminar on

HbbTV

for Content Providers, Network Providers and Application Developers

Seminar in English: March 21-22, 2017

Location: IRT, Floriansmuehlstrasse 60, 80939 Munich, House 17 A - Room A116

Would you like to learn more about the technical standard “HbbTV” which connects the so long separated worlds of “television” and “Internet”? Are you already working at evaluating how this standard can profitably be integrated into your entrepreneurial considerations? Or is HbbTV already established in your company, and there are still some remaining questions for the answer of which you would like to receive some support?

Then you can profit from IRT’s know-how. Based on the expert knowledge of our employees in the areas of standardization, application development and conformance testing, IRT is organizing the intensive seminar in English language on the technical basics of HbbTV, including the latest information on HbbTV 2.0 and Second Screen integration.

It is important to us that you can apply your newly gained expertise later on also in practice. We will not only combine the theoretical fundamentals with live demonstrations of services and equipment, but also deal with your individual questions. Therefore, the number of participants is limited to 17 persons. The two-day event is structured in an overview on HbbTV and a deep insight into the application development. Booking just one particular day is possible.

The intensive seminar addresses content providers, broadcasters, network providers and application developers with related technical background knowledge.
Day 1: Tuesday, March 21, 2017  10:00 – 16:00

**Introduction, architecture, and status of market development**

**Introduction**
- Hybrid TV as a specific market segment
- The HbbTV Association – its partners and objectives

**The architecture of the HbbTV system**
- Functional requirements
- Overview over the HbbTV standards 2.0 and 2.0.1 and improvements in comparison with HbbTV 1.5
- Integration of HbbTV 1.x/2.0 into the DVB system
- Applications signalling and application transport via the broadcast channel

**Status of market development**
- HbbTV services in Germany and Europe
- HbbTV on different distribution ways: satellite, cable, terrestrial
- HbbTV in IPTV networks
- Different business models for HbbTV
- Status of introduction of HbbTV 2.0/2.0.1
- HbbTV and Second Screen
- HbbTV and Targeted Advertising
- Demonstrations

**Invitation to a social event in downtown Munich**

Day 2: Wednesday, March 22, 2017  10:00 – 16:00

**Application development for HbbTV**

**HbbTV application development**
- Introduction to the basic APIs
- Video and audio over IP including MPEG-DASH (HbbTV 1.5)
- Second Screen on HbbTV 1.0
- Transmitting in broadcast signal via DSMCC carousel
- Synchronisation of application and broadcast signal
- Tools

**Practise**
- Discussion/Development of example application
- Frequent application failures

**HbbTV 2.0/2.0.1**
- Changes in comparison with HbbTV 1.x
- Companion Screen APIs
- Synchronisation with Companion Screens and Streams

**Online-Registration:** [www.irt.de/annmeldung/HbbTV-eng-032017](http://www.irt.de/annmeldung/HbbTV-eng-032017)  **Location:** [www.irt.de/en/irt/directions.html](http://www.irt.de/en/irt/directions.html)

**Conditions of participation:**
For participation a registration is required. Please note that the number of participants is limited to 18 persons.

**Participation fee (per participant; net, plus applicable VAT):**

1. Day  
   Standard rate:  890,- €  
   (Affiliates of IRT:  790,- €)

2. Day  
   Standard rate:  890,- €  
   (Affiliates of IRT:  790,- €)

Both days  
   Standard rate:  1.590,- €  
   (Affiliates of IRT:  1.390,- €)

**Registration deadline:**
Monday, March 13, 2017

From March 14, 2017 the full fee is payable in case of the cancellation of the participant. Any replacement participant is welcome without additional cost.