HbbTV Roadmap

Dr. Klaus Illgner

Chairman HbbT VConsortium

What is HbbTV® – and what is it not?

HbbTV® → **H**ybrid **b**roadcast **b**roadband **TV**

» *Business neutral technology platform*

» *Applicable to all kinds of broadcast and broadband networks*

» *Broadcast only mode possible*

» *Specifies terminal behavior only*

» *Maintains integrity of broadcast services*

Addresses mass markets:

> *by using <u>mature</u> and <u>standardized</u> technical components*

HbbTV® is NOT

» *A completely specified ECO-System, e.g. including implementation rules*

» *Solely applicable to broadcasters*

What makes HbbTV unique?

» *Mature technology*

» *Well established services*

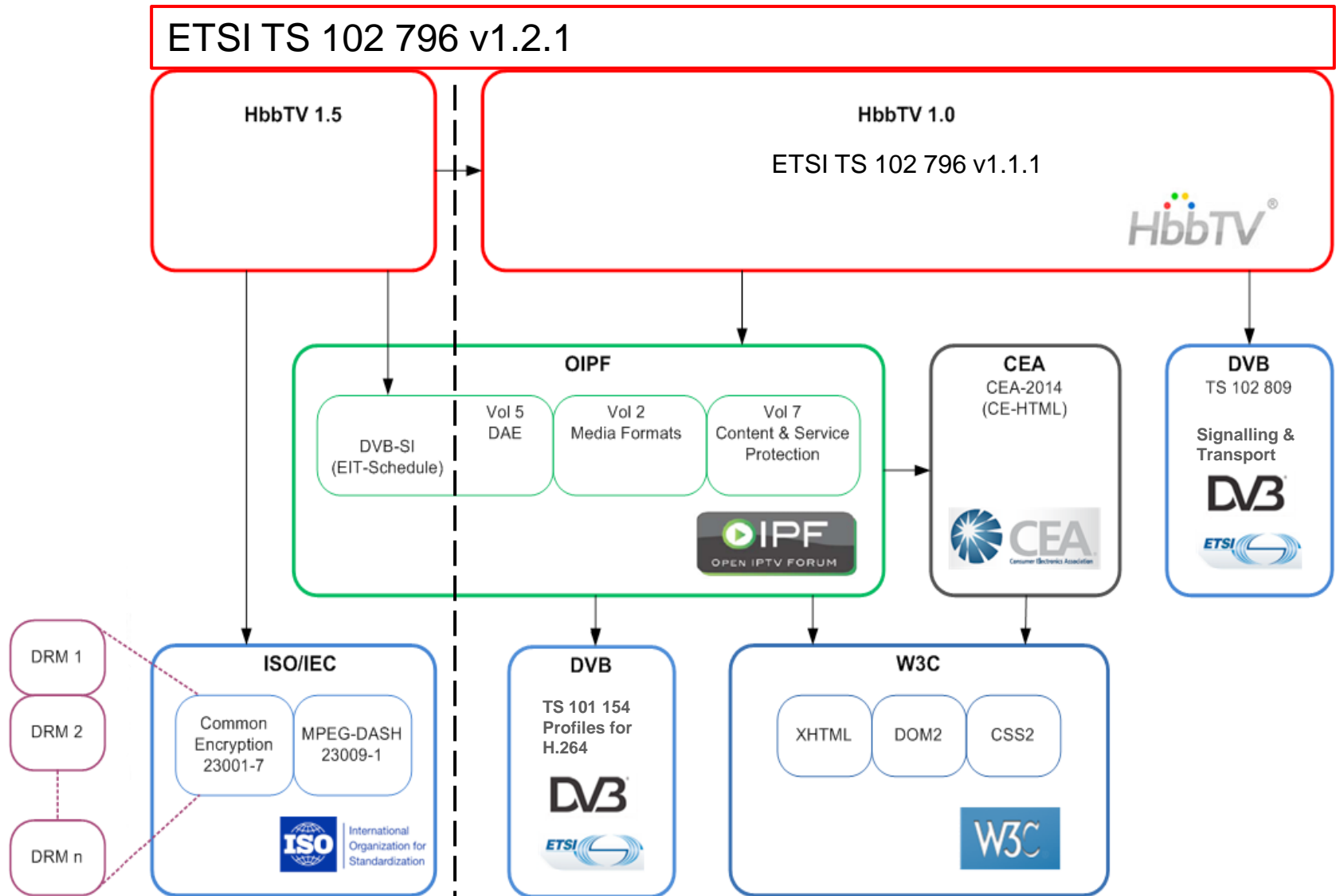» *Widely trained usage pattern*

» *Simplicty of user actions*

» *Mature technology*

» *Well established services*

» *Widely trained usage pattern*

by freely combine service elements from broadcast and Internet

1 + 1 > 2

» ***Completely new formats and services***

» ***New business models***

The Key Building Blocks

ETSI TS 102 796 v1.2.1

The HbbTV Consortium

» *HbbTV consortium formally established in 2010*

» *Borne out of a cooperation between French and German initiatives*

» *Today over 60 members*

» *Broad international market coverage*

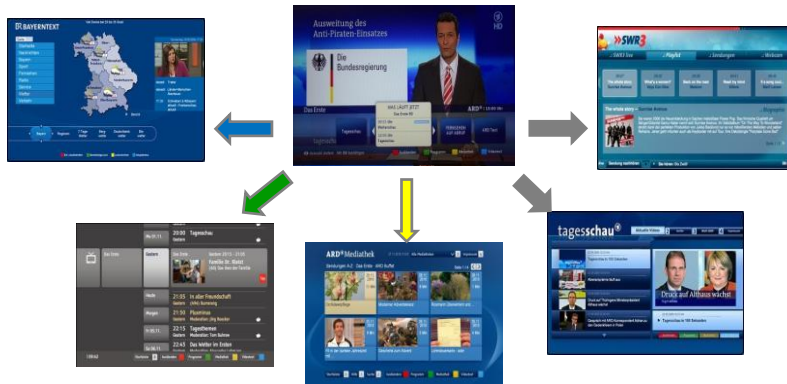   » *manufacturers, broadcasters, network operators, technology & research*

Achievements so far:

- *ETSI specification TS 102 796 v1.1.1 (June 2010)*
- *Release of test suite v0.9 (August 2012)*
- *ETSI specification TS 102 796 v1.2.1 (November 2012)*

Upcoming:

    work on v2.0 has started

HbbTV provides Benefits for the Entire Ecosystem

Broadcasters & Content Providers

Network operator / Serivce provider portals

Manufacturer Portals

Device independent and open HbbTV
TV App Portal for unbound applications

Portal for local Content Providers / Broadcasters

Broadcast channel launches local TV portal
(with broadcast and live-streaming channels)

HbbTV® in the international market
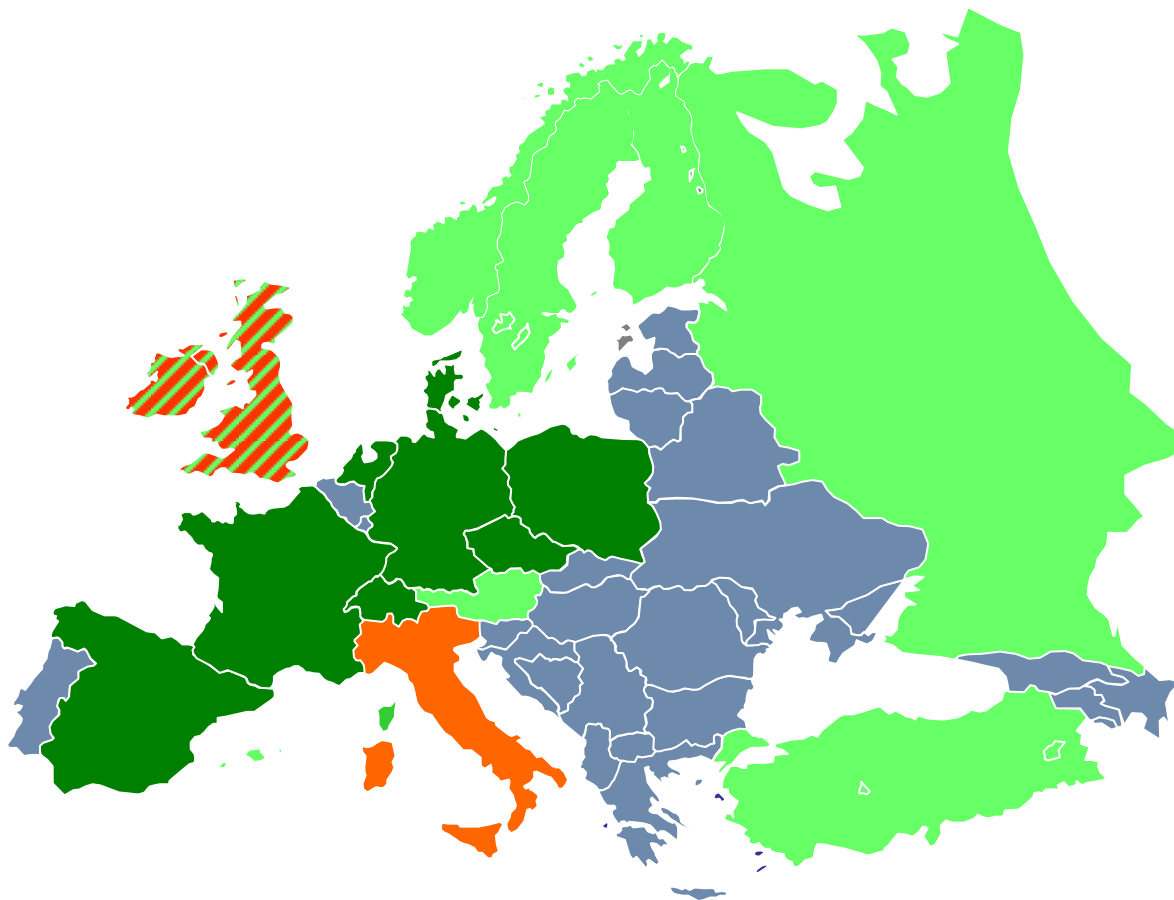
Legend:
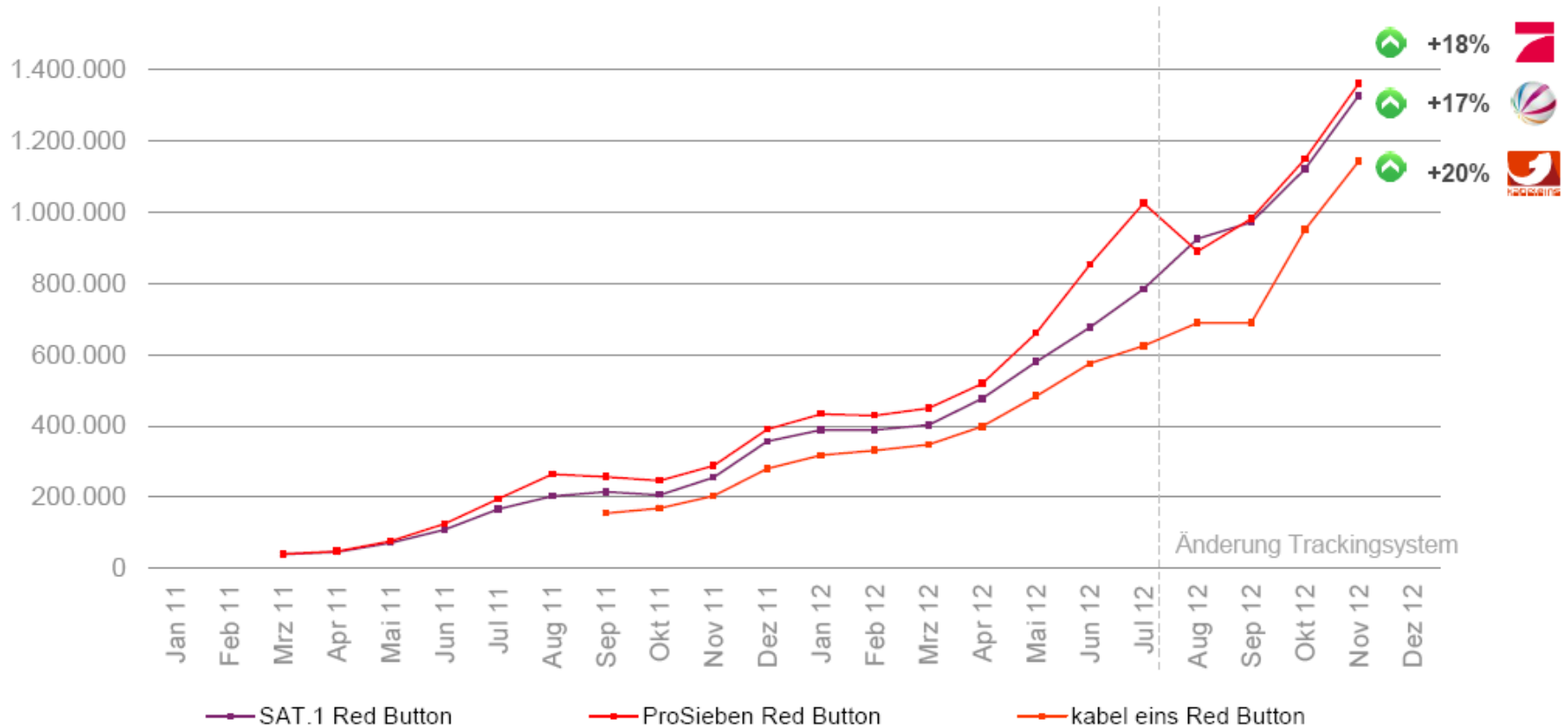- in regular operation
- announced / trials
- no information
- other plans

HbbTV caught interest also outside Europe e.g. US, Japan, Australia; South-East Asia, China (HbbTV trials)

More countries are about to decide …..

HbbTV® *usage figures (example)*

Unique Devices - SAT.1, ProSieben, kabel eins
Anzahl Benutzer (=Devices) nach Monaten

Quelle: SevenOne Media

Adapting the Text Services

in colour

in size

Support Political Demand:
Using HbbTV® for barrierfree TV

HbbTV

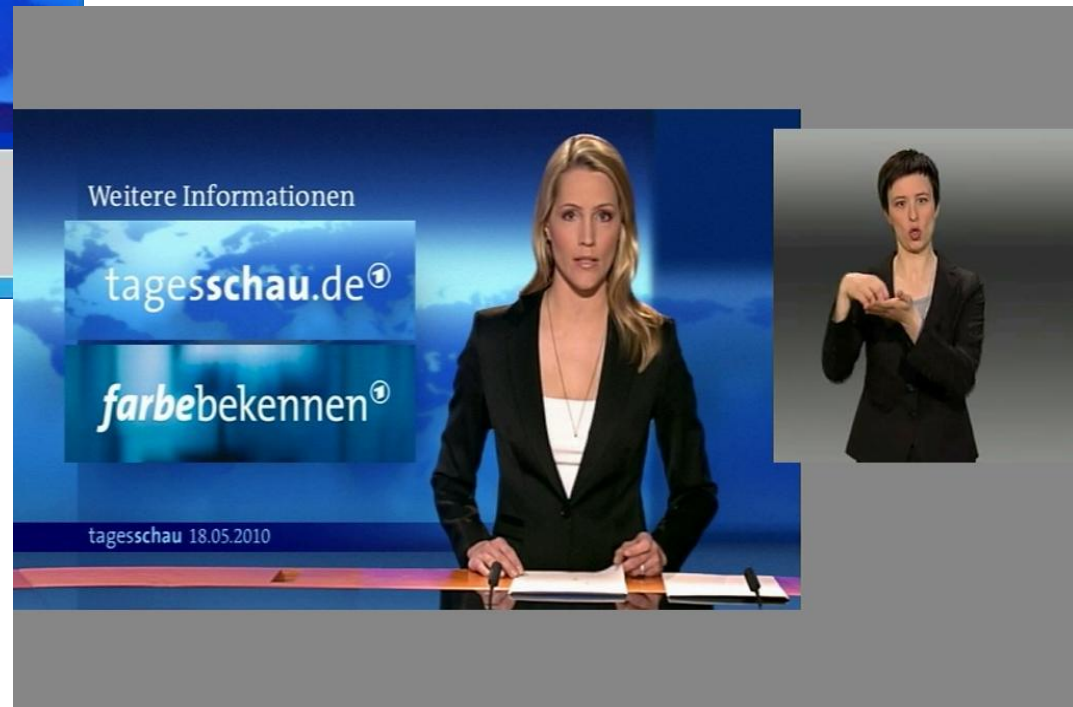*Sign language on Command*
Demo at IFA-10 – could be applied in practice
(synchronization still to be implemented in the specification)

News via broadcast –
signer via Internet

Diese Sendung gibt es mit Gebärdensprach-Dolmetscher über das Internet.

JETZT EINSCHALTEN?   JA   NEIN

Announcement of sign
language service

Weitere Informationen

tagesschau.de

farbebekennen

tagesschau 18.05.2010

National Ecosystems may have specific Needs

HbbTV is referenced **AS IS** by
- DTG D-Book 7 (UK)
- TNT 2.0 (France)
- AEDETI (Spain)
- NorDig
- ATSC 2.0 (US)

Interoperability Not guaranteed

Interoperability Guaranteed

HbbTV applications work on each HbbTV compliant devices everywhere (across borders)!

Country specific elements added on top
- Specifying open issues (e.g. DRM)
- Adding service related elements (e.g. EPG)

National B

National C

National A

HbbTV v1.5

Country X, Y, Z

HbbTV v1.0

HbbTV

Possibilities to increase harmonization? → DRM as an example?

Market introduction of v1.5

- *DRM essential for commercial offers on basis of HbbTV*

- *Requires agreements in the eco-system*
  - which DRM-system to support
  - how to do AAA (Authentication, Authorization, Accounting)?

- *Integral part of*
  - TNT 2.0
  - Spain
 - Nordic
  - Others to come soon?

HbbTV v2.0

- *Currently working on requirements*

- *Topics being discussed / raised as a topic HbbTV should address*
  - HTML5
  - Companion screen / 2nd Screen
  - Synchronizing Broadcast & Broadband
  - ……..

- *Design paradigm identical to phase 1*
  - → HbbTV has to address immediate market needs
  - → Leverage mature existing technical components / specifications

- *Aspects relevant to time line:*
  - Quick technology development in Internet domain
  - Content providers must be able to address rapidly growing legacy customer base
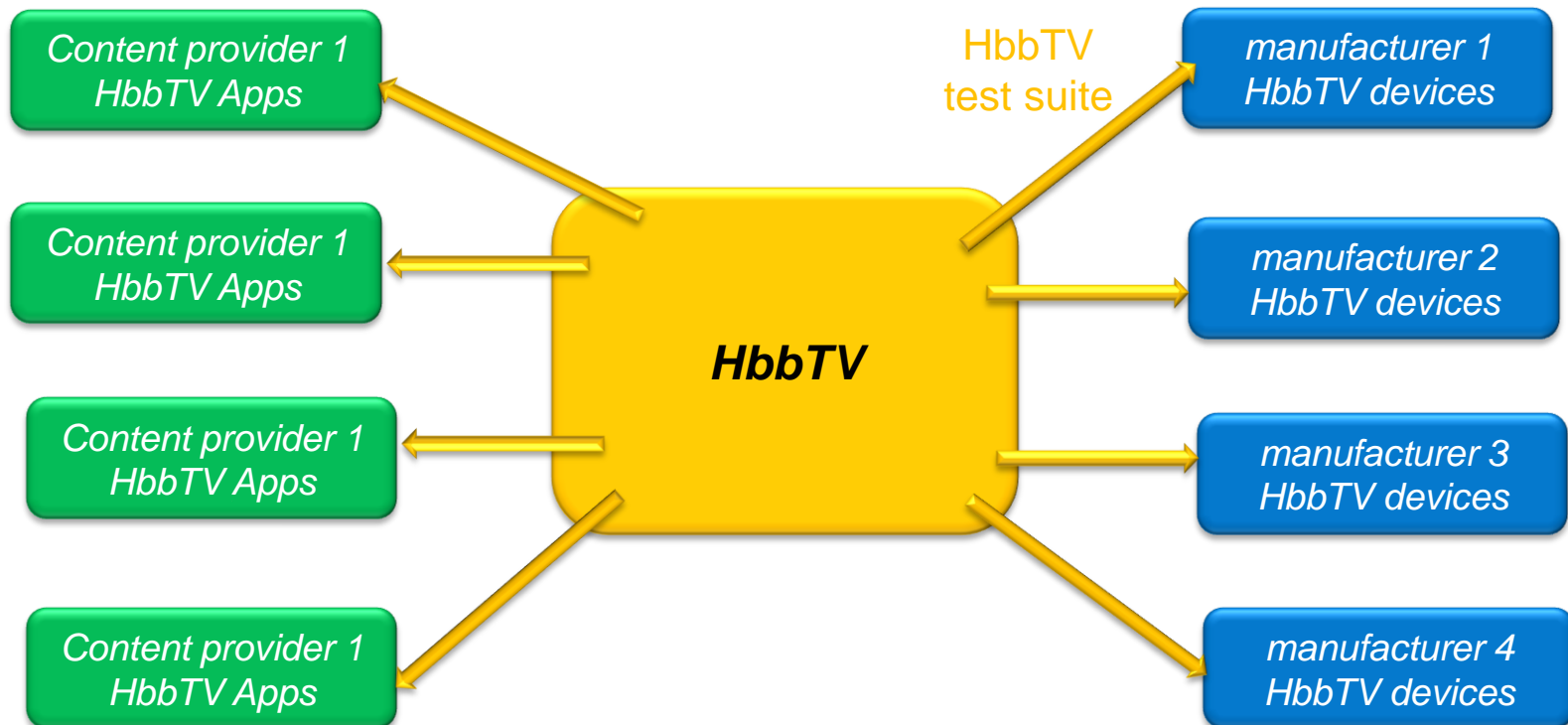
Interoperability Workshops

4 two-day interoperability workshops in 2012
workshop 22./23. Nov: 18 manufacturers / 24 content providers from 7 countries

Open Issues

Foster market confidence of application developers and manufacturers

Open Issues
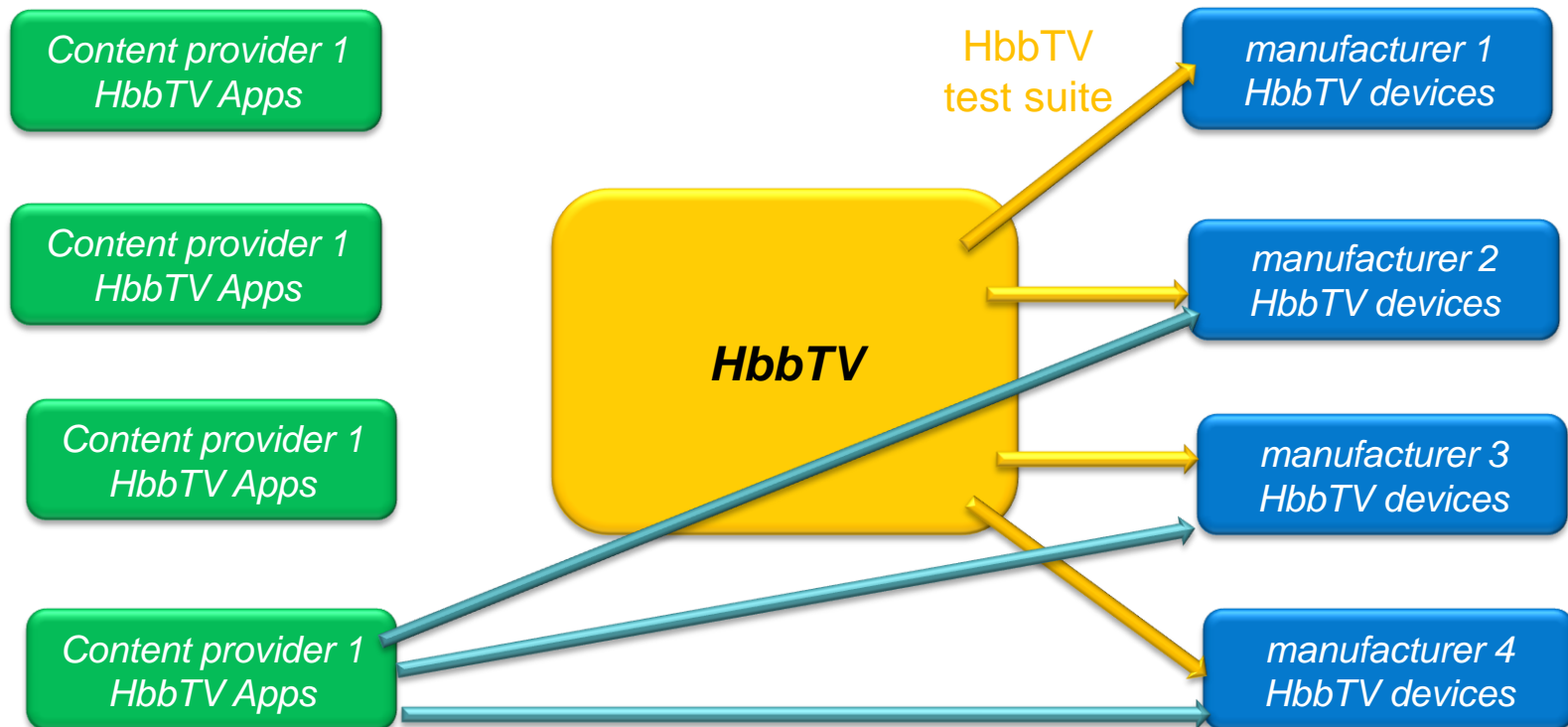
Foster market confidence of application developers and manufacturers

Ability to test applications needed

Enable communication between manufacturers and app developers

Summary

HbbTV®'s standardized solution:
- only open and business neutral technical infrastructures enable mass markets
- Immediate win-win situation for along the value chain

HbbTV® gained european-wide significant market momentum
- Rapidly growing international support is about to make it the standard feature of TV

HbbTV® sparks off fast development of attractive applications
- Potential for applications and business opportunities leveraging broadcast & broadband is barely being exploited yet.

Thank you for your attention!

Dr.Klaus Illgner-Fehns
Chairman HbbTV consortium

E-Mail: illgner@irt.de

www.hbbtv.org