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Fraunhofer Institute for Open Communication Systems | Kaiserin-Augusta-Allee 31 | 10589 Berlin, Germany

Welcome to Fraunhofer FOKUS local arrangements…

- Internet Access: wLan (fokus-guests / w3cweb / w3cfokus)
- Microphones
- Presenters laptop available (please upload your slides before your session! via USB stick)
- IRC: irc.w3.org:6665 #webtv
- Drinks & Food (in the breaks) next room
- Social Event: Dinner 19:00 / Bus transfer from FOKUS: 18:30 / 18:45!
  - (but you can also walk 800m)

Fraunhofer Institute for Open Communication Systems (FOKUS)

- FOKUS has been founded 1988 in Berlin, Germany
- 260 employees: scientists, students, technicians originating from 25 nations
- FOKUS is the Telecom R&D institute within the Fraunhofer Society
  - Fraunhofer Society is the biggest German R&D organisation, total # of 17.000 employees)
  - 57 institutes in total, 15 institutes in ICT

- FOKUS works since 22 years on convergence of IT, telecoms, internet and home entertainment and performs applied research and development projects
- Performs strategic studies, solution concepts, system integration and prototype development
- Strong cooperation with universities & establishment of spin offs (e.g. iptel.org., TwonkyVision, …)

FAME – Future Applications and Media

Intelligent services & applications: any time – any place – any form

- **Future Web Technologies** → Future Web Lab
  - Mobile Web, Multi-devices, Multimodal interaction
  - Semantics and context-awareness and reasoning
  - Mobile Cloud, distributed applications and services
  - Mashups and composite services

- **IPTV, Hybrid TV & Rich Media Interaction** → HybridTV Lab
  - Media clients and enablers for managed and unmanaged IPTV
  - Non-linear smart interactive content
  - Content guides and metadata management
  - Video streaming, service control, telco integration

- **Recommendation Systems** → Social Web Lab
  - Personalization and recommendations
  - Social media and social network management

Milestones

- **2007**: Providing the first **ETSI TISPAN Telco IPTV end-to-end test bed**
  - IPTV Session Management Application Server, ECG, User Profile
  - Managed IPTV various value-added services implementations
- **2009**: **Open IPTV Forum (OIPF) platform and infrastructure reference implementation**
  - FOKUS presented the first OIPF R1 reference implementation on the OIPF's booth at IBC 2009
    -> *FOKUS Open IPTV Ecosystem & Media Client Suite*
- **2009**: **OIPF InteroP TV #1:**
  - 1st Open IPTV Forum Interoperability Event hosted by FOKUS
- **2009: BONDI reference implementation**
  - Camera, location API -> *FOKUS Mobile Web Runtime 2*
- **2009: Microsoft Mediaroom Test bed**
  - Mediaroom Application development
- **2010**: **Hybrid & OTT TV Lab**
  - CE-HTML & HbbTV applications, HTML5, W3C Widgets on TV
  - *FOKUS Media Web Runtime*
- **2010: NIMS PoC: OIPF end to end prove of concept deployment in Singapore**
  - Overall PoC coordination and provisioning of dedicated OIPF compliant components
- **2010: Setup & coordination of FP7 Integrated Project webinos**
  - Secure WebOS Application Delivery Environment
- **2010**: **MEGASTORE launch @ IFA 2010**
  - App deployment for various devices and platforms
- **2010: White Label CE-HTML Portal Solution and test suite**

Web and TV
A special case?

- Current approaches often attached to the past
  - TV is primarily for watching videos
  - Examples are always the same applications
    - VoD
    - Teletext (News/Weather/Sports pages)
    - EPG
  - Done that on MHEG-5, done that in MHP, in Open TV…
  - Standards focus strongly on current input/output devices
    - fixed screen size
    - cursor navigation
    - coloured buttons
    - low computing / rendering power

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Learn from mobile phones!

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The same way that mobile phones are for making phone calls?

That led to WAP…

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Are the primary mobile phone applications (even the web based ones) currently contact lists and calendars?

Web and TV

Phones need to handle different screen sizes and even changing orientation. Can't be that hard to do...

- the past
- deos
- applications
- pages)
- FF
- Done … EG-5, done that in MHP, in Open TV…
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Web and TV
A special case?

Phones have full keyboards, cursor keyboards, numeric keyboards, joysticks, pens, touch screens, multi touch…

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Web and TV
A special case?

Even now TVs offer control by smart phones and pointer devices

- Done that on I… done that in MHP, in Open TV…
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Web and TV
A special case?

True now and will be true as long as
better teletext is all there is to offer.
Put what if someone sells a TV that can play
World of Warcraft (HD)? Or even Farmville (HD)?
Users pay for phones that can handle Angry Birds...

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  - fixed screen size
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Summary (and hopefully fuel for discussion):

- **Don't rely too much on the future being just a nicer looking past**
- **Don't take technical criteria too serious**
  - The can change quickly
  - Cover them in profiles or recommendations
  - Don't make them part of core standards
- **Plan for strong features of the domain**
  - TV viewing is often social
  - TV screens can typically be seen by more than one person
  - in most homes with VDSL, TVs are probably the devices with the fastest Internet connection

Our approach: Project on cross platform applications - webinos

webinos
Secure WebOS Application Delivery Environment

- Envisions web based cross platform applications
- Virtual devices cloud
- Develop key enablers for the future WebOS to drive portability and secure use of web applications across platforms (mobile, fix, TV, car)
- 22 core partners from 9 countries (more than 50% industry)

HTML 5 Mediaclient @ FOKUS Future Media and Applications Lab after session 4 (17:30) → Tour starts at reception

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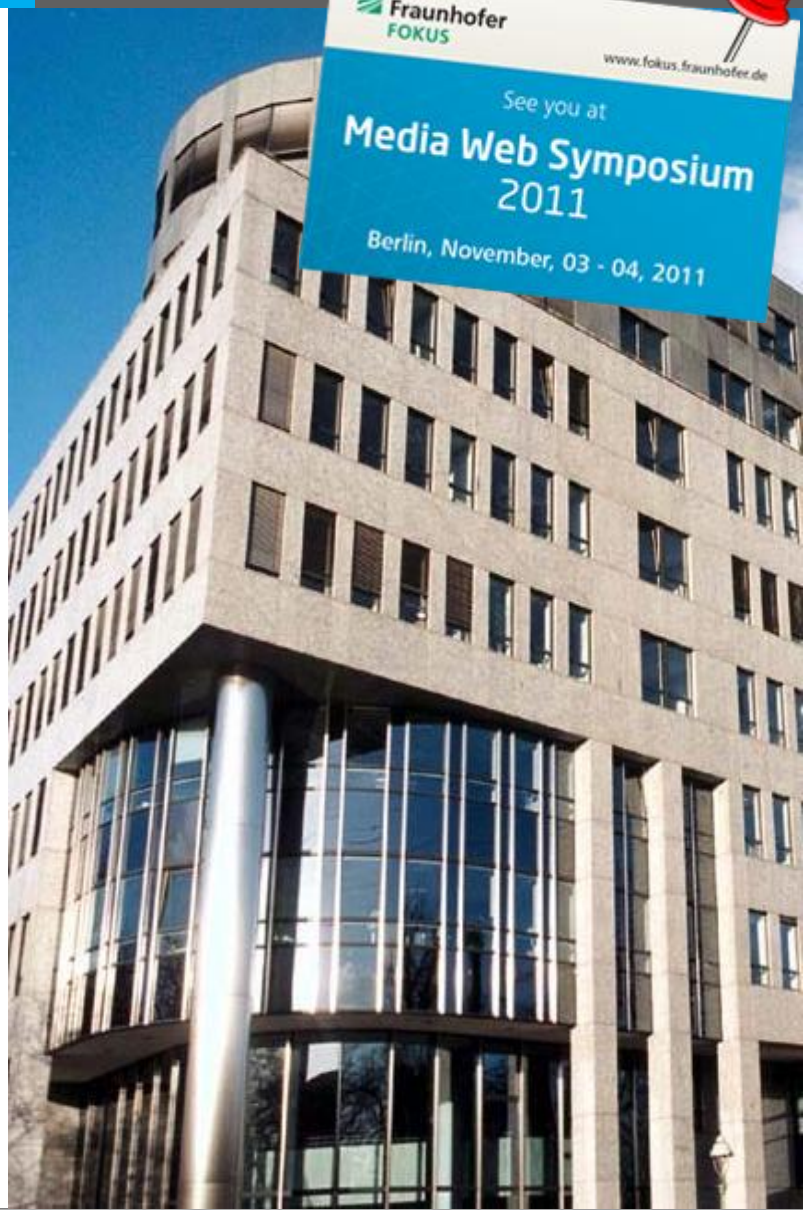

FOKUS Mobile Web Runtime & BONDI

MOBILE WEB RUNTIME 2

- extension to common Web browsers
- exposes host and cloud services via the JavaScript Runtime Environment to applications
- standards and standard recommendations (such as **BONDI**, **W3C**) are applied
- active contributions to OMTP's BONDI project (camera API, geolocation API)