![Fraunhofer FOKUS]

Fraunhofer FOKUS

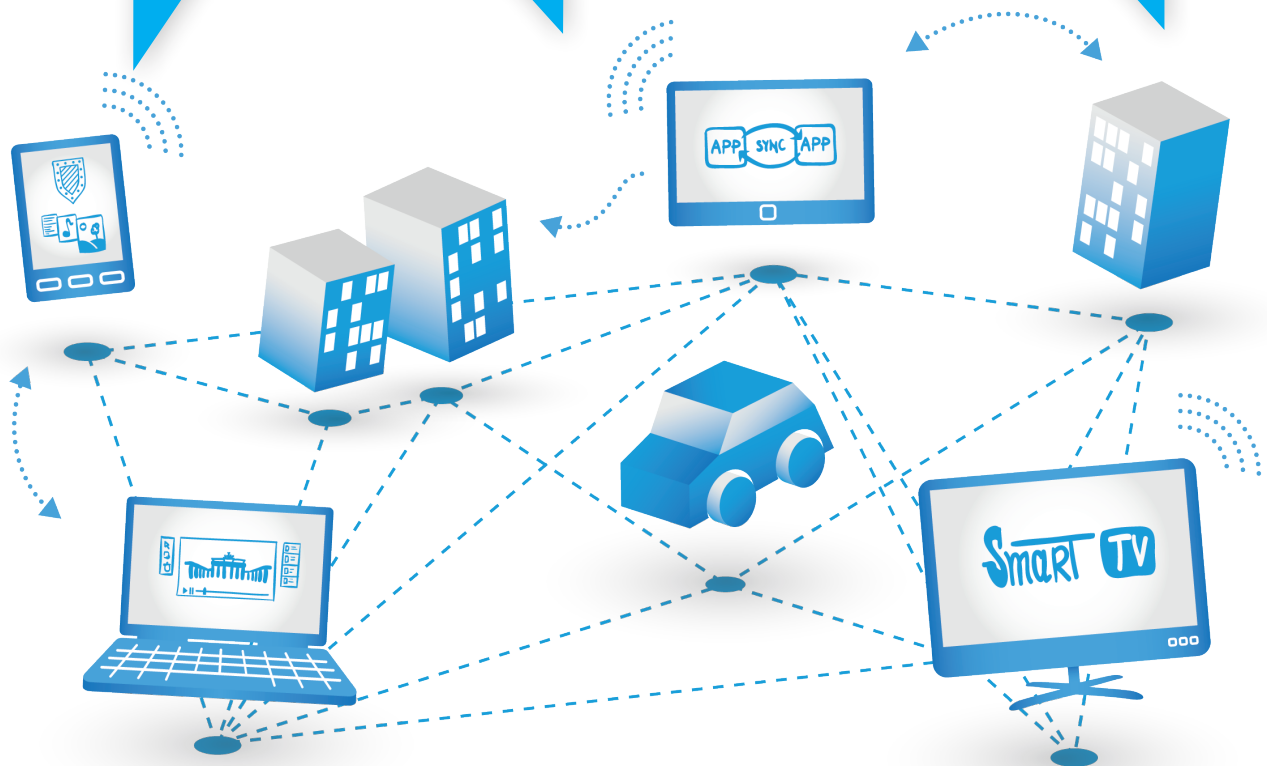Fraunhofer Institute for Open Communication Systems

3rd FOKUS Media Web Symposium

Applications, Content and
Technologies for a Multiscreen World

Berlin, March 14 – 15, 2013

Welcome to the 3rd FOKUS Media Web Symposium

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Words from the Chairs

» Dear FOKUS Family and Friends,
Ladies and Gentlemen

We are proud to welcome you to the 3rd FOKUS Media Web Symposium (MWS) in Berlin on March 14-15, 2013. The third symposium will build on the success of previous FOKUS workshops and will address applications, content and technologies for a multiscreen world. This event will be of great interest to international experts in web and media technologies who are seeking and exchanging the latest technical information and hands on experience of multiscreen content and applications.

"Multiscreen" is certainly one of the hottest keywords this year. It is not just Phones that are Smart and Connected; Tablets, Connected Cars and Smart TVs are all on the rise. Convergence is coming. This convergence is not just technical, but represents a convergence of industries. The Internet is already revolutionizing the TV industry. These new technologies not only disrupt the existing industry with new content delivery models (broadband vs broadcast), but are the driving force behind the evolution of the industry, where new features such as VoD, shift TV, and mobile consumption, are now expected by consumers. This powerful mix of revolutionary and evolutionary forces is now starting to impact other industries such as Automotive and Smart Cities.

We address these pressing issues as the main theme for the 3rd FOKUS Media Web Symposium. We are pleased to welcome experts from all over the world to present latest developments and updates. The event will take place over two-days, offering tutorials, workshops and a great social event on day one and a full day conference on day two. Demonstrations of products and prototypes from sponsors, partners and Fraunhofer FOKUS will be shown in the exhibition area on both days. The agenda lists around 45 presentations for the two days given by experts from 15 different countries on the hottest topics in broadband-broadcast convergence and cross-platform service provision.

We hope you will enjoy the 3rd FOKUS Media Web Symposium 2013 and wish you very interesting and fruitful two days.

Sincerely yours,
Dr. Stephan Steglich & Dr. Stefan Arbanowski
and the entire FOKUS team.

Day 1 – Tutorials
March 14, 2013 — 10:00 till 12:30

» 10:00 – 12:30　　　**TUTORIAL 1** — »ConnectedTV«
Auditorium 1, Dr. Stefan Arbanowski, Stefan Pham, Christopher Krauss
Fraunhofer FOKUS

This tutorial overviews the emerging Connected TV market, technologies used, current standardization activities and future trends. The tutorial is aimed at anyone interested in the convergence of broadcast and broadband, the technology behind it and the potential future of IPTV, Hybrid TV and WebTV.

» 10:00 – 12:30　　　**TUTORIAL 2** — »Multiscreen App Development«
Auditorium 2, Dr. Stephan Steglich, Max Tritschler, Louay Bassbouss, Martin Lasak
Fraunhofer FOKUS

In this tutorial we will discuss the differences and similarities of cross-platform, second-screen and multiscreen app development. We will walk through the underlying technical challenges. Participants will learn about design patterns for multiscreen applications, requirements and approaches to cross-device and multiscreen application development.

» 12:30 – 13:30　　　Lunch — Networking, Exhibition & Demos

» **WORKSHOP 1** – »TV - Hybrid, Smart, Social, Multiscreen - What is Next?«

Auditorium 1, Chair: Dr. Stefan Arbanowski, Fraunhofer FOKUS

13:30 – 13:50 **HbbTV update, what's possible, what's next**
Jon Piesing, TP Vision / Philips, Director Standardisation, *UK*

13:50 – 14:10 **Web Technologies for Interactive TV Apps**
Giuseppe Pascale, Opera Software, Product Manager TV & Connected Devices, *Sweden*

14:10 – 14:30 **HbbTV perspectives – interaction and access**
Christoph Ziegler, Institut für Rundfunktechnik (IRT), *Germany*

14:30 – 14:50 **Resolving CRIDs on the Net**
Alexander Adolf, Condition-ALPHA, Technology Consultant, *Germany*

» 14:50 – 15:20 Coffee Break – Networking, Exhibition & Demos

15:20 – 15:40 **HTTP based streaming everywhere**
Dr. Stefan Lietsch, Zattoo, VP Engineering, *Germany*

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15:40 – 16:00 **Adaptive Streaming using DASH**
Stefan Lederer, Bitmovin, CEO & Founder, *Austria*

16:00 – 16:20 **Media Analysis - Moving towards Smarter Experiences**
Dr. Faisal Ishtiaq, Motorola Mobility, Senior Manager, Media Analysis and Processing Lab, *USA*

16:20 – 16:40 **Formatting the second screen**
Jeroen Elfferich, Ex Machina, CEO, *Netherlands*

» 16:40 – 17:10 Coffee Break – Networking, Exhibition & Demos

17:10 – 17:30 **Content is Apps**
Antonio Pavolini, Telcom Italia, Business Analyst Social Media, *Italia*

17:30 – 17:50 **User interfaces in the living room**
Peter-Yves Ruland, ruwido, Senior Business Development Manager, *Germany*

17:50 – 18:00 **Future media in the real world: mobile interactive video during your ski holiday**
Dr. Lyndon Nixon, STI2, Head of Research, *Austria*

» 19:00 Social Event
CK-99, REVALER STRASSE 99, 10245 BERLIN
MORE DETAILS ON PAGE 18

Day 1 – Workshop 2
March 14, 2013 – 13:30 till 18:00

›› **WORKSHOP 2** – »Web Technologies for Smart Cities & Internet of Things«

Auditorium 2, Chair: Dr. Stephan Steglich, Fraunhofer FOKUS

13:30 – 13:50	**Smart cities as a web of people, things and services** Dr. Dave Raggett, W3C, W3C Fellow, *UK*
13:50 – 14:10	**The Web of Things (web tech for IoT/M2M)** Dr. Nick Allott, UbiApps, CTO, *UK*
14:10 – 14:30	**Smart City at T-Labs: Hamburg's smart port logistics & webinos cross screen payment** Joachim Schonowski, Ernst-Joachim Steffens, Deutsche Telekom AG, T-Labs, *Germany*
14:30 – 14:50	**Web Application local network service discovery** Claes Nilsson, Sony Mobile Communications AB, Master Engineer - Web Research, *Sweden*

›› 14:50 – 15:20   Coffee Break – Networking, Exhibition & Demos

15:20 – 15:40	**The EnyoJS Framework** Markus Leutwyler, Hewlett-Packard, Enyo & webOS Developer Relations, *Switzerland*
15:40 – 16:00	**W3C standards for Multiscreen** Prof. Jean-Claude Dufourd, Telecom ParisTech, Directeur d'études, *France*
16:00 – 16:20	**Cross-screen Web Applications** Dr. Kiyoshi Tanaka, NTT Service Evolution Laboratories, *Japan*
16:20 – 16:40	**Collaborative Working solutions for SMEs based on Web Technologies** Dr. Javier Caminero, Telefonica R&D, Technological Specialist, *Spain*

›› 16:40 – 17:10   Coffee Break – Networking, Exhibition & Demos

17:10 – 17:30	**Gesture Jam – Interactive Window Shopping using Microsoft Kinect** Sven Haiges, hybris GmbH, Technology Strategist, *Germany*
17:30 – 17:50	**Stereoscopic 3D web: utilizing a 3D display in the web** Dr. Dong-Young Lee, LG, web standards activity, *Korea*
17:50 – 18:00	**How videoconference can be social, immersive and transparent?** Oliver Martinot, Alcatel-Lucent Bell Labs, Dept. Head Multimedia Technologies Domain, *France*

›› 19:00   Social Event
                   CK-99, REVALER STRASSE 99, 10245 BERLIN
                   MORE DETAILS ON PAGE 18

Conference
Auditorium 1

》 08:30 – 09:30   Registration & Welcome Coffee

》 09:30 – 09:45   `CONFERENCE - SESSION 1` — Welcome and Opening Presentation
»Future Media Web«

Opening by Conference Chairs
Dr. Stefan Arbanowski & Dr. Stephan Steglich, Fraunhofer FOKUS

》 09:45 – 10:45   `CONFERENCE - SESSION 2` — Standards Panel
»Connected TV« – Where We Are, Where Do We Go?
Chair: Dr. Stefan Arbanowski, Fraunhofer FOKUS

Panel discussion: OIPF, HbbTV, W3C Web and TV, DASHIF, SmartTV Alliance

Panelists:
Mohamed Dadas, Orange FT-Group, Content Standardization Manager, *France*
Régis Saint Girons, High Tech TV (HTTV), CEO, *France*
Giuseppe Pascale, Opera Software, Product Manager TV & Connected Devices, *Sweden*
Dr. Thomas Stockhammer, Qualcomm, Consultant for Technical Standards, *Germany*
Volker Blume, TP Vision, Technical Product Manager Philips Television, *Germany*
Dr. Oliver Friedrich, Deutsche Telekom AG, T-Labs, Senior Expert New Media, *Germany*

》 10:45 – 11:15   Coffee Break — Networking, Exhibition & Demos

Day 2 – Conference
March 15, 2013 — 11:15 till 14:30

Conference
Auditorium 1

» 11:15 – 12:15   **CONFERENCE - SESSION 3** — Web Technologies in the Wild - From Desktop to Smart Cities
Chair: Alan Baldwin, Samsung Research Institute, Technology Manager, UK

11:15 – 11:30   **Smart Cities, Internet of Things and Web Technologies - Implementation perspective**
Ajit Jaokar, Futuretext, Founder, *UK*

11:30 – 11:45   **Expanding the Web beyond desktop and mobile to the Web of Things**
Dr. Dave Raggett, W3C, W3C Fellow, *UK*

11:45 – 12:00   **Security: a key factor to make Smart Cities happening**
Dr. Virginie Galindo, Gemalto, Technical Marketing Standardization and Technology Dept., *France*

12:00 – 12:15   **Multiscreen collaboration to realize resilient information sharing**
Masayuki Ihara, NTT Service Evolution Laboratories, *Japan*

» 12:15 – 13:15   🍴 Lunch — Networking, Exhibition & Demos

» 13:15 – 14:30   **CONFERENCE - SESSION 4** — Streaming Media - Internet, the New Broadcasting Channel?
Chair: Dr. Stephan Steglich, Fraunhofer FOKUS

13:15 – 13:30   **DASH264: Towards an Interoperable OTT Video Delivery Solution**
Dr. Thomas Stockhammer, Qualcomm, Consultant for Technical Standards, *Germany*

13:30 – 13:45   **ConnectedTV Portals: Real usage statistics of a portal provider**
Jan Wendt, NetRange, CEO, *Germany*

13:45 – 14:00   **TV & mobile devices: just second screens?**
Dr. Fleming Lampi, net mobile AG, Product Manager, *Germany*

14:00 – 14:15   **Connected TV – Multiplayer Gaming for the whole family**
Sabine Irrgang, GoFresh, COO & Co-Founder, *Germany*

14:15 – 14:30   **SmartTV Update**
Volker Blume - TP Vision, Technical Product Manager Philips Television, *Germany*

Day 2 – Conference
March 15, 2013 — 14:30 till 17:15

» 14:30 – 15:00   ☕ Coffee Break — Networking, Exhibition & Demos

» 15:00 – 16:00   **CONFERENCE - SESSION 5** — Metadata - Searching, Finding, Recommending Content
Chair: Lajos Lange, Axel Springer, IT-Project Manager, Germany

15:00 – 15:15   **Wikidata - the Wikipedia of Data**
Dr. Denny Vrandecic, Wikimedia Deutschland e.V., Project Lead Wikidata, *Germany*

15:15 – 15:30   **Movisto - Personalized TV Programm**
Jan Reichold, rtv media group, CFO, *Germany*

15:30 – 15:45   **A new view of TV everywhere: Entertainment Unbound**
Leander Carell, NOWTILUS / Rovi Corp., Managing Director, *Germany*

15:45 – 16:00   **Implementation of a Recommendation System for Multimedia Contents in VESTEL SmartTV Portal**
Dr. Gürkan Üstünkar, VESTEL, *Turkey*

» 16:00 – 16:30   ☕ Coffee Break — Networking, Exhibition & Demos

» 16:30 – 17:15   **CONFERENCE - SESSION 6** — Apps World
Chair: Dr. Oliver Friedrich, Deutsche Telekom AG, T-Labs, Senior Expert New Media, Germany

16:30 – 16:45   **A DVB-T-based hybrid TV portal**
Daniel Kleinbauer, Media Broadcast, Head of Product Management Hybrid TV, *Germany*

16:45 – 17:00   **Top of the VODs – inspection: defects & prospects**
Tobias Künkel, TeraVolt, Managing Director, *Germany*

17:00 – 17:15   **The Changing Game of Online User Experience in a Multi-Device World**
Dirk Bartels, idealo, Head of Product Management, *Germany*

» 17:15   End of Conference — Coffee, Farewell & Demos

FOKUS Demonstrations

The FOKUS competence center Future Applications and Media (FAME) presents the most recent technologies and advancements that enable a standardized cross-platform use of apps and interactive services on TVs, PCs, and mobile phones. The exhibitions show how service providers, content providers, telco operators, and CEs can realize advanced cross-screen media applications and telecommunication services using technologies such as hybrid and connected TV, mobile web, service personalization and service mashups. Furthermore, the demonstration addresses the question of how applications can be provided on various terminal devices irrespective of vendor and device type.

Demo Slots

» Thursday, March 14
13:00, 14:50, 16:40

» Friday, March 15
10:45, 12:15, 12:45, 14:30, 16:00

A guided demonstration will be available to conference guests during coffee and lunch breaks.

Please register for one of the demo slots at the reception desk.

FAMIUM

Browser-based DRM with DASH Compliant Content Protection for Internet Delivered Video

Dynamic adaptive Streaming over HTTP (MPEG-DASH) is the upcoming streaming standard for the Web and will harmonize video delivery across the Internet. Fraunhofer FOKUS solutions Famium and DASH Transcoder together form an end-to-end platform for the consumption and delivery of adaptive bitrate content. The client component Famium is based on the W3C proposals for Media Source Extensions and Encrypted Media Extensions and additionally provides multi-screen capabilities. For the usage in delivery networks, DASH Transcoder supports DASH-compliant content creation, including common encryption in ISO Base Media File Format (ISO BMFF) files. Both components are

demonstrated by exemplary implementations of various use cases.

http://s.fhg.de/bwv

Interactive Video as a Service

Cloud-based All in One Solution for Internet Delivered Video

Non-linear video (NLV) is a technology which makes video content an interactive experience. Non-linear video gives the viewer the opportunity to interact with objects that are part of the video and access supplemental information. On demand, multimedia content is linked with related information. Interactive, time independent navigation opens new ways to experience video content.

Designed as a cloud-based all-in-one solution, non-linear Video serves a comprehensive set of features for a wide range of target platforms, devices and applications. Our technical concept is entirely based on open Web technologies to allow a maximum of flexibility, platform-independence, and portability. NLV supports the following cloud-based services: Content Management System, Tagging Tool, interactive Players (Web, Mobile and SmartTV through HTML5, Flash, iOS, Android, CE-HTML, and Mediaroom) and Social Media Integration.

http://s.fhg.de/2iR

webinosTV

Multiscreen Switchboard for Seamless Interaction with Distributed Content

The increasing amount of media, data and applications that are distributed across many devices requires much effort to preserve usability as well as privacy and security attributes when making such content available for different screens.

The multiscreen and multi-user application webinosTV utilizes the concept of the personal zone that enables a secure and convenient usage of services and resources provided by all connected personal devices independent of platforms and operating systems. With webinosTV links between source and target devices can be created intuitively while providing access to the consolidated and shared content for the consumption on the desired screen.

http://www.webinos.org

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HTML5 for Multiscreen

Information Division/Cooperation Technology Applicable to HTML5

Contents Follow User Situation Changes:

We propose a technology to divide/allocate web content elements among devices in accordance with user situation changes. The demo will show you how the elements are freely transferred among smartphones, tablet devices, and television sets when user situations are changed. Users can configure their systems in a „My Style" manner that suits their preferences and the devices they want to use.

Multiscreen Collaboration to Realize Resilient Information Sharing

Sharing disaster information under Internet disconnection: To support evacuation centers without Internet access due to a disaster, our multiscreen collaboration realizes resilient information sharing that allows evacuees to share disaster information among devises with a HTML5 browser by connecting to a local Wi-Fi router and launching the browser. The demo system shares information among the centers through the movement of people.
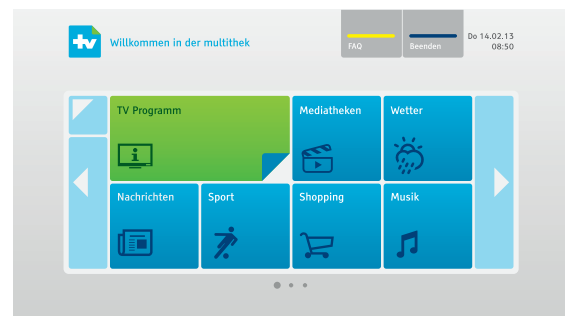
Multithek

A Lightweight Platform for HbbTV Services Prototyping, Validation and Demo

Multithek combines broadcast and broadband. The hybrid approach by Media Broadcast enables OTT-programs and services complimentary to the DTT offering

The HbbTV-based portal is shown as a separate channel on the TV set. Broadcast and IP contents are presented in a truly seamless way: by listing the portal and additional IP-based linear programs in the EPG. The user selects both broadcast and IP channels via the channel buttons on the remote. Navigation on the portal is based on the 5-button principle – guiding the user and offering OTT content without overloading.

Exhibitions of Sponsors & Supporters

Global Smart TV Portal Solutions

NetRange is a global provider of white label, brand independent Smart TV portal solutions. NetRange is operating integrated worldwide full-service Smart TV portals for major clients such as HD+ (a subsidiary of SES Platform Services), Sharp, Ikea, TCL Thomson, Loewe, Vestel and Media Broadcast. It is also one of the world's most successful service providers for the development of Smart TV applications and services.

rtv smartTVpredictor

rtv smartTVpredictor provides personalized program recommendations. The rtv predictor is based on the Fraunhofer FOKUS Recommendation Engine. The algorithm uses complex metadata and a database of related ratings of other users to generate recommendations that match the user's preferences. The system is already in use in an open Web Beta since January 2013 on rtv.de.
The rtv smartTVpredictor takes advantage of multiple self-learning mathematical algorithms and includes new items on a regular basis.
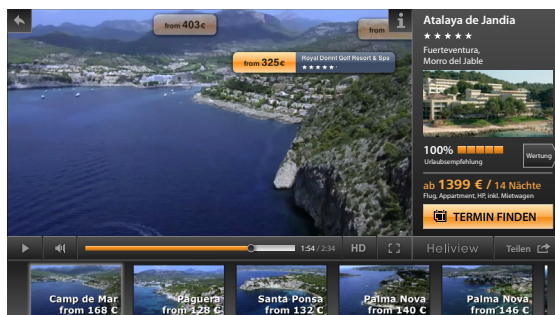
Exhibitions of Sponsors & Supporters

Interactive Video

BitTubes GmbH develops and sells advanced media web technologies helping customers to increase their user's satisfaction and service experience. We provide solutions that enable cross platform applications targeting various different industries such as telecommunication, Internet, broadcasting and automotive.

See one of our interactive video services called Heliview and our advanced video tagging solution.
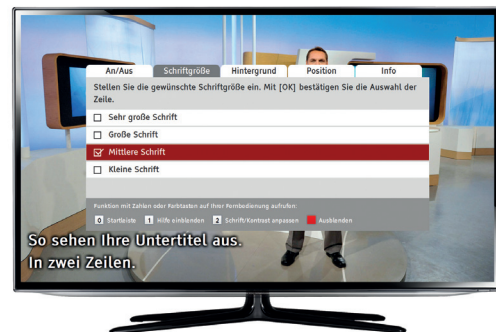
Next Generation HbbTV Services

The exhibit presents results of an „IRT-RBB Innovationsprojekt" which is a collaboration in the EU-funded projects FI-Content and HBB-Next. The HbbTV application is a second-screen service synchronized with TV content with the purpose to provide customised subtitles for users.
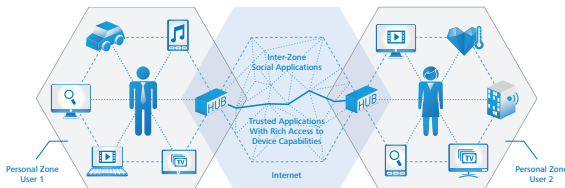
Exhibitions of Sponsors & Supporters

webinos

A Pioneering Open Web Platform For Multiscreen Applications

webinos delivers an Open Source platform that connects user's devices securely and allows applications to run and use resources across mobile, PC, home media, TV sets and in-car devices in new ways. Implementations and demos are shown across all screens and covering Android, Windows, OSX and Linux. The webinos project has over twenty partners from across Europe spanning academic institutions, industry research firms, software firms, handset manufacturers and automotive manufacturers.

FI-CONTENT

Future Media Internet for Large-Scale CONTent Experimentation

Future media Internet for large-scale CONTent experimentation (FI-CONTENT) is a project that will transform the perception of, and possibilities for, the next generation internet. With inputs from five important content areas, spanning the future uses of AV, games, Web, metadata and user generated content, demonstrating usage beyond current state of the art, we have assembled a consortium including major content providers, games companies, hardware vendors, network operators, broadcasters, research institutes and academia to propose a number of novel and inventive scenarios for new forms of content.

The FI-CONTENT Demo is dedicated to the presentation of the project and the results attained during FI-PPP phase 1. The Future Internet architecture and the enablers necessary to implement FI-CONTENT use cases will be showcased.

http://www.webinos.org

http://www.fi-content.eu

Information for Participants

Reception Desk

Please contact the reception desk in case you need information or assistance. Reception desk hours are:

Thursday, March 14:	8:30 - 18:00
Friday, March 15:	8:30 - 18:00

If the reception desk is closed you can contact us by phone: +49 170 452 7782

Internet Access for Guests

WLAN Internet access is provided in the auditorium and exhibition area. You'll find your user ID and password information in the conference folder. Network name: MWS2013

Presentation Slides

Presentation slides can be downloaded after the workshop on:
www.fokus.fraunhofer.de/go/mws

Event Minutes / Pictures

Event minutes and pictures can be found after the event on:
www.fokus.fraunhofer.de/go/mws

Social Event
Thursday, March 14, 19:00

Conference guests who have registered for the Social Event are invited to get to know each other at gastronomy event at CK-99. There is no dress code, and casual wear is welcome.

CK-99

www.ck-99.com
Revaler Straße 99
10245 Berlin

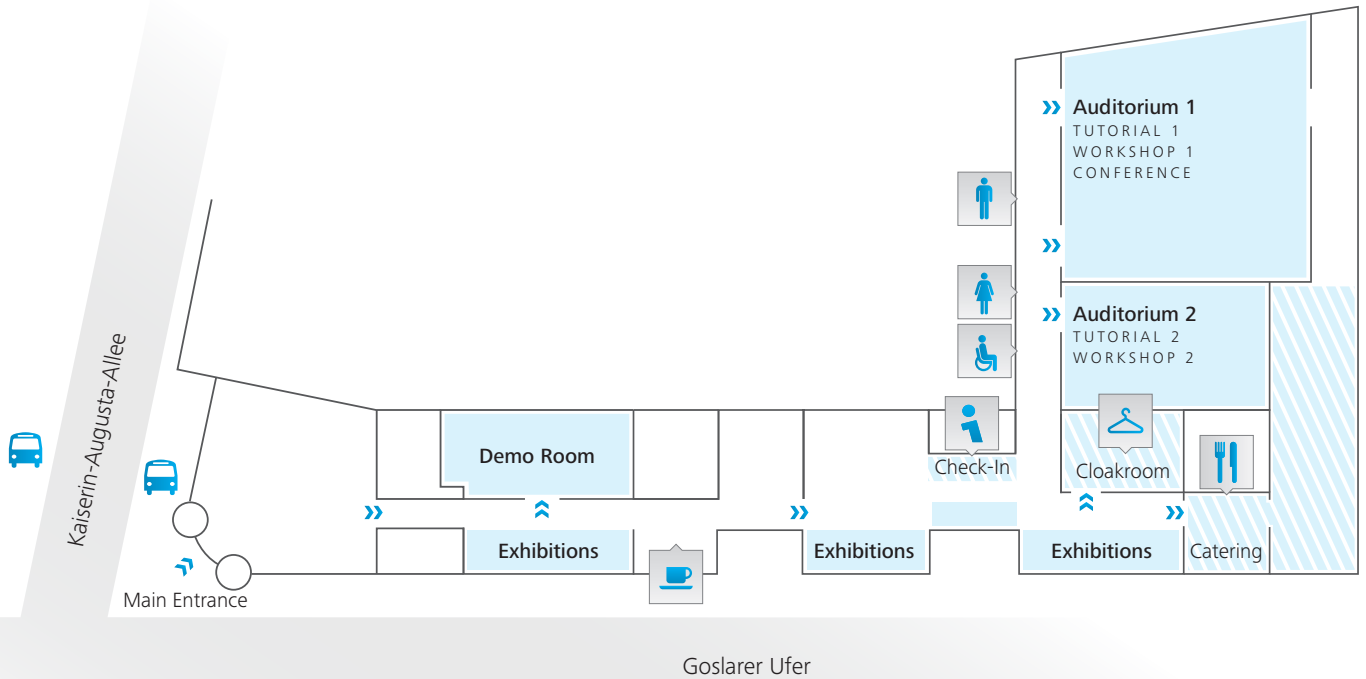The shuttle service to the event location departs at 18:15 in front of the Fraunhofer-FOKUS building.

Afterwards the shuttle will depart from the event location, with stops at Alexanderplatz, Berlin Hauptbahnhof and Zoologischer Garten.

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Hashtag #FOKUSMWS

Floor Plan

Kaiserin-Augusta-Allee

Main Entrance

Demo Room

Exhibitions

Goslarer Ufer

Check-In

Auditorium 1
TUTORIAL 1
WORKSHOP 1
CONFERENCE

Auditorium 2
TUTORIAL 2
WORKSHOP 2

Exhibitions

Exhibitions

Cloakroom

Catering

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Venue
Fraunhofer Institute FOKUS
Kaiserin-Augusta-Allee 31
10589 Berlin

Public Transport
Bus Line M27
Station: Goslarer Ufer

Google Maps
http://s.fhg.de/SaN

Day 1

March 14, 2013

10:00 – 12:30	Tutorial 1 **Connected TV**	Tutorial 2 **Multiscreen App Development**
13:30 – 18:00	Workshop 1 **TV – Hybrid, Smart, Social, Multiscreeen – What is Next?**	Workshop 2 **Web Technologies for Smart Cities & Internet of Things**
19:00	Social Event at CK-99 More details on page 18	

Day 2

March 15, 2013

09:30	Conference, Session 1 **Welcome and Opening Presentation »Future Media Web«**
09:45	Conference, Session 2 **»Connected TV« – Where We Are, Where Do We Go?**
11:15	Conference, Session 3 **Web Technologies in the Wild – From Desktop to Smart Cities**
13:15	Conference, Session 4 **Streaming Media – Internet, the New Broadcasting Channel?**
15:00	Conference, Session 5 **Metadata - Searching, Finding, Recommending Content**
16:30	Conference, Session 6 **Apps World**

Please check our website for changes in the schedule
www.fokus.fraunhofer.de/go/mws

Venue
Fraunhofer Institute FOKUS
Kaiserin-Augusta-Allee 31
10589 Berlin