

The MHP Knowledge Project

Marcel Langlois
IRT / Information and Data Services

Overview

Background

- What is the market status of MHP?
- What does the EU say about APIs?

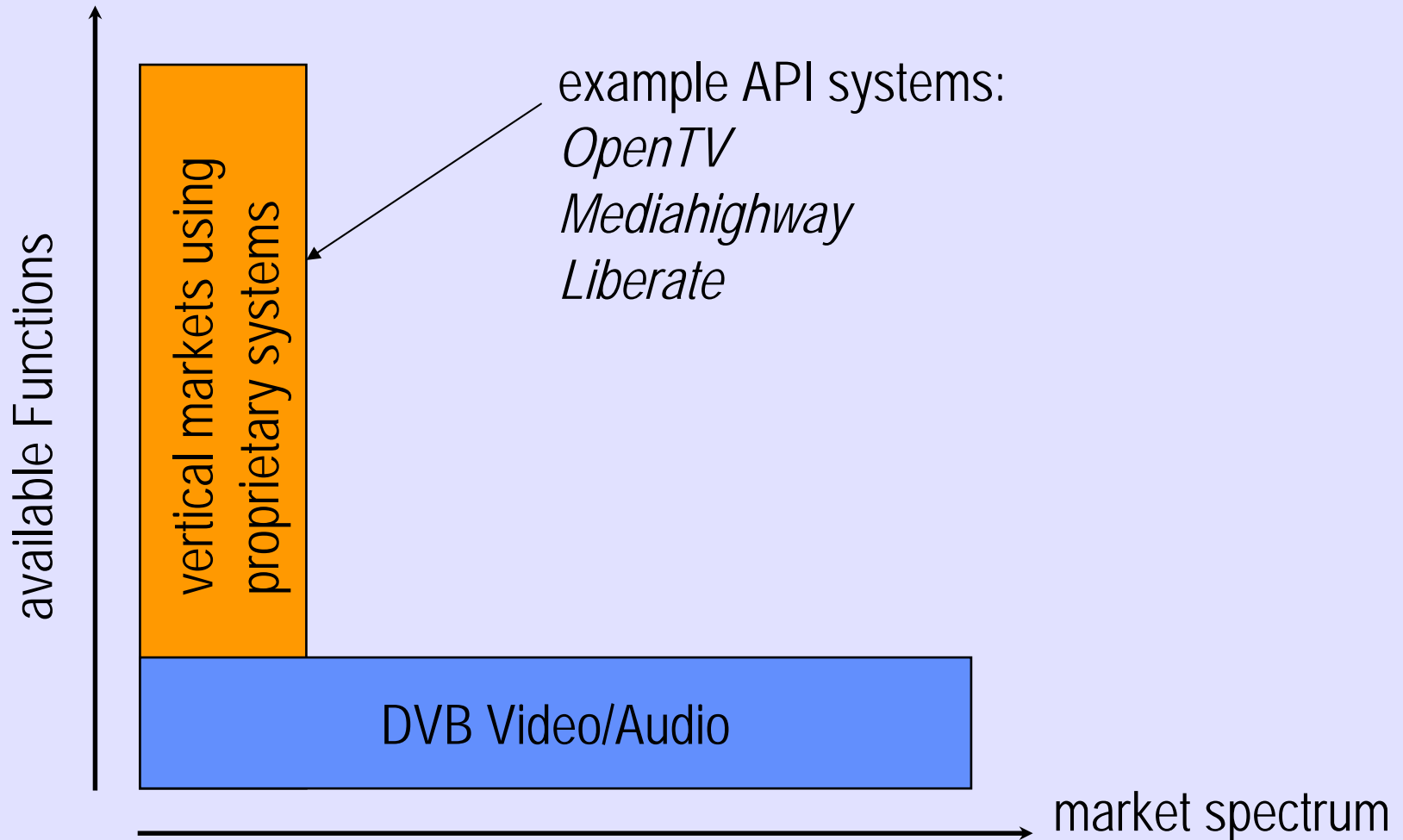
The MHP Knowledge Project

- Partners – Lifetime – Funding
- Objectives – Means
- Workflow – Organisation
- Status and achievements

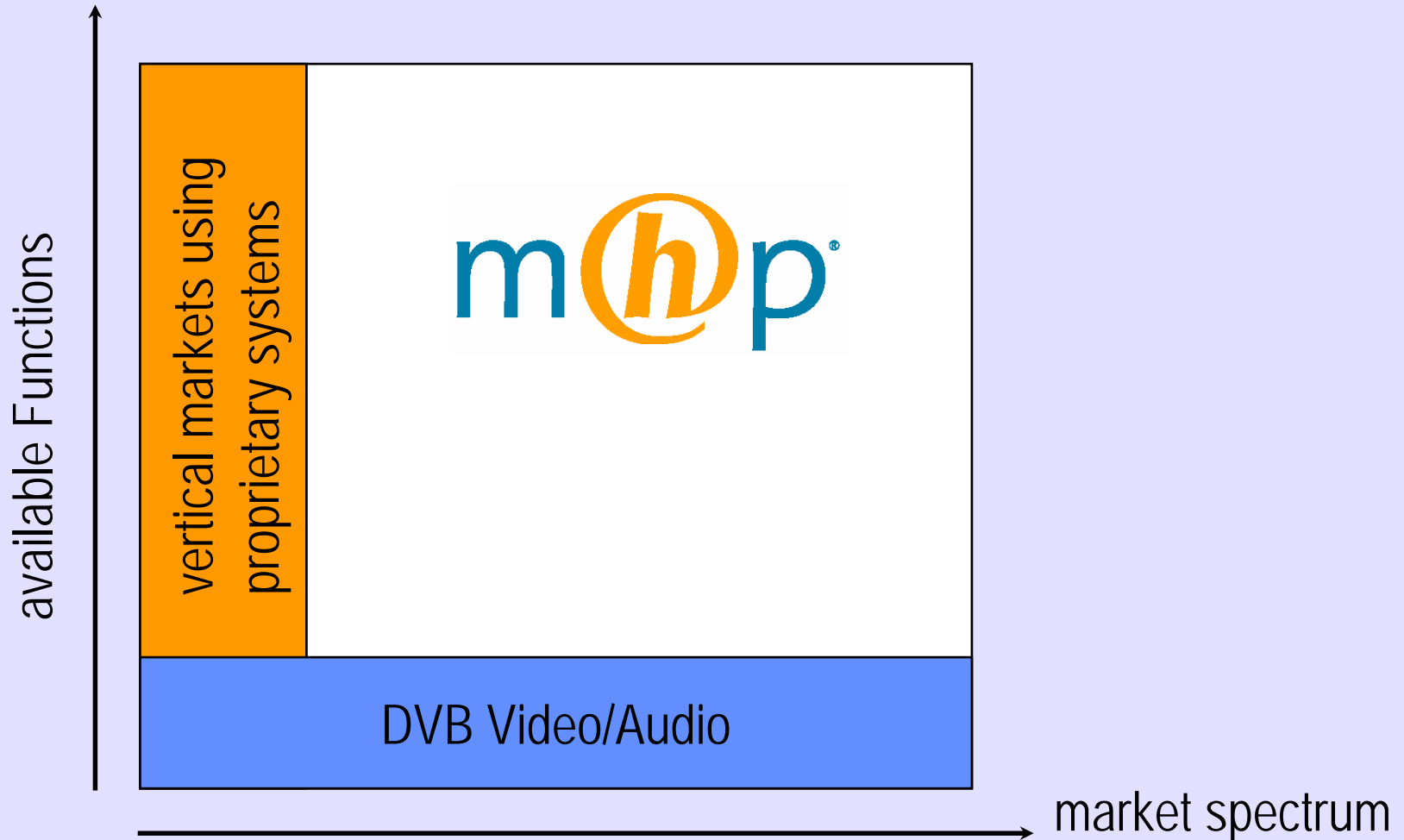
What the MHP Knowledge Base offers

- KDB infrastructure (The KDB Portal)
- Database features
- Testing tools / environments
- Target users and terms of use

Proprietary API systems in vertical markets



MHP allows functionality and interoperability



MHP in the market: available services

Belgium: 4 Providers + Telenet (Plan 2005: Portal, EPG, voting, shopping)

Denmark: DR Portal is realised / Simulcast in OpenTV und MediaH.

Finland: regular MHP service in DVB-T since 2001 / variety of services

Germany: regular services from big public and private broadcasters

Italy: RAI u. Mediaset: MHP for DVB-T / since 2003 / subsidising decoders

Austria: ORF testing MHP

Singapore: MHP for DVB-T / testphase / e.g. „Food Guide“

Australia: MHP via cable and DVB-T starting March 04 / Simulc. OpenTV

MHP in the market: available decoders

Manufacturers offering MHP decoders for DVB-S, DVB-T and DVB-C:

- Sony
- Philips
- Panasonic
- Humax
- Nokia
- Galaxis
- Samsung
- Salora/ Finlux
- ...

EU Framework Directive...

... for electronic communication 2002/21/EC (07.03.2002):

Interoperability of digital interactive television ... should be encouraged in order to ensure the free flow of information, media pluralism and cultural diversity:

- consumers should be able to receive all digital interactive TV services
- technological neutrality and future technological progress to be granted
- competition in the markets for digital television services to be granted
- platform operators should strive to implement an open API conforming to European standards
- migration from existing APIs to new open APIs should be encouraged and organised

EU Framework Directive...

... for electronic communication 2002/21/EC (07.03.2002):

Article 18 / 'Interoperability of digital interactive television services'

- requires Member States to encourage providers of digital interactive television services and equipment providers to use an open API
- requires the Commission to examine the effects by July 2004 and allows to impose a standard

Recent EU Communication

EU COMMUNICATION ... on interoperability of digital interactive television services (30.7.2004 / COM(2004)54) states that:

- MHP is currently the only open standard for APIs adopted by EU standards bodies
- Desired interoperability reached? -> “doubtful picture”
- No clear case for *mandating* standards at present
- By 2005 mandating MHP will be reconsidered
- A range of promotional actions are proposed to promote the deployment of interactive digital services using the MHP standard

The MHP Knowledge Project

Overall Objective of the MHP-KDB Project:

Strengthen the market impact of MHP by improving interoperability of MHP applications and MHP decoders

- Acronym: MHP-KDB (MHP Knowledge DataBase)
- Co-funded by the European Union (IST 507442)
- Duration: Two years from Dec. 2003 to Nov. 2005

The MHP-KDB Consortium

11 Partners from 5 European Countries:

Panasonic
ideas for life

rbb
RUNDFUNK BERLIN-BRANDENBURG

ita

DW-WORLD.DE
DEUTSCHE WELLE



PHILIPS

DR

tComLabs

bmt

The logo for telenor, consisting of a stylized blue and red circular graphic to the left of the word 'telenor' in a blue sans-serif font.

Institut für Rundfunktechnik

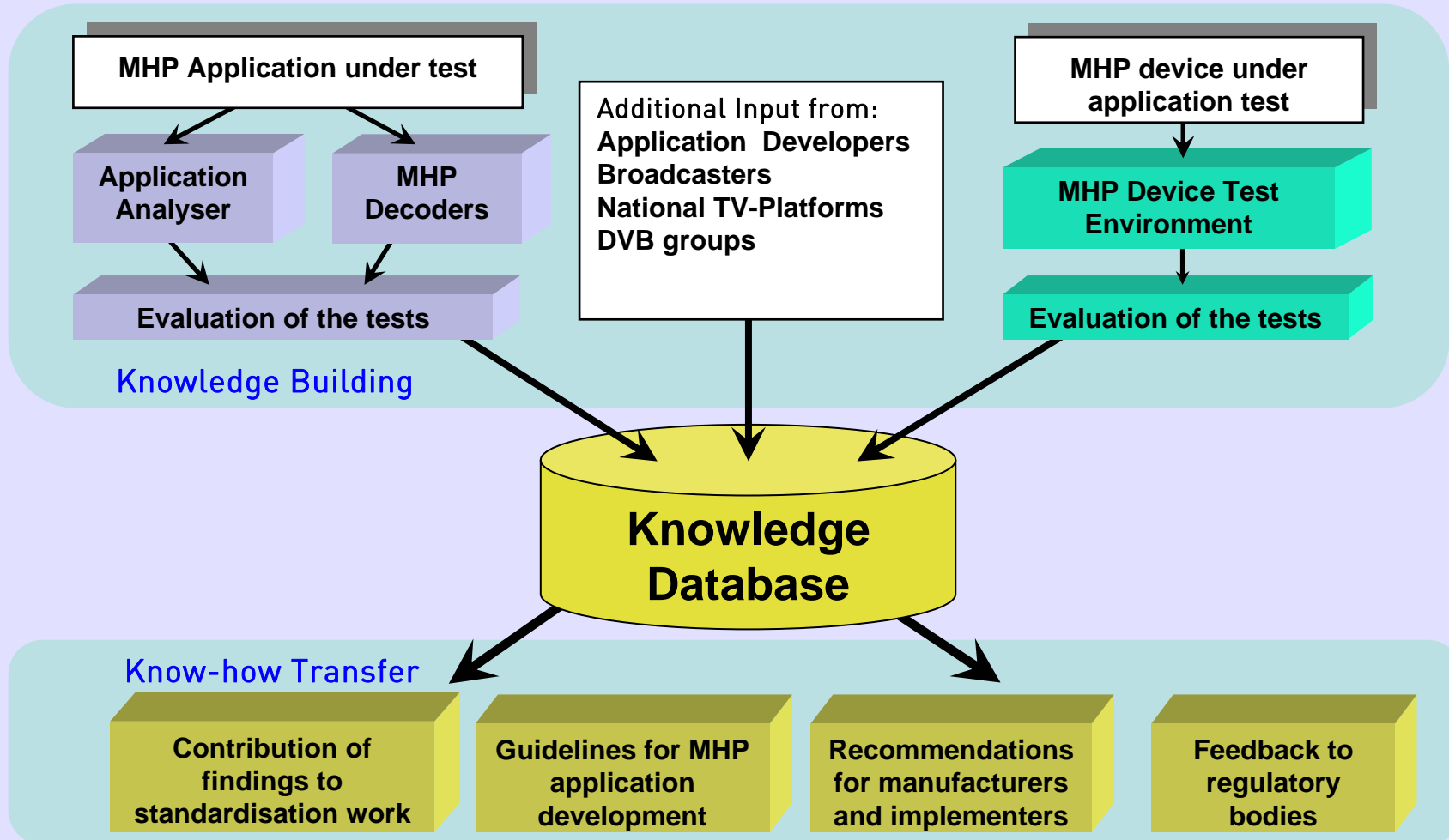
IRT

Co-ordinator: IRT

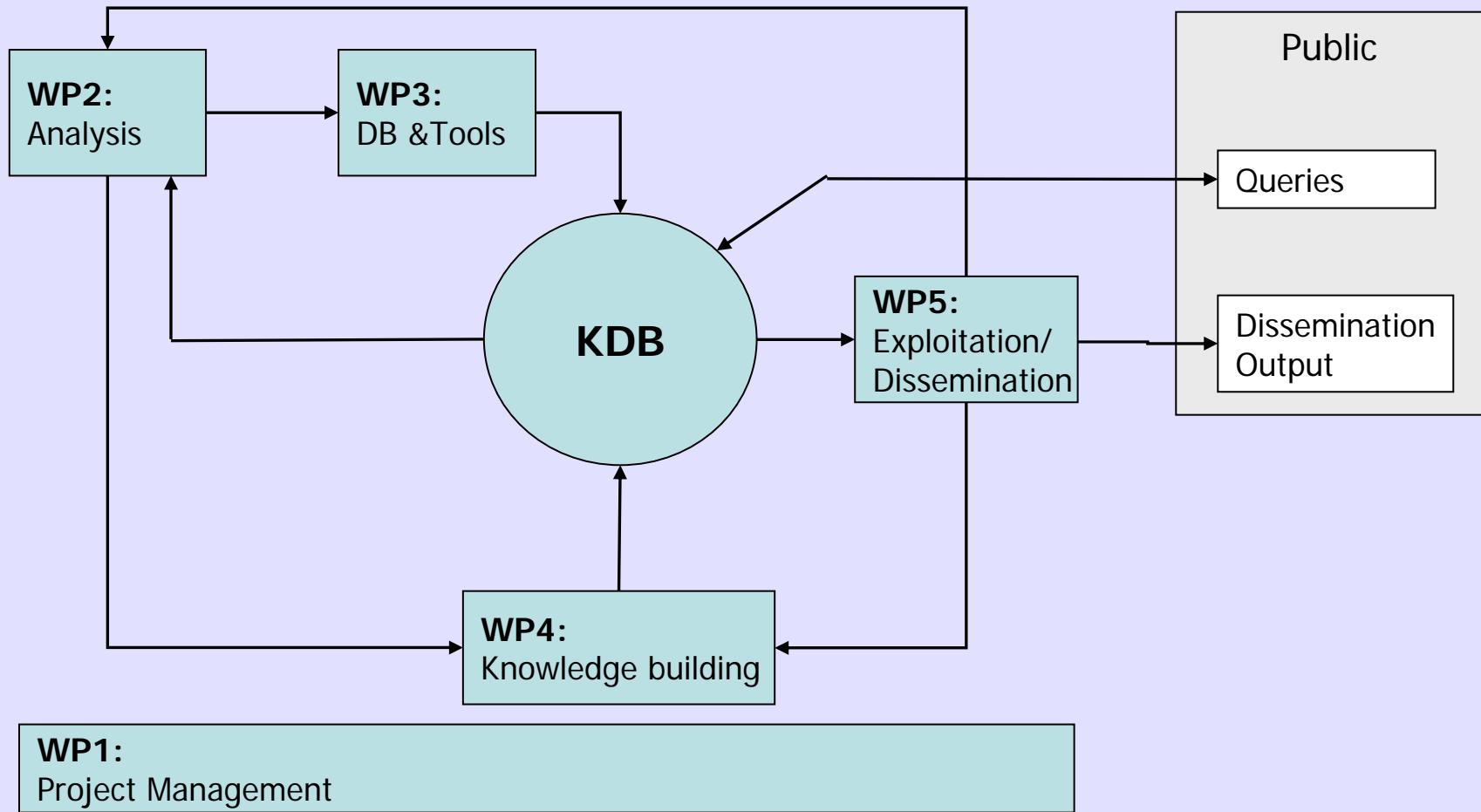
The Main Procedures of MHP-KDB

- Creation of an infrastructure and tools to gain and to collect MHP knowledge
- Filling the database and writing guideline documents covering all known interoperability issues and possible solutions
- Transfer of the won know-how over various paths: searchable database, papers, seminars, demos...

Workflow around the Knowledge Database



MHP-KDB: Workpackage Structure



Status of the Project

- *What has been achieved*
 - Analysis: current status of MHP and areas of interest
 - Database architecture has been defined
 - MHP-KDB Portal & prototype of database have been implemented
- *Current activities*
 - Tools are being implemented and integrated
 - Filling of the database has started (best practise code, ...)
 - Testing and refinement of database (GUI, functions,...)
- *Future Activities*
 - Knowledge building
 - Dissemination (MHP-guide, seminars, demos, etc.)
 - Going live

MHP-KDB at IBC-2004



The MHP-KDB Project

Eleven European partners, known for their competence in broadcasting, IT manufacturing and technology research, have joined forces to establish the collaborative MHP-KDB project. It will tackle one of the most pressing issues in the field of digital interactive television: the harmonised usage and implementation of DVB-MHP (Multimedia Home Platform) by establishing, for all MHP-related issues, a single "point of call" (the MHP Knowledge Data Base, or short: MHP-KDB) for know-how and best practice solutions to all companies and organisations active in this field.

The prime focus of MHP-KDB is to improve the interoperability of MHP implementations and MHP applications. Progress in the interoperability of MHP is the crucial factor for the deployment of interactive digital TV in Europe. This progress will guarantee freedom of expression and cultural pluralism as well as access of all European citizens to the services of the Information Society (eEurope 2002 and 2005 Actions Plans).

MHP interoperability will lead to a wide adoption and usage of the MHP standard and pave the way for a whole range of new e-content formats and e-services – including T-Commerce and T-Learning – accessible via the most commonly used media device world-wide: television (with local and remote interactivity)! The results will be beneficial for the whole media industry as well as for the end-user in fostering a standardised API (i.e. digital gateway) to ensure the development of horizontal markets for services and receiving equipment, in line with Directive 2002/21/EC.



Information Society
Technologies



MHP-KDB Portal: www.mhp-knowledgebase.org

MHP / iTV Seminar on 18 - 19 October

„The Interactive Television Opportunity“

- Organised by MHP-KDB and the EBU
- More than 100 visitors joined the event at IRT
- Several speakers presented research results, case studies and pitches

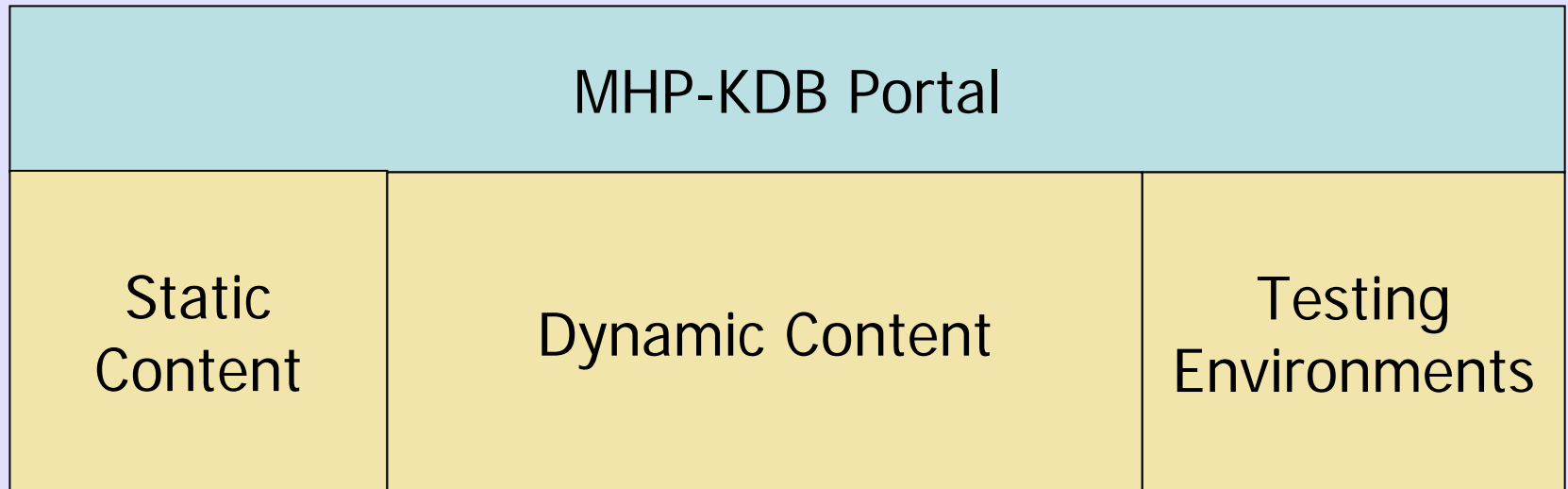
A great majority of visitors...

- evaluated the event as *good* and *useful*
- are pleased with quality and amount of information
- would like to join such event again (after one year?)

Overview

- *Background*
 - What is the market status of MHP?
 - What does the EU say about APIs?
- *The MHP Knowledge Project*
 - Partners – Lifetime – Funding
 - Objectives – Means
 - Workflow – Organisation
 - Status and achievements
- *What the MHP Knowledge Base offers*
 - KDB infrastructure (The KDB Portal)
 - Database features
 - Testing tools / environments
 - Target users and terms of use

The MHP-KDB portal



- MHP Guide
- Reports
- Q & A

- MHP issues & solutions
- Sample code
- Discussion forum

- Application Analyser
- Test centres

Features of the Database (dynamic)

- *Issue* is the central data type
 - *Solution, Source code, Comment* depend on it
 - Can be referenced by *Decoder, Tool, Application*
- Search functions
 - Keyword search
 - Category based search
 - By *Decoder, Tool* or *Application (restricted)*
- Review of content
- Roles and rights model

Validation tools and testing environments

- Tool to measure application loading time
- IRT Application Analyser: compliance checks, result protocol
- AIT / DSMCC analyser
- Return Channel Analysis Tool
- Test centre: MHP decoder farm available via web interface
 - Upload code to DSMCC server and run it on different decoders
 - Control application remotely
 - Get video feedback and debug output
- etc.

Access to KDB Content / Terms of Use

- Written documents & papers:
publicly available
- Access to database:
registered (authorised) KDB-users
- Usage of application modules java source code:
open source, LGPL license agreement
- Access to validation tools / testing environments
free for KDB-users, limited capacity

Target Users and Benefits

MHP application developers

- Reference models, best practice, benchmark applications
- Free sample source code (LGPL)
- MHP guide
- Knowledge exchange

Decoder manufacturers

- Receive a list of problems occurred with THEIR boxes

Broadcasters

- MHP know-how
- Test MHP services on different MHP decoders

Operators

Conclusion

- Public launch of the database soon (improved usability)
- Filling the database has started
- Integration of testing environments is running
- The database will be filled with a lot of MHP-related know-how and best practise code
- MHP-KDB is prepared to deal with input from the whole MHP community

www.mhp-knowledgebase.org

info@mhp-knowledgebase.org

Marcel Langlois
Institut für Rundfunktechnik
langlois@irt.de