

A joint project in Berlin

# DVB-H Pilot Trial in Berlin

Prof. Dr. Claus Sattler  
Project Manager bmco

**NOKIA**  
CONNECTING PEOPLE

**PHILIPS**

UNIVERSAL STUDIOS NETWORKS  
DEUTSCHLAND GMBH

 **vodafone**



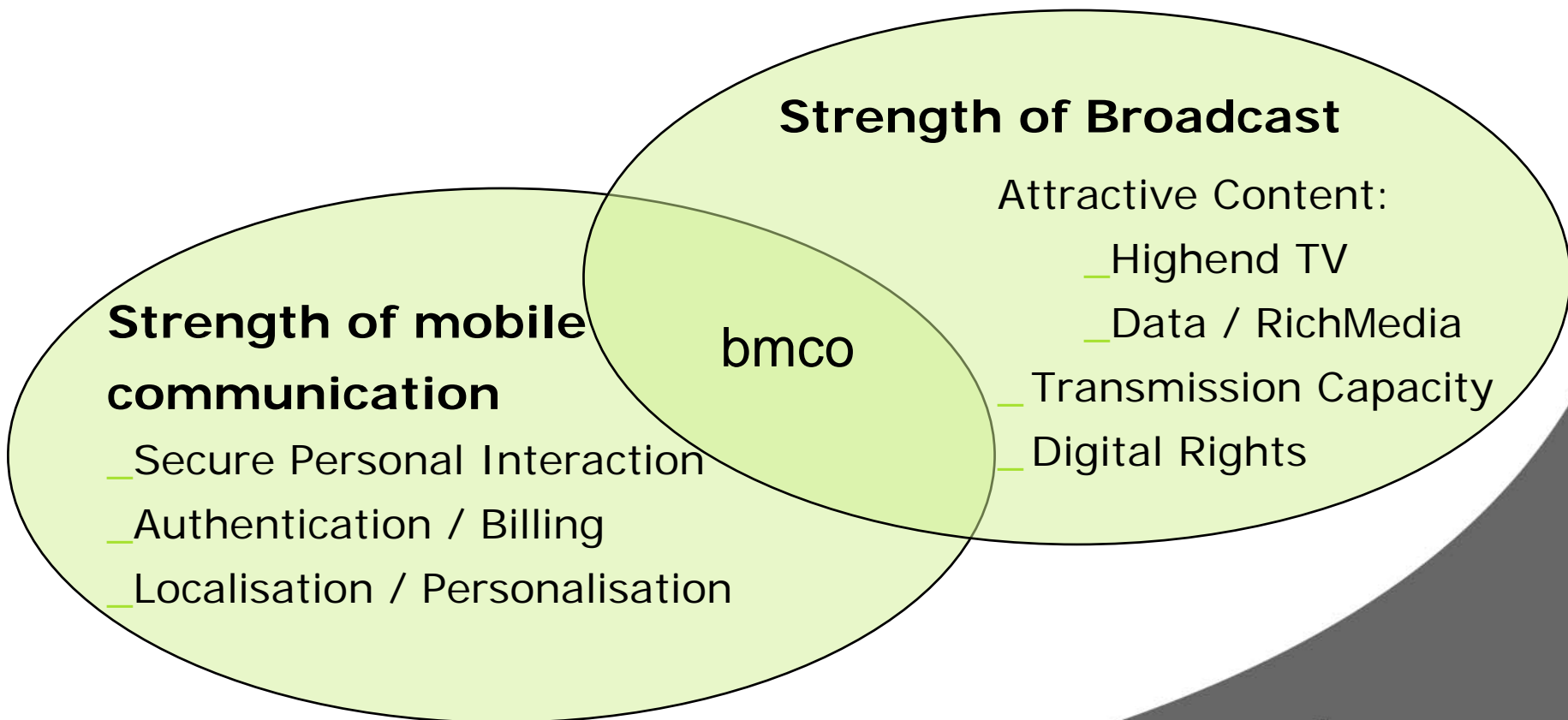
**EBU FORECAST 2004**

10. November 2004, Geneva

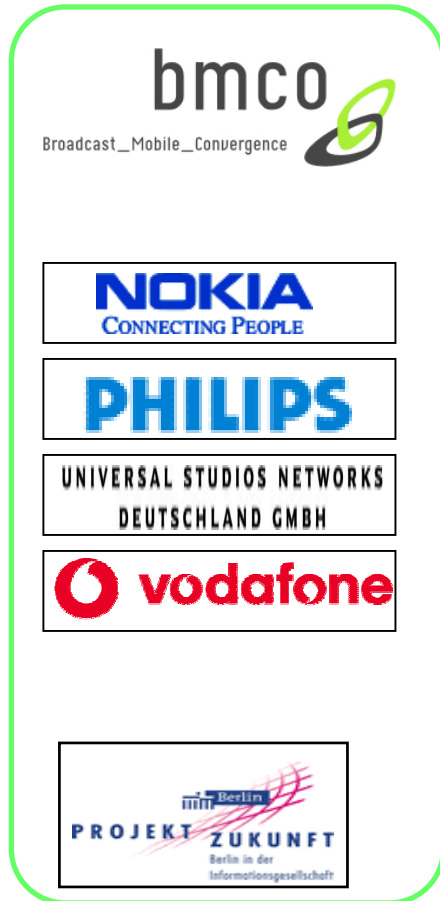
**bmco**  
Broadcast\_Mobile\_Convergence 

# bmco Mission

Broadcast mobile convergence combines the strengths of digital terrestrial TV with the strengths of mobile communication.



# bmco targets



- **Build a convergent platform and operate DVB-T/H +GPRS trial**
- **Evaluate the value chain** for broadcast mobile services
- **Analyse business models**, driving factors and obstacles for commercial hybrid services
- **Identify suitable content formats** and services suitable for mobile reception, partner with broadcasters & CP

# bmco project milestones



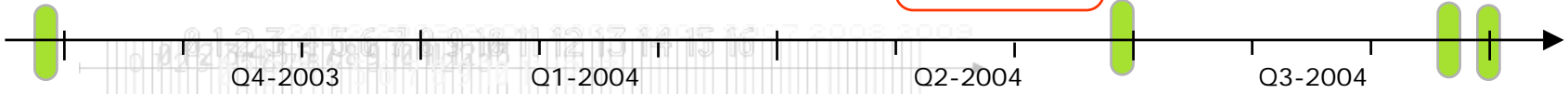
**Contract signing**  
(Aug 29<sup>th</sup>)

**CeBIT**

**Market Research**

**Friendly User Trial**  
July – Sept

**Project end**  
(Sep 30<sup>th</sup>)



**Application development**      **Service provision**  
**System development**      **Business potentials**



# Broadcast Usage Scenarios on Mobile Terminals

The usage scenarios on the move are to expect to be different from that in a stationary environment for different reasons. This influences the content and services that will be consumed.

## Main Differences:

Mobile viewer is not the same as the typical TV viewer  
Shorter time of attention due to usage environment:

‘on the road’- way to office, railway etc.

waiting periods- airports, dates, metro, traffic jams etc.

Narrow margin of attention in busy situations with lots of side noise and actions

The display size of mobile terminal is much smaller than of a stationary device

**\_ Everytime access should be possible**

**\_ Services should**

- **Entertain**
- **Not to be too long (5-10 min.)**
- **Not to be too challenging**



# bmco Friendly User Trial

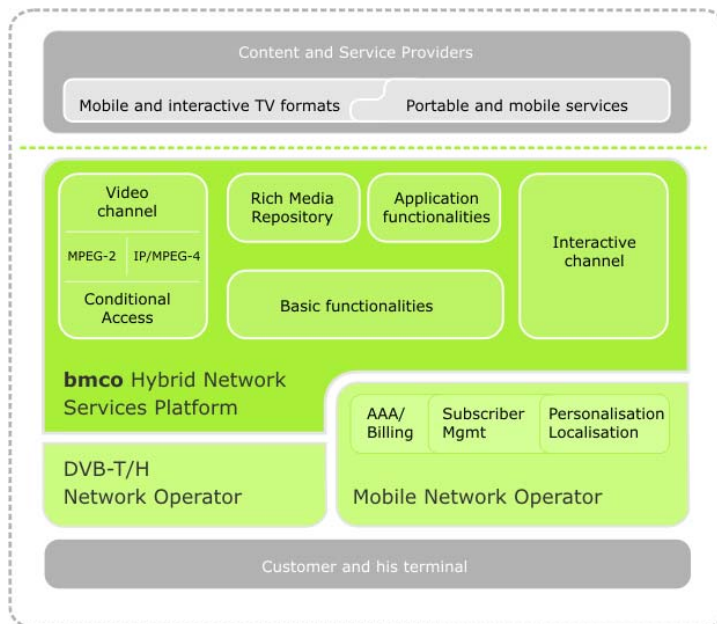
\_ Start: July 2004

\_ Duration: 8 weeks

\_ Devices

\_ Nokia 7700 \*) (20 pieces)

\_ Philips HoTMAN2 \*) (20 pieces)



\_ Quantitative market research

\_ Omnibus (1000 persons)

\_ Auditorium (500 persons)

\_ Qualitative market research

\_ Friendly users

\*) with special functionalities for the trial only

# Services of the Friendly User Trial

## Mobile TV

- 13<sup>th</sup> STREET
- N24
- Eurosport
- RTLshop



## Interactive TV and Streaming

- VIVApplus (Get the clip)

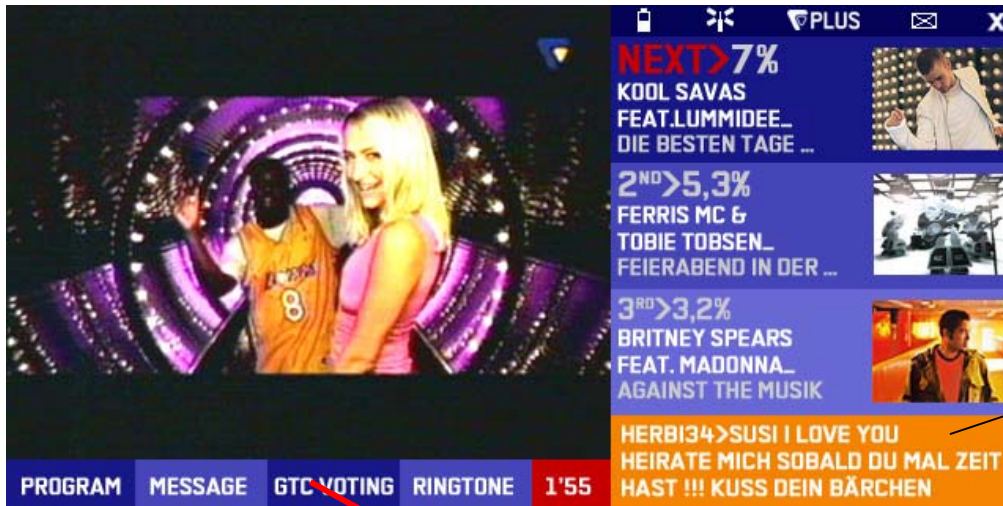


## Interactive Applications

- What's up (Berlin City- and Lifestyle Guide)



# bmco Showcase: VIVA's 'Get the Clip'



## Information & data area- Nex Three Clips:

- Shows ranking of votes.
- The first three positions are shown to the viewer.
- As percentage of votes is changing the information & data area is flexible.

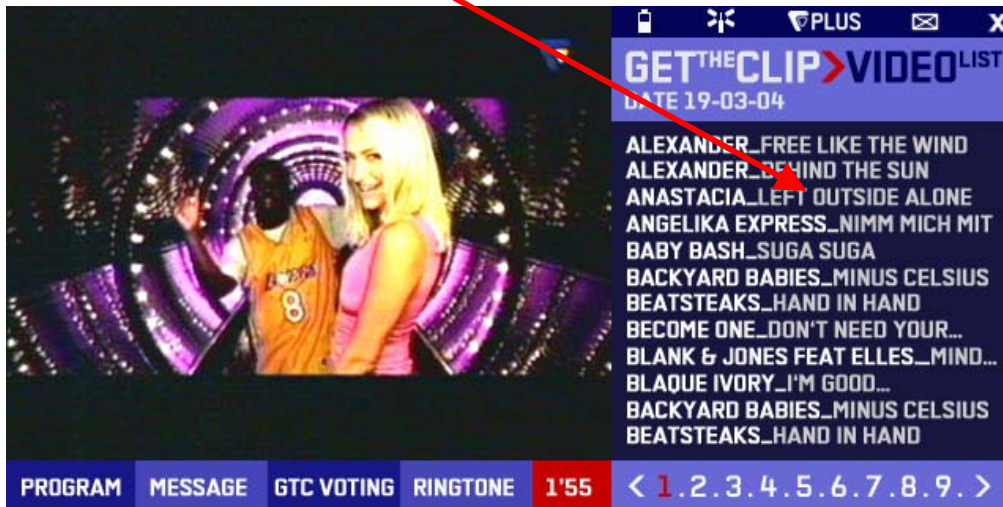
## Ticker displays viewer's messages

## Information & data area- GTC Voting List:

Appears if viewer clicks on The GTC Voting Button.

## Course of action:

- Three-Click voting
- Viewer chooses favourite artist and title from list.
- A messaging field appears.
- Viewer writes down message and confirms his voting choice.





## Response from the bmco friendly user trial

Friendly user trial with 20 users,  
Numbers are indicative,  
not statistically representative!

The friendly users like mobile (interactive) TV services: sport (Olympic games), news and music are the favourite content

In average users spent about 15 minutes to use a single service

Mobile reception everywhere seems to be crucial for user acceptance. A multiplex with mobile indoor coverage is necessary in any case.

# Some findings of the bmco market research

Auditorium Market  
Research

— Acceptance of Mobile TV is high and correlates with age.

- Four out of five respondents regarded mobile TV as a good or excellent idea

— Mobility and flexibility are strongest perceived benefits of mobile TV

- It's a medium for „*on the go*“. Journeys, public transportation and waiting times are the most popular use cases.

— News and regional information are the most demanded content

— Willingness to pay is high

- More than four out of five potential users could imagine to pay significantly for interactive MobileTV services.

— Monthly payment for package of channels is the favoured service model

— Advertising needs to be adapted to Mobile TV

- Low acceptance of advertising, but like in traditional TV, it probably would not really affect usage. Also user-friendly pricing seems to be an argument for „some advertising“

# The challenges

The foundations for market creation have to be laid already today

- Transmission capacity für broadcast mobile services
- Creation of open market models
- Suitable (interactive) formats for mobile and portable usage
- Content right for mobile and portable devices
- Standardisation (IP Datacast)
- Provision of chip sets and terminals
- Mobile in-house reception (network, antenna)
- Formation of the value chain

## bmco project results and next steps

### **All bmco partners assessed the project as very successful**

- All project target were reached
- The understanding for the business, the services and the technology has been increased
- The market research showed high user interest in broadcast mobile convergence services
- The technology was proven to work well

**Each partner will now decide on its next steps toward broadcast mobile convergence.**

# Contact

bmco – Broadcast\_Mobile\_Convergence

Prof. Dr. Claus Sattler

Attilastr. 61-67

D-12105 Berlin

Fon +49\_30\_255 680 -10

Fax +49\_30\_255 680 -99

[info@bmco-berlin.com](mailto:info@bmco-berlin.com)