ADVANCED MBMS FOR THE FUTURE MOBILE WORLD

C-MOBILE Project

http://c-mobile.ptinovacao.pt

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4th of October 2006, Brussels, Belgium
Overview

- Introduction
- Project Objectives
- Project Key Issues
- Issues for collaboration with other projects
- Possible cluster participation
- Contact person for the different clusters/issues
Introduction

- Starting date: March 2006
- End date: February 2008
- Duration: 24 months

Main focus:
- Enhance MBMS (Multimedia Broadcast Multicast Service) as defined in 3GPP Release 6 to support more efficiently advanced broadcast and multicast services

Covered areas:
- User requirements, scenarios and business models
- Radio interface and RAN (UMTS evolution)
- Core Network (supports different type of RATs)
- Interactive content formats and content handling
- Includes simulations and a demonstrator
Project Objectives

- Develop new **high capacity MBMS radio interface technologies**, radio resource management and new topological approaches in the architecture for beyond 3G systems.
- Provide a concept for **integration of a more flexible MBMS architecture into IMS** (IP Multimedia Sub-System) including group management, session management, scheduling, media delivery and transcoding.
- Evolve MBMS, in order to **exploit alternative broadcast bearers** (e.g. DVB-H), when available, in a heterogeneous mobile networks environment, with multi-interface terminals.
- Specify and implement **interactive content formats for MBMS and a secure content management** architecture within and in-between content provider and mobile operator domain.
- **Validate various innovative technical solutions** experimentally or via system level simulations.
- Ensure the commercial viability of mobile broadcast services by identifying the needs of multicast-broadcast users, network operators and content providers and to derive **new business models** for the emerging market of mobile broadcast.
- Contribute to **3GPP and OMA** standards.
The strategic objective of C-MOBILE is to foster the evolution of the mobile broadcast and multicast services by providing enhancements to the MBMS for systems beyond 3G.
Areas covered

Interactive Content Formats

Content Server

Scheduling

Congestion Control

Group Management

IMS

Core IP Network

Service Guide

Stream Services

BM-SC

Mobile Broadcast Operator

New Interface

Content Provider

Joint Conversational Broadcast Bearer Radio Resource Management

High Capacity MBMS+

My Broadcast (Personalized Content)

Radio Network
Issues for collaboration with other projects

- **Covered**
  - Business modelling and scenarios definition
  - UMTS RAN evolution and RRM
  - Evolution of IMS
  - Evolution of MBMS considering the utilisation of multiple type of bearers
  - New content formats allowing for interactivity and personalisation
  - New services and new enablers

- **Not Covered**
  - New requirements on network planning and techniques for different RATs (PLUTO)
  - Spectrum management and cognitive systems (PLUTO)
  - Distributed Testbeds (UNITE)
  - Core Network evolution and advanced architectures (?)
  - Services platforms and seamless services provisioning aspects (?)
  - Location dependent services and context information (?)
  - Satellite component integration
  - Other technologies like DVB-H, DMB and MediaFLO
Possible cluster participation

- **Higher Priority:**
  - Broadcast and Multicast (BMC)

- **Lower Priority:**
  - Mobile Services Platforms
  - B3G System Architecture and Control
  - Broadband Air Interface
  - Spectrum and Resources Management
Contact person for the different clusters/issues

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