

Main Objectives

INSTINCT is a European project in line with the objectives of the newly established DVB-CBMS activities. It is committed to assist DVB in realising the commercial provision of convergent services in mobility with a special focus on the DVB-T, DVB-H and DVB-MHP standards in conjunction with the concept of wireless communications networks (notably GPRS and UMTS) combined with terrestrial DVB broadcast networks. INSTINCT aims to a carrier grade fully specified and open final platform for the delivery of convergent services in collaborating wireless communications and terrestrial broadcast networks. The main DVB configurations that will be considered and tested in INSTINCT are DVB-T, DVB-H and, of course DVB-MHP. INSTINCT is planned in three phases over six years. Each project phases will last 2 years with Phase 1 lasting from 1 Jan 2004 until 31 Dec 2005.

At the end of the Phase 1, the consortium will deliver:

- ✂ A suite of tools for simplified and highly productive content and service creation for hybrid broadcast/cellular networks
- ✂ A system architecture and management functions (network, services)
- ✂ APIs (extensions) enabling inter-working between DTV and Cellular platforms
- ✂ Prototype applications in the area of e-entertainment and e-learning, illustrating the usability of the content and service creation process, system architecture
- ✂ Network equipment and deployment rules that will help early pilot deployments across Europe and wider
- ✂ Prototype broadcast front-ends that will be suited for mobility requirements (low-power, low volume, low cost)
- ✂ Training material and curriculum to teach operational actors in order to provide sufficient ground to support phase 2 objectives.

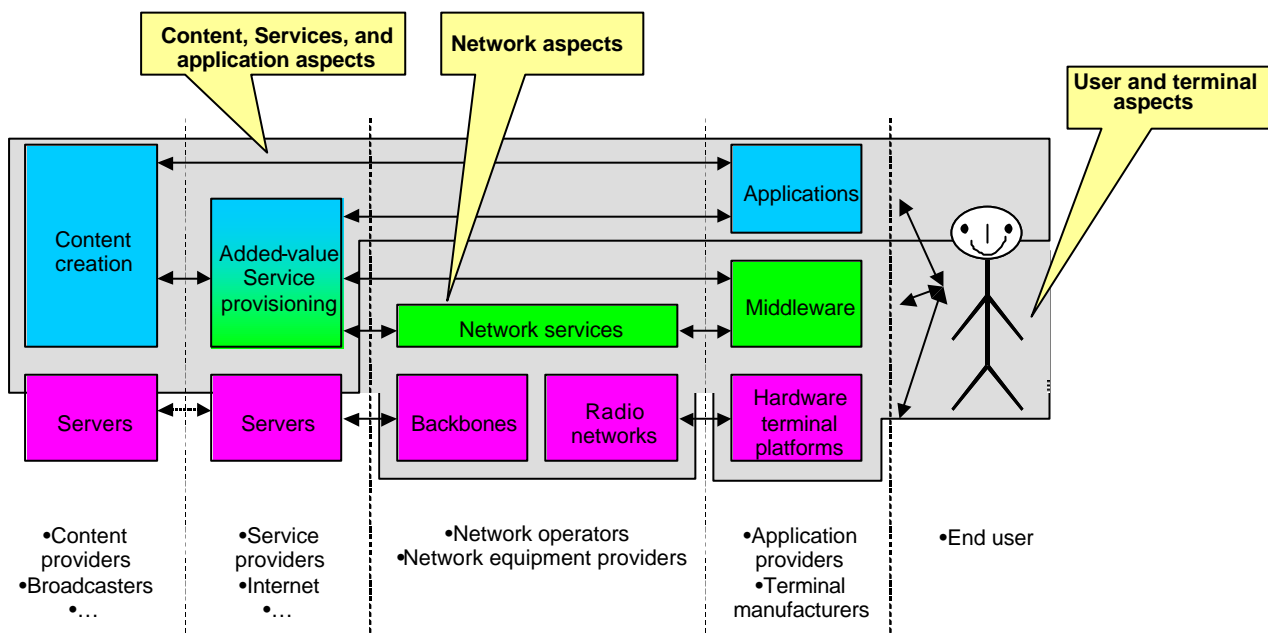


Figure: INSTINCT Concept Diagram

Phase 1 will mainly be devoted to the development of core technologies that have been identified as enablers for the INSTINCT concepts to occur. The main focus will be on equipment-related developments.

The INSTINCT consortium in Phase 1 is expected to be active in the standardization and regulation arena in order to make sure that INSTINCT concepts will realistically fit the environmental landscape. The mechanisms of evolving the consortium towards phase 2 will also be elaborated.

INSTINCT Project

Phase 2 will be devoted to the deployment of the technologies developed in phase 1 to content/service creators, user equipment makers, and operators. Technology development activities will occur, though at a lower intensity, with the purpose of introducing new features that will be fed-back from the demonstrations. Most of the focus will be on content and service creation (and related tools), although equipment aspects and network aspects will still be concerned.

<http://www.brunel.ac.uk/instinct>

The introduction of new partners will be considered for phase 2 in order to match the proposed objectives. At the end of this phase, the consortium will deliver:

- ✂ A range of content, services and applications for the support of consumer e-business, e-government applications, e-learning, e-entertainment, etc
- ✂ Support to the standardization process for solving the detailed inter-operability issues between value-chain actors
- ✂ A number of different devices and configurations for the large-scale validation of user cases.
- ✂ A set of interconnected test beds usable by value-chain actors to validate their services/applications/terminals, etc

Technical Approach

INSTINCT targets the following groups of mobile users: Young urban customers, corporate users, and the general public on the move, walking in a mall or sitting at lunch, in cars and public transport or transiting through any public areas, in which context the INSTINCT concept may allow additional log-in into public WLANs.

For the end user, the INSTINCT concept will provide cheap and easy to use services on a handheld terminal. Mobile Information Device Profile (MIDP) is a Java API that provides the core application functionality required by mobile applications. INSTINCT will investigate how this API can be used and can interact with MHP to develop application software for converged DVB broadcast and UMTS telecommunication services, more specifically, it will be identified and specified how thin client devices such as smart phones can use this API to receive a subset of a full set of a DVB service.

The INSTINCT consortium includes five Brazilian partners. The Brazilian involvement in INSTINCT enables Brazil to enter a phase of active cooperation and transfer of knowledge in view of a growing awareness of DVB technologies in Brazil and develop general and specific partnerships for the next generation of technologies and standards.

INSTINCT builds on a number of strategic EC Framework Programme 5 (FP5) projects, notably, CISMUNDUS, CONFLUENT, MCP (Mobile Car Platform), SAMBITS and SAVANT.

Expected Impact

The INSTINCT project will deliver prerequisites for the commercial exploitation of services combining UMTS and DVB-T, crucial to which is the availability of handheld terminals for high-speed operation with low power consumption. These terminals will provide widely available alternative platforms for Internet access. Thus, INSTINCT will contribute to the achievement of one of the commission's main objectives, giving everybody access to the Internet. More than this, by working for the commercial exploitation of services combining UMTS and DVB-T the participants in INSTINCT will be working together so that Europe becomes a community that has cheap and universal access to the Internet.

The Brazilian involvement in INSTINCT will promote Brazilian industry, possibly by increasing exports, and by fostering digital inclusion should increase the Brazilian consumer market.

Consortium:

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Partners:

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France Télécom R&D [fr]
IRT: Institut für Rundfunktechnik [de]
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Optibase [il]
Rundfunk Berlin-Brandenburg [de]
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TDF: Télédiffusion de France [fr]
TBM: Thales Broadcast & Multimedia [fr]
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