



PROJECT PROFILE

Smart services everywhere

Opening the door to local mobile B2C and B2B services



End-users seek differing services depending on the occasion and their location – yet they want them consistently to accommodate personal likes and dislikes, while also respecting privacy. There is great market potential in fulfilling these desires, but would-be providers lack the creative environment and business models to address it. The LOMS vision is to demolish the main barriers by introducing a framework that will enable even the smallest players to deliver rich and localised services.

Given the ubiquity of IT and the commoditisation of telecoms, end-user expectations of easy access to ad-hoc services in varying circumstances and locations have gradually increased. Moreover, third parties like small companies, independent professionals and other individuals desire to participate in the e-trend by offering their own services. The ability to create service value has become the distinctive market driver for all players. Apart from mastering the current and future wireless network technologies used in enterprises or at

public places, many hurdles face newcomers aiming to introduce, innovative and widely available services to the general public or to targeted customer segments. The goal of the LOMS project team is to remove the principal constraints to obtaining a surge of localised, wireless but Internet-like, creative service offers in which virtually any party can participate as a provider or user.

Open framework for smart services

In this two-year ITEA project, the partners are tackling the following problems that currently inhibit the emergence of a variety of rich local services:

- *Heterogeneous service environments*, ranging from the pure IT environment to sophisticated mobile or fixed-mobile converged telecom networks, consist of essentially different service concepts, platforms, device constraints and security assumptions;
- *Overly environment-specific enabling services* lack common models and procedures for collecting, storing and exchanging e.g. user profile data in a secure and application-independent manner;
- *Unclear business and value chain roles* prevent the assembly of multi-provider user experiences;
- *Service management and governance* is not implemented;
- *Easy service authoring tools* are not available to third-party service creators.

The LOMS consortium's solution to these constraints takes the form of an open service creation framework, in which various

LOMS (ITEA 04012)



Partners

- Communology
- Concentra
- European Software Institute
- Fraunhofer IAO
- Ibermatica
- Infoman
- K.U. Leuven
- ORGA Systems
- SBS C-Lab
- Siemens Networks
- T.U. Berlin
- University of Paderborn
- University of Rostock
- Yellowmap

Countries involved

- Belgium
- Germany
- Spain

Project start

August 2005

Project end

June 2008

Contact

Project Leader:
Marc Roelands
Siemens Networks, Belgium

Email:
marc.roelands@siemens.com



PROJECT PROFILE

enabling services and service building blocks are promoted to a broad audience, allowing for the development of smarter, context-aware and personalised mobile services that are supported by sound, multi-party business models.

Simply adding value

Simple cases that can be envisaged include:

- shopkeepers wishing to attract local people to visit their shops, e.g. by means of rebate vouchers;
- café or restaurant owners wanting to persuade groups of friends to meet at their establishments;
- movie theatres and mobile telecoms operators seeking to combine forces as a means of encouraging subscribers to participate in a virtual movie club with various community actions; and,
- city authorities offering dedicated tourist guidance at points of interest to visitors.

These examples highlight the fact that the complexity associated with telecoms and web services, further complicated by the nature of present enabling service provision, presents a daunting barrier – especially to smaller actors in the multi-stage value chain, as well as to possible users. The major challenge to the success of LOMS could thus be to remove the hurdles without sacrificing the richer and more intuitive service features.

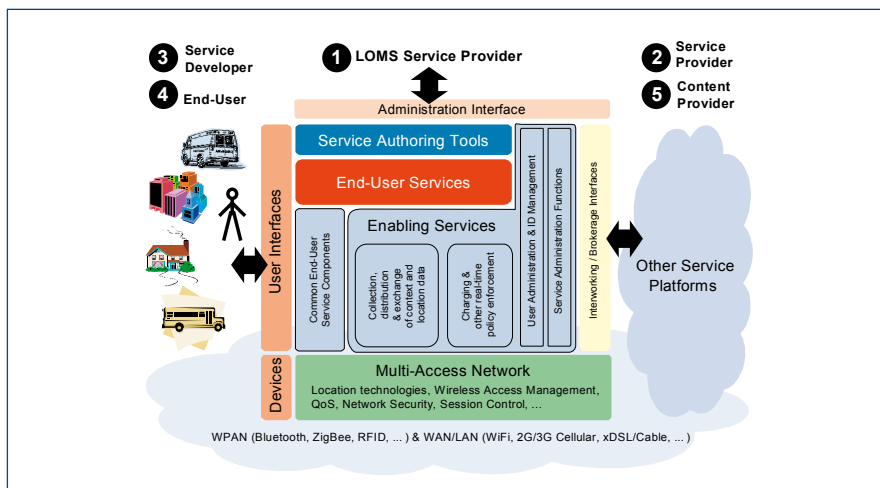
Step by step

As well as defining the market and business model aspects of LOMS, and developing a methodological guideline, the partners intend to focus on specific technological elements requiring attention while building the framework:

- **network technologies** to form the basis of a multi-network platform;
- **generic service framework architecture**, for end-user services to be built on essential enabling services,
- actual **enabling services**, as needed for achievement of the LOMS goals (location context, privacy, ...), and where possible derived from existing network-based functions;
- **service authoring tools** for easy service creation and governance; and,
- **example end-user services** demonstrating the framework's capabilities.

Benefits to all stakeholders

LOMS envisions combining endless service creativity with rich, powerful features of a well-controlled service environment, thus offering clear value both to service providers and users in new business model variations. A wide range of large to small service providers could benefit from such a framework, ultimately even allowing end-users themselves to offer their own content and services. The concept opens a broad perspective for commercial roll-outs throughout Europe.



'SOA+' architectural model

ITEA Office

Eindhoven University of
Technology Campus
Laplace Building 0.04
PO box 513
5600 MB Eindhoven
The Netherlands
Tel : +31 40 247 5590
Fax : +31 40 247 5595
Email : itea2@itea2.org
Web : www.itea2.org

ITEA - Information Technology for European Advancement - is an eight-year strategic pan-European programme for pre-competitive research and development in embedded and distributed software. Our work has major impact on government, academia and business.

ITEA was established in 1999 as a EUREKA strategic cluster programme. We support coordinated national funding submissions, providing the link between those who provide finance, technology and software engineering. We issue annual Calls for Projects, evaluate projects, and help bring research partners together. We are a prominent player in European software development with some 9,000 person-years of R&D invested in the programme so far.

ITEA-labelled projects build crucial middleware and prepare standards, laying the foundations for the next generation of products, systems, appliances and services. Our projects are industry-driven initiatives, involving complementary R&D from at least two companies in two countries. Our programme is open to partners from large industrial companies, small and medium-sized enterprises (SMEs) as well as public research institutes and universities.

