

## 2.5.8 ICT for Networked Businesses

### Objectives

- To develop software solutions adaptable to the needs of local/regional SMEs, supporting organisational networking and process integration as well as improving adaptability and responsiveness to rapidly changing market demands and customer requirements.
- To develop distributed and collaborative ambient intelligence-based network-oriented systems for efficient, effective and secure product and service creation and delivery. The aim is to explore how ambient intelligence technologies and the vision of duality of existence, in the real world and in cyberspace, can result in innovative products, services and business environments.

### Focus

1. *Digital business ecosystems for SMEs.* Research in this area will aim at providing an open-source environment and suitable operative models enabling small- and medium-sized organisations to co-operate, through the implementation of dynamic virtual organisations, in production of software services, components and applications that are suited to local/regional business needs across the enlarged European Union. The work covers the design, development and take-up of flexible and adaptable software applications which are interoperable with proprietary systems, to support the spontaneous composition, sharing, distribution, adaptation and evolution of business solutions and knowledge. Special emphasis will be laid on open-source, distributed, collaborative, self-adaptive and easy-to-use environments for small organisations.

Instruments: STREPs, NoEs

2. *Extended products and services.* Research in this area will investigate what recent progress in ambient intelligence technologies (e.g., agent based systems, knowledge management, smart wireless tagging, and ubiquitous computing) can mean for new products, services and the business environment. The work can cover decentralised architectures of intelligent communicating objects or processes allowing new approaches to collaboration, planning, scheduling, material management, auctioning, tendering, invoicing, workflow management, knowledge management or other business processes. Underlying issues such as interoperability, flexible, secure and robust infrastructures, information and knowledge sharing, modelling and simulation, and organisational change should be given due consideration.

Instruments: IPs, STREPs

3. *Horizontal actions.* This work will address the new legal challenges raised by the fostered networked and collaborative paradigms – especially in the areas of IPR/open source, autonomous software components and the extended products and services concept, which draw an increased public awareness – and the need for advanced tools for the measurement and assessment of the potential benefits of collaborative networks.

Instruments: SSAs, CAs

Priority will be given to domain-specific RTD projects contemplating a time to market above 5 years. Complementarity and consistency with ongoing activities from IST Calls 1 and 2 will be given special attention. International co-operation with third countries will continue to be promoted, in particular with the U.S. (through the research opportunity jointly developed by the EU IST priority and the U.S. Information Technology Research Programme), India (as a follow-up of EuroIndia 2004), China, and Latin America.

Instruments: see above

Indicative budget: IPs, NoEs: 55%; STREPs, CAs, SSAs: 45%

Call information: IST Call 5

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