

## Welcome to CASCOM

The main objective of the project (CASCOM) is to implement, validate, and trial a value-added supportive infrastructure for Semantic Web based business application services across mobile and fixed networks.

The main expected outcomes of the CASCOM coordination framework include

- Innovative research results and techniques for context-aware, agent-based business application service coordination and secure provision in open P2P service environments,
- Implemented context-aware agents using these techniques, and basic co-ordination infrastructure services,
- Service coordination architecture and specifications, and guidelines for using (a) and (b) to develop various context-aware business application services in nomadic computing environments, and
- Prototypically implemented CASCOM service coordination demonstrator for selected health care use case scenario.

The essential approach of CASCOM is the innovative inter-disciplinary combination of intelligent agent, Semantic Web, P2P, and mobile computing technology. Conventional peer-to-peer computing environments are extended with components for mobile and wireless communication. Semantic Web services are provided by peer software agents which exploit the CASCOM coordination infrastructure to efficiently operate in highly dynamic environments. The generic CASCOM coordination support infrastructure includes efficient communication means, support for context-aware adaptation techniques, as well as flexible, resource-efficient service discovery, execution, and composition planning.

The project will deliver a full proof-of-concept implementation of the generic CASCOM service coordination support infrastructure for mobile business application service coordination for mobile users and workers, and a field-trial CASCOM demonstrator for selected pervasive health care application services.

For end users, the CASCOM framework provides more easy and seamless access to semantic Web services anytime, anywhere, by using any mobile computing device. For service providers, CASCOM offers an innovative development platform for intelligent and mobile business application services in the Semantic Web.

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