ACCUS
Adaptive Cooperative Control in Urban (sub) Systems

PROJECT description
ACCUS aims to provide an integration and coordination platform for urban systems in order to optimize their combined performance, thus achieving more flexible, more efficient, safer and more robust integrated urban systems and managing their emergent behaviors.

RELEVANCE CALL 2012 objectives
ACCUS is focused on the integration of urban systems such as intelligent transport systems, city light systems and energy management systems. Rather than developing solutions for specific applications and scenarios, ACCUS will develop a theoretical framework (e.g. semantic interoperability concepts) and a practical framework (e.g. methodology, reference architecture) to design new applications within converged scenarios.

MARKET innovation
The challenge of ACCUS is to provide short-term R&D results with commercial impact within a 3 to 5 years’ range by pushing innovative solutions into the market based on new ICT and new ideas and supporting the development of new applications, by proposing open platform and increased interoperability to the research and industrial community, in order to overcome the present technical barriers hindering these goals.

ACCUS is actively aiming at end user and stakeholder’s involvement.

ACCUS will provide, from its Gdansk Use Case a strong impact in line with the new Smart Cities concepts under evolution, thus reinforcing the EU industrial competitiveness in this area.

TECHNICAL innovation
The ACCUS project will provide an integration and coordination platform for urban subsystems to build applications across urban subsystems. This platform will be created with an adaptive and cooperative control architecture and corresponding algorithms for urban subsystems in order to optimize their combined performances. ACCUS will also provide methodologies and tools for creating real-time collaborative applications for System of Systems.

Different methodologies and tools will be designed for creating real-time collaborative applications for SoS, covering the entire life-cycle of applications for the integrated urban subsystems domain. Results include a reference architecture, platform software, design tools for information extraction and control, model-based design environment for application development, validation tools for application development, monitoring and visualization tools to track the system level operation.

PROJECT COORDINATOR
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WEBSITE
START
June 2013
DURATION
36 months
TOTAL INVESTMENT
€12.02 M
PARTICIPATING ORGANISATIONS
27
NUMBER OF COUNTRIES
8
CZECH REPUBLIC
SLOVENIA
POLAND
THE NETHERLANDS
FINLAND
ITALY
PORTUGAL
SPAIN
POLAND
CZECH REPUBLIC
SLOVENIA