The ITEA 2 project INSIST will develop a smart connected ecosystem for public spaces, where sensor data can be efficiently used not only for proprietary infrastructure services but also to offer value added services based on data fusion from multiple sensor systems in traffic management, advertising and ambience, and business intelligence.

ADDRESSING THE CHALLENGE
The standalone sensor-based installations in urban spaces tend to rely on street-implemented infrastructure like lampposts, cameras or sensors while local businesses have their own display illumination systems and monitor customer behaviour using various sensor systems. The INSIST ecosystem aims to create an architecture that supports real-time, both video and presence sensing-based, an open database where INSIST services can exchange information and events, and support big data analysis (e.g. city planning). The project will focus on societal challenges, such as increasing the level of comfort in the urban environment, and the economic challenges of increasing energy costs and financial pressure on municipalities as well as technical issues, especially integration across multiple systems (traffic management and advertising).

PROPOSED SOLUTIONS
INSIST will draw on the expertise of top, experienced partners in embedded software devices, sensors, smart advertising systems and research institutions to integrate sensor-based services and technology into a smart connected ecosystem that overcomes current limitations. It will increase knowledge and create proof-of-concepts in the unexplored area of the perception of public systems and services in terms of comfort and security. Finally, the INSIST ecosystem with intelligent data analysis and knowledge management features will allow the exploration of new digital services that extend beyond advertising and traffic management. By leveraging the hardware and software infrastructures of the different systems, the resulting solutions will be more affordable and more intelligent.

PROJECTED RESULTS AND IMPACT
The increasing capacity and capability of technology resulting from the INSIST ecosystem will facilitate the rapid emergence of new and improved digital services, creating a paradigm for crafting intelligent and flexible sensor-based systems and services for urban spaces. The potential economic benefits of the results will help companies compete in an ever more demanding market and changing business environment, and enable Europe to take the lead in the design and manufacture of a new type of smart connected ecosystem for public spaces with unprecedented advanced functionality.
ITEA is a transnational and industry-driven R&D&I programme in the domain of software innovation. ITEA is a EUREKA Cluster programme, enabling a global and knowledgeable community of large industry, SMEs, start-ups, academia and customer organisations, to collaborate in funded projects that turn innovative ideas into new businesses, jobs, economic growth and benefits for society.

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