Building an IoT Open Innovation Ecosystem for Connected Smart Objects

EXECUTIVE Summary

bIoTope will establish new open ecosystems that enable companies to innovate in both creating software components and constructing entire IoT systems for connected smart objects – with minimal investment.

PROJECT Objectives

The Internet of Things (IoT) brings opportunities to create new services and products, reducing costs for societies, and changing how services are sold and consumed. A critical obstacle to further IoT innovation is the “vertical silos” that shape today’s IoT landscape. These silos impede creation of cross-industry, cross-platform and cross-organisational services due to their lack of interoperability and openness.

bIoTope lays the foundation for creating open innovation ecosystems by providing a platform that enables companies to easily create new IoT systems and rapidly harness available information using advanced Systems-of-Systems (SoS) capabilities for connected smart objects.

TECHNICAL Innovations

Key research and technology developments addressed in the project:

> New forms of co-creation of services ranging from simple data collection and processing, to intelligent, situation aware and self-adaptive components supporting everyday work and life
> Open and standardised APIs to enable interoperability between today’s vertical IoT silos
> Robust and adaptable IoT framework for security, privacy & trust that facilitates responsible access and ownership of data
> Sustainable socio-technical and business models for bIoTope ecosystems and establishment of a governance roadmap for ecosystem evolution

bIoTope is driven by industrial requirements with large-scale smart cities pilots providing proofs-of-concept of bIoTope enabled SoS ecosystems.

SMART CITY Pilots

- Smart Metering & Energy Efficiency
- Shared Electric Vehicles
- Smart Parking Guidance
- Power Delivery for Emergency Services
- Heat Wave Mitigation
- Charging Station Selection + Route Planning + Electric Car Charging Services
- Self-Managing Buildings
- Smart Air Quality
- Smart Parking Guidance
- Smart Mobility for Emergency Services
- Bottle Bank Management
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PROJECT CONTACT

Kary Främling
Aalto University, Finland
Kary.Framling@Aalto.fi
www.bIoTope-project.eu

DURATION
12 Months

TOTAL COST
9.1M€

CONSORTIUM
21 Organisations