BAAS PROJECT: COVERING THE BUILDING DESIGN- AND OPERATIONAL- PHASE INTEROPERABILITY GAP

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This presentation deals with the FP7 EU project "Building as a Service" (BaaS). The BaaS project is a research initiative which aims at providing a generic solution for delivering standardization and interoperability concepts for building data and open middleware platform covering the Design- and Operational-Phase Interoperability Gap in the application domain of "non-residential buildings." There are two important phases in the building life-cycle: the design phase and the operational phase. Development and integration of ICT technologies can help best coordinate the building design and operation phases. Overcoming interoperability gaps between both phases so as providing a way of integration to use existing and future tools and services would help to enhance building operations and controls. Better design, standardization and interoperability can con-tribute themselves to the goals of improving energy efficiency. Interoperable components working as services at the building level, will lead naturally to the concept of the Building as a Service ecosystem. This presentation aims at analyzing some of the BaaS project topics: (1) building data management and interoperability: data warehouse to collect, organize, store and aggregate static and dynamic data from various in- and out-of-building sources; an IFC-based BIM will act as a central repository for all static building data, and a data warehouse will be used for dynamic data, both schemes mapped using a unique vocabulary. (2) Integration of building energy management Services using Open Service Middleware Platform technologies. A service middleware platform to abstract the building physical devices, support high level services on the cloud and facilitate secure two-way communication between the physical and ICT layers (building) with high level services (cloud).