Upcoming events

The next General Meeting takes place in Brussels on 18 & 19 February 2014, followed by the intermediate technical review of 20 February 2014.

Workshop: 18 September 2014

Organised in collaboration with ECPPM 2014 Vienna. The ECPPM conference series has provided a discussion platform for Research and Development topics of key importance to the Architecture Engineering, Construction and Facilities Management sectors since 1994. This workshop will focus on **Modelling Buildings as EcoSystems** *-the Role of Modelling and Simulation for Optimised Building Operation -*

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Workshop: 10 September 2013
CESBP – Vienna

This workshop was jointly organized by the EU-FP7 projects, BaaS and CAMPUS 21.

The Keynote speaker was Professor Ger Maas, Chairman of the European Construction Technology Platform. The intermediate results of these two projects were presented at the Central European Symposium on Building Physics. Up to 45 participants were recorded during the sessions which represented strong recognition of the project.
Construction Technology Platform.

Main topics examined were:
Achievements
This session looked at the main goals of the BaaS, Campus 21 and other projects which have been addressed during their life-cycle. Experts in the respective knowledge areas presented the achievements of the attendees.
Community of Interest Interaction
How to disseminate and collaborate with the Community of Interest was the topic of discussion in this session. The two salient points were the new business models and the impact of standardised BIM on the development of the aforementioned models for Integrated Energy Management.
Obstacles for Integrated Energy Management
Last but not least, the final topic looked at the integration of the simulation and prediction tools, as well as the continuous commissioning techniques involved in the daily energy management of buildings.

Cesar Valmaseda, BaaS Project Coordinator

Welcome to the 2nd issue of the BaaS project newsletter on the research of ICT solutions for optimizing energy performance in the application domain of "non-residential buildings" in an operational stage. At this second stage, and once all the requirements of the BaaS system have been collected, the design phase of the BaaS prototype will have been covered. From a demonstration point of view, the baseline period has been launched with the collection of real pre-BaaS data in demo buildings. Right now we are in the ideal place to fulfil the implementation of the BaaS prototype until month 24 (April 2014). This is when the real validation of the BaaS system in real pilots starts. This activity is divided into several work packages. The work undertaken in each area is set out below. Again, we invite you to follow BaaS activities by visiting our communication channels: BaaS project website and the BaaS community in LinkedIn.

News of WP1
WP1 is an end-user-driven work package whose aim is to monitor the proper alignment between RTD outcomes and the application domain of BaaS pilots in an operational stage. After the definition of several Theoretical Case Studies that led into a set of Theoretical Use Cases, the activity of this WP during the second year of the project has focused on assessing if the defined requirements are mapped conveniently in specific and advanced use cases. That is addressing the real problematic found in BaaS pilots from an Assessment, Prediction and Optimization point of view.

News of WP2
WP2 in BaaS progressed with the work on the assessment and the analysis of Building performance data with a special emphasis on integrating data standards into the data management. On top of that WP2 BaaS liaised with researchers from other institutions and other EUFP7 projects. During the CESBP workshop in Vienna we collected feedback from industry representatives. Finally we explored ways in which the performance data evaluation can be used in new and advanced business modelling approaches such as continued commissioning. There is a PhD thesis in progress which will be completed in the first half of 2014 on this topic.

News of WP3
In the second half of 2013, WP3 developed the technical specifications of the BaaS system and, in particular, the middleware layer. These specifications encompass the inner workings of the software bundles, the interfaces via which they communicate among themselves and external components and services, and the functionality of the graphical user interface. Moreover, the actual implementation phase has begun. This marks the transition from the conceptual and design stage to the stage in which the BaaS system comes into being in the shape of a working prototype. It is anticipated that the APO service layer can take up routine operation in Q2 2014, providing its assessment, prediction, and optimisation functionalities to all demonstrator buildings of the BaaS project

News of WP4
During the second BaaS year, different scalable simulation models for the three test bed buildings were developed with increased difficulty levels to provide the APO's enough accuracy for their tasks.
In collaboration with WP5 and WP6 the BaaS cases to be solved were completely defined and a number of the simulation models validated with the available instrumentation installed.

BaaS

Publications

BaaS project has presented in several conferences and congresses with the aim of spreading the project and its results to the scientific community. The following are an example of some of the papers submitted.

"An Event-driven SOA-based Platform for Energy-efficiency Applications in Buildings"

"SRC: a systemic approach to building thermal simulation"

"Functional and technological definition of BIM aware services to Access, Predict and Optimise energy performance of buildings"

To view these and other papers please click on the following link.

Documentation/Papers

For events, conferences, papers through 2013, you can find updated information in the public space of BaaS website:
Home/Public Access/Public Documentation/Papers
Home/Public Access/Project News/Conferences

BaaS useful contacts

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www.baas-project.eu

Follow updates and news and benefit from the exchanges among wide-ranging players in the energy efficient community by joining "**BaaS – Building as a Service (Ecosystem) community**" on LinkedIn.
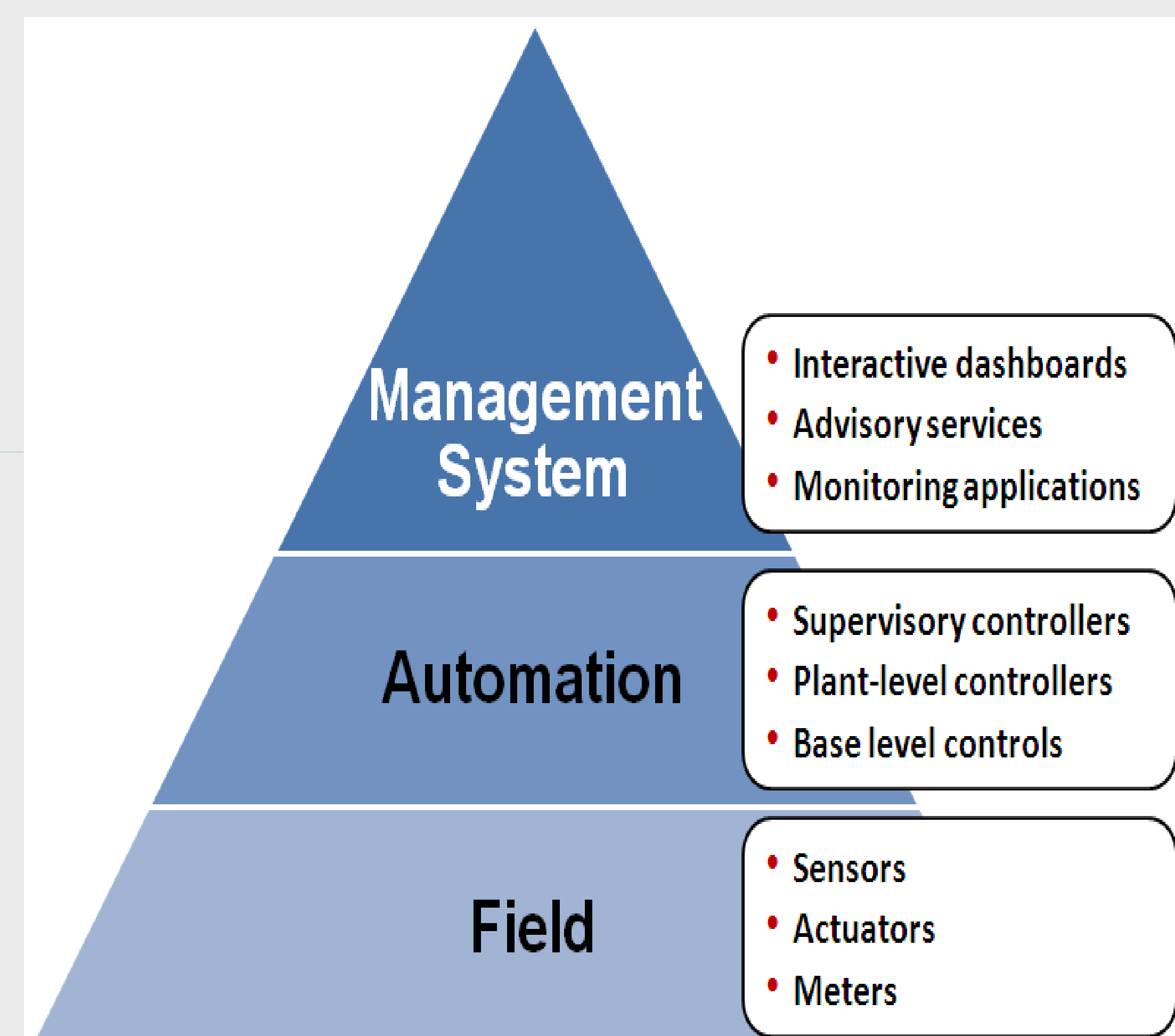
If you would like to become a member of the BaaS Dissemination Network, please contact us at
baas_dissemination@cartif.es

News of WP5

In terms of advanced automation and control (WP5), the main effort has been focused on the functional and interoperability requirements definition. The description of the APO (Assessment, Prediction, and Optimization) services was extended by mathematical formalism. This forms the basis for the development of components for building optimization and control as well as anomaly detection that will be addressed later in the project. Inputs and outputs of selected APO services have been stated explicitly. This allowed the site leaders to declare which APOs are realistically applicable in their sites. The interaction of APO services with simulation models (WP4) and stored data (WP2) has also been elaborated and described.

The researchers from Honeywell and TU Crete have published an article in the Advances in Distributed Computing and Artificial Intelligence Journal (ADCAIJ) titled "Black-Box Optimization for Buildings and Its Enhancement by Advanced Communication Infrastructure". Here an advanced optimization APO is examined and illustrated in a simplified setting. This APO is intended to be developed in the BaaS project.

News of WP6

The main outcomes related to this demonstration work package are the characterization of all the metering and sensing systems, as well as access to weather data for the demo sites. This includes those previously existing and those belonging to the specific installation plans carried out. Also, the definition of the specific KPIs for the demo sites, considering those needed for BaaS operation and those needed for deploying the M&V Plans. Pilot buildings are ready for the implementation and evaluation of the BaaS system and the M&V plan is ongoing.

You can join us here:

➢ Joint BaaS / CAMPUS 21 dissemination workshop in conjunction with CESBP 2014 will take a place in Vienna, 18th September, 2014. There will be three sessions with presentations of achievements and discussions with emphasis on interaction with the members of the stakeholder groups.

BaaS useful contacts:

➢ In respect to BaaS Project coordination and management you can contact the BaaS Project coordinator César Valmaseda from Fundación Cartif, Energy Division; email cesval@diana.cartif.es
➢ In respect to BaaS events participation and related dissemination you can contact the BaaS Workshop Coordinator Professor Karsten Menzel from University College Cork, Ireland; email k.Menzel@ucc.ie
➢ If you have a question related to scientific objectives with emphasis on project APO (Assess, Prediction and Optimisation) you can contact Dimitrios Rovas. Since 2007 he has been Assistant Professor in the Department of Production Engineering and Management at the Technical University of Crete. Dimitrios is leading the WP5 of BaaS.
➢ Email rovas@dpem.tuc.gr