



Co-funded by the European Community Horizon 2020 Program

Project Title:

ORganizational Behaviour improvement for Energy Efficient administrative public offices



OrbEEt

Grant Agreement No: 649753

Collaborative Project

Public Summary

Deliverable	D3.4 : Equipment installation and system integration and testing
Work package	WP3
Task	T3.4 Equipment Installation and Fine-Tuning T3.5 Configuration, Integration and Testing
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Delivery date	2017-08-31
Status	Final
File Name	D3.4 - Equipment installation and system integration and testing.doc



1. PUBLISHABLE EXECUTIVE SUMMARY

The report presents the results of T3.4 Equipment Installation and Fine-Tuning & T3.5 Configuration, Integration and Testing as specified in the Description of Actions [1]. The goal of the document is to provide the summary documentation of the activities performed under these two tasks towards the final deployment of the OrbEEt platform in pilot premises.

T3.4 involves the procurement and actual installation of the hardware infrastructure (sensors, gateways, in-office displays) at the pilot site venues according to the guidelines of D3.1 [5] and D2.2 [4] in close collaboration with pilot site building managers. On-site physical visits for installation, hardware fine-tuning and operation verification were undertaken to ensure venues are ready for the pilot validation phase. More specifically, we are presented the detailed steps towards the hardware installation in pilot premises. The 1st activity performed was purchasing the equipment and further proceeding with the installations at the selected pilot zones. The next step of the work is to periodically check and report the health of the hardware components. In case of abnormal situations, a contingency plan is activated by fixing the error or replacing the equipment

In T3.5, the components developed in previous tasks are further configured, integrated and tested as a system. The cloud software components are linked to the hardware installations at the pilot sites to test their interoperability and communication so as to verify that the technical system is ready for deployment in real-life conditions. The evaluation analysis covers the IML layer as the interface layer with the hardware components, the SEOR engine toward KPIs calculation and the presentation applications of OrbEEt framework (DECs and Behavioural triggering framework).

Selected end-users are engaged to test the in-office displays and the smartphones application in order to provide early feedback and accelerate bug tracking and fixing.

Therefore, in this document we are reporting the activities performed for the integration of OrbEEt components under the common OrbEEt framework and further the deployment and alpha testing of OrbEEt services in pilot sites. The next step of the work is the full scale demonstration and evaluation of OrbEEt at the different pilot sites in WP4.

2. CONCLUSIONS

2.1 Summary of achievements

The first phase of this work is the installation of hardware equipment (sensors, gateways & in office displays) required for the deployment of OrbEEt platform. Along with the installations per pilot site, a fine tuning process is required to ensure the prompt operation of the equipment installed. These activities were performed under T3.4 about equipment Installation and Fine-Tuning.

Then, and in parallel with hardware installations, we have to deploy the integrated OrbEEt software platform in premises. Following the integration of the different system components (developed in D3.1, D3.2 & D3.3) and further configuration of the platform per pilot site, we proceed with different tests to ensure the prompt and reliable operation of OrbEEt framework in real life conditions.

The results from hardware and software deployment in premises are reported in this deliverable, further enabling the mass scale demonstration and evaluation of OrbEEt platform in WP4.

3. ACRONYMS AND TERMS

Acronym	Definition
WSN	Wireless Sensor Network
eDEC	Enhanced Display Energy Certificate
SEOR	Systemic Enterprise Operational Rating
SOAP	Simple Object Access Protocol
CIM	Common Information Model
IML	Information Management Layer
ESCO	Energy Service Company
REST	Representational state transfer
GW	Gateway
RPI	Raspberry Pi
KPI	Key Performance Indicator
GUI	Graphical User Interface

4. REFERENCES

- [1] OrbEEt Project, Description of Actions
- [2] OrbEEt Project, D1.1: End-user & business requirements
- [3] OrbEEt Project, D1.4: Technical architecture and specifications of Technology framework
- [4] OrbEEt Project, D2.2: Pilot Validation & Equipment Installation Plan for Pilots
- [5] OrbEEt Project, D3.1: Deployment plan and installation manual for the energy use data capture and management framework
- [6] OrbEEt Project, D3.2: Gamified User Interfaces
- [7] OrbEEt Project, D3.3: Equipment Installation and Fine-Tuning -Configuration, Integration and Testing

