



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

OrbEEt ETHICS MANUAL

Dissemination level		
PU	Public, fully open, e.g. web	
CO	Confidential, restricted under conditions set out in Model Grant Agreement	X
CI	Classified, information as referred to in Commission Decision 2001/844/EC.	

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1 INTRODUCTION

Energy performance of commercial premises heavily relies on three interrelated spatio-temporal groups of factors: Business processes, facility characteristics & occupant behaviour under specific context. OrbEEt will establish a holistic organizational energy performance framework that will build on top of contemporary and standardized energy performance rating practices by incorporating business and behavioural information. This will be realized through the fusion of three (currently disjoint) worlds:

- a) Building Operational Rating (OR)
- b) Business Process Modelling (BPM) and
- c) Organizational (& Behavioural) Change

treating building occupants as organizational actors as well as the main catalysts of sustainable operations.

To this end, OrbEEt will establish a **trusted Systemic Enterprise Operational Rating framework**, that will also present the ability for real time building monitoring, continuous measurement of the impact of different activities on the overall building energy performance and most importantly, for timely, relevant and personalized feedback that will aim at triggering sustainable behaviours. Thus, within OrbEEt **energy efficiency will be achieved through progressive improvement of organizational efficiency**, while energy performance will be optimally balanced with business performance and occupant preferences to avoid organizational performance degradation or loss of occupant comfort.

2 SCOPE OF THE ETHICS MANUAL

The current Ethics Manual has been produced by the OrbEEt Ethical HelpDesk towards the diffusion and establishment of all the ethical guidelines that should be taken into consideration during the pilots' demonstration, where final users will be involved and data collection is going to take place. The manual will be constantly updated throughout the whole duration of the project based on new ethical issues or problems that may arise. The final version of the Ethics Manual will provide all the needed information and guidelines for the topics addressed by the proposed framework.

This document is intended, first of all, for all the project staff that will participate in the pilot preparation and realization. Software developers, managerial and technical staff members of the pilot partner should carry all their activities in accordance with the guidelines outlined here. Secondly, the manual is directed to all the people involved in the project and especially to final users, who are the ones actually participating in the pilots and may want to be further informed about the guidelines adopted by the project.

3 PILOT EVALUATION AT PILOT PREMISES

In order to calibrate, test and assess the overall project's infrastructures, a Pilot Evaluation Framework will be set up. The task will analyse and evaluate the pilot operation phase across all pilot sites, comprising individual, aggregated and comparative assessments of pilot results, considering energy efficiency, behavioural change, business performance and cost-efficiency (savings vs. costs).

The evaluation will be performed progressively following the distinct steps of the pilot roll-out phase of the project and will involve the end users to achieve holistic assessment. An intermediate impact assessment analysis has been foreseen for M24 in order to inform stakeholders regarding validation activities and early results which will be used to facilitate the interaction between stakeholder feedback and OrbEEt framework development.

Following the initial pilot auditing phase, the Pilots will comprise of multifaceted workplaces, incorporating specific variations of occupancy and building usage patterns, various types of demand loads (e.g. office receptacle loads – office equipment, other types of central building loads like lighting and HVAC etc.). The final selection of different sub-areas will be concluded after a thorough survey of the premises by corresponding consortium partners and under the supervision of the Project Coordinator, ensuring the fact that these areas constitute complete and representative consumer clusters covering all aspects treated within OrbEEt framework. Furthermore, the selection was based on a set of ethical and privacy principles, in conformance with respective laws and ethics deontology.

4 MONITORING AND CONTROL INFRASTRUCTURES

For the need of the pilot realization and assessment, a set of different sensors will need to be installed at various places, to allow both monitoring and control. More specifically, different types of sensors will be installed in terms of: consumption measurements and control along with occupancy monitoring. Two different user scenarios will be evaluated during the pilot tests: group-based and individual. In the group-based scenarios only aggregated data will be collected, while in the individual scenarios data will be related with specific occupants that are placed on specific offices. The main goal of the project is to examine group based business processes and thus individual based scenarios are not within the scope of the project.

The local ethical committees of the pilot partners have been informed for the data collection as part of the study and an ethical approval form has already been signed providing formal permission to the whole procedure.

Given this monitoring, it is essential to protect the rights and the privacy of all the participants. To that end, this Ethics Manual has been composed by the OrbEEt Ethical HelpDesk including all the necessary ethical and privacy guidelines in order to inform all involved parties towards preserving the privacy of the user, protecting his/her private data and limiting the risk of interception to the minimum. This document will be constantly updated throughout the whole duration of the project.

5 LEGISLATION

The OrbEEt project must abide by the ethical rules of the EU, and due to the fact that the pilots are going to take place in different countries, by the respective legislation of the respective countries. More specifically, the legislation that the OrbEEt framework has to conform with is:

- European Union – Directives 95/46/EC & 2002/58/EC
- Austria- Data Protection Act 2000 (Datenschutzgesetz 2000 – DSG2000)
- Germany - Federal Data Protection Act, 2003 (amendments: Federal Law Gazette 2009).
- Spain – Organic Law 15/99 (amendments : Royal Decree 424/05)
- Bulgaria - Personal Data Protection Act, 2001.

6 GUIDELINES

6.1 Personal Data

Personal Data must be:

- processed fairly and lawfully;
- collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes. Further processing of data for historical, statistical or scientific purposes shall not be considered as incompatible provided that Government provides appropriate safeguards;
- adequate, relevant and not excessive in relation to the purposes for which they are collected and/or further processed;
- accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that data which are inaccurate or incomplete, having regard to the purposes for which they were collected or for which they are further processed, are erased or rectified;
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data were collected or for which they are further processed. Within the project, anonymization of personal data will be considered as the goal is the analysis over business roles and processes (user specific profiles will not be considered in the project).

6.2 Acquisition and storage of human related information

- The pilot tests supervisor should inform the participants with clarity about the procedure of the pilot tests, the system operation and the objectives, the data retrieval and storage and the exact dates the tests will be running.
- No sensitive personal data should be collected. In no case more personal data should be collected than the necessary ones, according to the requirements of:
 - Article II Part 2 of the Federal Act concerning the Protection of Personal Data (DSG 2000) (Austria).
 - Section 13 and Section 14 of the Federal Data Protection Act (2003) (amend. Federal Law Gazette 2009) (Germany).
 - Title II Article 4 of the Organic Law 15/99 (amend. Royal Decree 424/05) (Spain).
 - Chapter I Article 2 of Law for Protection of the Personal Data (2002) (amend. in SG. 70/10 Aug 2004, amend. SG. 93/19 Oct 2004, amend. SG. 43/20 May 2005,

amend. SG. 103/23 Dec 2005, amend. SG. 30/11 Apr 2006, amend. SG. 91/10 Nov 2006, amend. SG. 57/13 Jul 2007) (Bulgaria).

- No personal data should be centrally stored, but they should be scrambled/anonymized where possible and abstracted in a way that will not affect the final project outcome.
- No data should be collected without the explicit written consent of the occupants under observation (group-based and individual scenarios).
- No data collected should be sold or used for any purposes other than the current project.
- A data minimization policy should be adopted at all levels of the project and should be supervised by the respective ethical/privacy component. This will ensure that no data which is not strictly necessary to the completion of the current study will be collected.
- Any shadow (ancillary) personal data obtained during the course of the research should be immediately cancelled. However, this kind of ancillary data should be minimized as much as possible. Special attention should also be paid to complying with the Council of Europe's Recommendation R(87)15 on the processing of personal data for police purposes, Art.2 :
“The collection of data on individuals solely on the basis that they have a particular racial origin, particular religious convictions, sexual behaviour or political opinions or belong to particular movements or organizations which are not proscribed by law should be prohibited. The collection of data concerning these factors may only be carried out if absolutely necessary for the purposes of a particular inquiry”.
- The burden for enrolled subjects should not be superior to that imposed by participation in standard market research.
- If employees of partner organizations, or university students serving in any partner university, are to be recruited, specific measures should be in place in order to protect them from a breach of privacy/confidentiality and any potential discrimination; In particular their names should not be made public and their participation should not be communicated to their managers. Any incidental findings should be kept strictly confidential and erased from files under request from the enrolled subject though no incidental findings are expected in the project. Additionally, in the case of enrolment of employees of any partner organization, the recruitment method and informed consent procedures should be particularly stringent to ensure no coercion (not even soft or indirect) is exerted.
- The research to be conducted should be in full compliance with the principles and guidelines of ethics for research projects in Horizon 2020 framework.

6.3 Collection of data from participants

The pilot controller or his/her representative must provide participants from whom data related to themselves are collected with at least the following information, except where he/she already has it:

- the identity of the controller and of his/her representative, if any;
- the purposes of the processing for which the data are intended;
- any further information such as
 - the recipients or categories of recipients of the data,
 - whether replies to the questions are obligatory or voluntary, as well as the possible consequences of failure to reply,
 - the existence of the right of access to and the right to rectify the data concerning them

in so far as such further information is necessary, having regard to the specific circumstances in which the data are collected, to guarantee fair processing.

These guidelines shall not apply where, in particular for processing for statistical purposes or for the purposes of historical or scientific research, the provision of such information proves impossible or would involve a disproportionate effort or if recording or disclosure is expressly laid down by law. In these cases the Government shall provide appropriate safeguards.

6.4 Rights of Participants

- Participants will have the right to access their personal data as well as their extracted profiling parameters.
- Participants will be able to quit the experiment at any point, if they wish, without any consequences. He/she can exercise his/her right to access, correct and delete his/her data at any moment.
- Participants will enroll the pilot tests as part of their daily activities, as no further work is requested for their participation in OrbEEt Project.

Moreover, every participant has the Right to obtain from the pilot controller:

- without constraint at reasonable intervals and without excessive delay or expense:
 - confirmation as to whether or not data relating to him/her are being processed and information at least as to the purposes of the processing, the categories of data concerned, and the recipients or categories of recipients to whom the data are disclosed,
 - communication to him/her in an intelligible form of the data undergoing processing and of any available information as to their source,
 - knowledge of the logic involved in any automatic processing of data concerning him/her;

- as appropriate the rectification, erasure or blocking of data the processing of which does not comply with the provisions of this Manual, in particular because of the incomplete or inaccurate nature of the data;
- notification to third parties to whom the data have been disclosed of any rectification, erasure or blocking, unless this proves impossible or involves a disproportionate effort.

The participant has the Right to Object:

- at any time on compelling legitimate grounds relating to his/her particular situation to the processing of data relating to him/her, save where otherwise provided by national legislation. Where there is a justified objection, the processing instigated by the pilot controller may no longer involve those data;
- to object, on request and free of charge, to the processing of personal data relating to him/her which the pilot controller anticipates being processed for the purposes of direct marketing, or to be informed before personal data are disclosed for the first time to third parties or used on their behalf for the purposes of direct marketing, and to be expressly offered the right to object free of charge to such disclosures or uses.

6.5 Data Confidentiality and Security

- Any person acting under the authority of the pilot controller or of the data processor, including the processor himself/herself, who has access to personal data must not process them except on instructions from the controller, unless he/she is required to do so by law.
- The controller must implement appropriate technical and organizational measures (e.g. PET technologies) to protect personal data against accidental or unlawful destruction or accidental loss, alteration, unauthorized disclosure or access, in particular where the processing involves the transmission of data over a network, and against all other unlawful forms of processing.
- Having regard to the state of the art and the cost of their implementation, such measures shall ensure a level of security appropriate to the risks represented by the processing and the nature of the data to be protected. The carrying out of processing by way of a processor must be governed by a contract or legal act binding the processor to the controller and stipulating in particular that:
 - the processor shall act only on instructions from the controller,
 - the obligations, as defined by the Governments laws in which the processor is established, shall also be incumbent on the processor.

6.6 Installation of sensors - Notification

- All sensors utilized during the pilot should be privacy-preserving and should neither acquire sensitive personal data nor violate personnel's privacy.

- The controller of the study or his/her representative, if any, must notify the supervisory authority (OrbEEt Ethical HelpDesk) before carrying out any data collection process. The information to be given in the notification shall include at least:
 - the name and address of the controller and of his/her representative, if any;
 - the purpose or purposes of the processing;
 - a description of the category or categories of data subject and of the data or categories of data relating to them;
 - the recipients or categories of recipient to whom the data might be disclosed;
 - proposed transfers of data to third countries;
 - a general description allowing a preliminary assessment to be made of the appropriateness of the measures taken to ensure security of processing.
- All offices/areas that will be monitored and controlled with any type of sensors and equipment should be appropriately marked with Notification Posters, describing in detail equipment used and monitoring procedures taking place towards project's objectives.
- All occupants, whose working offices/areas will be monitored during the pilot, should be thoroughly informed and their signed approval should be requested.

6.7 Group-based scenarios

- Only aggregated information should be extracted per office/area. No individual data should be gathered or analysed. For example, when monitoring an office's business patterns, only data concerning the overall business pattern will be considered, not including information about each user behaviour. In a similar sense, when monitoring air-conditioning settings, these data should not be correlated to specific people working in each office but instead to the office/ business process itself.
- All personnel working in the selected pilot sites should have been notified on the project's objectives, the pilot duration, the test procedures, the sensor infrastructures and the occupancy and user preferences profiles extraction procedures that will take place and have signed the respective consent form before the data acquisition process begins.
- In case one or more people working in a selected space (e.g. office) refuse to participate in the group-based scenarios, the responsible partner for pilot audits along with the project coordinator will decide on excluding/substituting this office with one with similar characteristics, or consider to proceed to temporary personnel shifting in other offices for the time period the pilot tests will take place (the duration will be from a couple of weeks to no more than a few months).

6.8 Individual scenarios

- Individual scenarios are not a high priority for the project and thus the goal is to eliminate these case scenarios.

- If any case though, individuals should be thoroughly informed about the scenarios to be implemented during the pilot tests.
- Individuals should be clearly informed that their areas will be monitored and data related to their business processes will be captured following the ethical process defined. They should also be notified about with the respective details of the individual data acquisition process.
- Individuals should be clearly informed that no user specific profiles will be defined as the goal of the project is the definition of role (business) based profiles.
- Individuals should have signed a consent form before the actual pilot realization phase.
- Individuals should be informed that they can withdraw at any time with no obligations, except the return of any given equipment.