

## D7.13

### Project newsletter 4

#### [Websites, patents filling, etc.]

**Authors:** Tiziana Buso (REHVA)

**Co-Authors:** Theoni Karlessi (UoA), Manuel Krempf (E7), Michele Liziero (ET), Stefan Hindrichs (SYNA), Christina Spika (IGS), Niels Delaere (F4), Marco Pietrobon (eERG-PoliMI)

**Abstract:** This deliverable reports the contents of the 4<sup>th</sup> QUANTUM newsletter, issued in December 2017.

| PROJECT DATA            |   | DELIVERABLE DATA           |                                |
|-------------------------|---|----------------------------|--------------------------------|
| <b>Project</b>          | QUANTUM   | <b>Document Identifier</b> | D7.13_Newsletter4_171218_V1_TB |
| <b>Project number</b>   | 680529  | <b>Version</b>             | V.1                            |
| <b>Lead beneficiary</b> | Technische Universitaet Braunschweig (IGS)  | <b>Due Date</b>            | 31.12.2017                     |
| <b>Duration</b>         | 01.01.2016 - 31.12.2019   | <b>Release Date</b>        | 18.12.2017                     |
| <b>Funding code</b>     | H2020-EeB-2014-2015/H2020-EeB-2015  | <b>Dissemination level</b> | Public                         |
| <b>Funding</b>          | This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 680529. |                            |                                |

The sole responsibility for the content of this paper lies with the authors. It does not necessarily reflect the opinion of the European Commission (EC). The EC is not responsible for any use that may be made of the information it contains.

## QUANTUM Consortium



**TECHNISCHE UNIVERSITÄT BRAUNSCHWEIG (IGS)**  
POCKELSTRASSE 14, BRAUNSCHWEIG 38106  
Germany



**ENESA a.s. (EA)**  
U Voborniku 852/10, Praha 919000  
Czech Republic



**COWI A/S (COWI)**  
PARALLELVEJ 2, KONGENS LYNGBY 2800  
Denmark



**NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU (NTNU)**  
HOGSKOLERINGEN 1, TRONDHEIM 7491  
Norway



**ETHNIKO KAI KAPODISTRIAKO PANEPISTIMIO ATHINON (UOA)**  
6 CHRISTOU LADA STR, ATHINA 10561  
Greece



**EKODOMA (EKO)**  
Zentenes street 12-49, RIGA 1069  
Latvia



**ENERGY TEAM SPA (Energy Team)**  
VIA DELLA REPUBBLICA 9, TREZZANO SUL NAVIGLIO  
20090  
Italy



**FACTOR 4 BVBA (Factor4)**  
KRUISSTRAAT 127, DUFFEL 2570  
Belgium



**e7 ENERGIE MARKT ANALYSE GMBH (E7)**  
WALCHERSTRASSE 11/43, WIEN 1020  
Austria



**SYNAVISION GMBH (SYNA)**  
SCHOENAUER FRIEDE 80, AACHEN 52072  
Germany



**ČESKÉ VYSOKÉ UČENÍ TECHNICKÉ V PRAZE (CVUT)**  
ZIKOVA 4, PRAHA 16636  
Czech Republic



**FEDERATIE VAN VERENIGINGEN VOOR VERWARMING EN LUCHTBEHANDELING IN EUROPA VERENIGING (REHVA)**  
De Mulderij 12, Leusden 3831 NV  
Netherlands



**BUILDING RESEARCH ESTABLISHMENT LTD (BRE)**  
BUCKNALLS LANE, WATFORD WD25 9XX  
United Kingdom



**POLITECNICO DI MILANO (eERG-PoliMI)**  
PIAZZA LEONARDO DA VINCI 32, MILANO 20133  
Italy



**History of changes**

| CHAPTER NO. | DESCRIPTION OF CHANGE |
|-------------|-----------------------|
|             |                       |
|             |                       |
|             |                       |





**Table of Contents**

- 1 WELCOME TO QUANTUM 4<sup>TH</sup> NEWSLETTER – DECEMBER 2017 ..... 5
  - 1.1 What is QUANTUM? ..... 5
  - 1.2 Advocating Quality Management ..... 5
    - 1.2.1 Quality Management in the ongoing EPBD review ..... 5
    - 1.2.2 New guideline for the quality management of HVAC installations published by German government..... 5
  - 1.3 Applying Quality Management..... 5
    - 1.3.1 WELL endorses Comfortmeter for surveying Occupant Indoor Environmental Quality ..... 5
    - 1.3.2 A smart nZEB passive house in a warm climate as QUANTUM demo building ..... 6
    - 1.3.3 Digital Quality Management for Commissioning of a Research Building ..... 6
    - 1.3.4 QUANTUM field study results @ Next Facades Conference ..... 6
  - 1.4 Promoting Quality Management..... 7
    - 1.4.1 QUANTUM conquers Rome..... 7
    - 1.4.2 Showcasing QUANTUM tools for building performance optimization..... 7
  - 1.5 Digitalizing Quality Management ..... 7
    - 1.5.1 QUANTUM @ “Digitization as a driver for process optimization” congress ..... 7
    - 1.5.2 Synavision enters in partnership with MBS for automated data collection..... 7
  - 1.6 Join QUANTUM on Social Media! ..... 7
  - 1.7 Contact ..... 7





# 1 WELCOME TO QUANTUM 4<sup>TH</sup> NEWSLETTER – DECEMBER 2017

## 1.1 What is QUANTUM?

Quality Management Systems (QMS) have big potential to reduce the gap between the calculated and actual energy performance of the European building stock.

The EU funded project [QUANTUM](#) is developing and will demonstrate pragmatic services and appropriate tools, suitable for widespread use, **to support QMS** for building performance in the design, construction, commissioning and operation phases.

## 1.2 Advocating Quality Management

### 1.2.1 Quality Management in the ongoing EPBD review

During the REHVA Brussels Summit Conference, the Managing Director of REHVA Anita Derjanecz listed the pros and cons of the ITRE report - starting point for the ongoing EU trialogue on the review of the Energy performance of Building Directive (EPBD) - from a Quality Management perspective, mentioning the role of QUANTUM project in addressing the shortcomings.

| ITRE REPORT ON EPBD REVIEW: EFFECTS ON QUALITY MANAGEMENT   |  |
|---|--|
| PROs  | CONs   |
| <ul style="list-style-type: none"> <li>Mandatory regular inspection for heating and cooling systems remained</li> </ul> | <ul style="list-style-type: none"> <li>Ventilation/IEQ related aspects not included</li> </ul>   |
| <ul style="list-style-type: none"> <li>Advice as alternative to inspection deleted</li> </ul>                           | <ul style="list-style-type: none"> <li>No improvements in the scope and general requirements of an independent inspection process</li> </ul> |
| <ul style="list-style-type: none"> <li>Strong support for the use of electronic monitoring and BACS</li> </ul>          | <ul style="list-style-type: none"> <li>Buildings with BuildinAC systems shall be exempted from regular inspection</li> </ul>                 |

### 1.2.2 New guideline for the quality management of HVAC installations published by German government

The new guideline for the Quality Management of HVAC installations, published by the German Federal Ministry of Construction, defines for the first time the process from building design planning to commissioning and operation with a clear and precise tender document, and establishes the role of an independent quality manager.

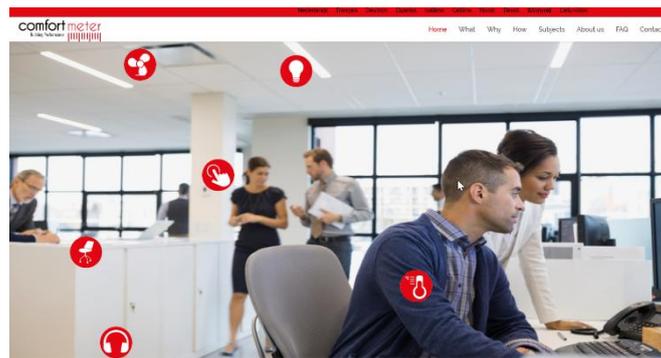
QUANTUM partners synavision and iGS TU Braunschweig contributed to these guidelines and are now holding workshops throughout Germany to support their implementation. **[Read more]** On 17 and 21 November workshops were held in Braunschweig, Frankfurt am Main and Berlin and more (national and international) workshops are in progress.

## 1.3 Applying Quality Management

### 1.3.1 WELL endorses Comfortmeter for surveying Occupant Indoor Environmental Quality

The [International WELL Building Institute](#) has recently accepted the QUANTUM tool [Comfortmeter](#) as equivalent to the Occupant Indoor Environmental Quality Survey which is required in the WELL certification procedure. This is a major step forward in the worldwide commercialization of Comfortmeter, as the WELL Building Standard is changing the way people think about buildings. **[Read more]** The WELL scheme explores how design, operations and behaviours within the places where people work and live can be optimized to advance human health and well-being. These goals fit well with Comfortmeter, which is a Post Occupancy Survey tool applied in Europe in various standards to measure the comfort satisfaction of building occupants.





### 1.3.2 A smart nZEB passive house in a warm climate as QUANTUM demo building

The net zero energy building *Progetto Botticelli*, located in Sicily, has been selected as demo building to test the QUANTUM project tools. This residential building is Passivhaus-certified and it represents an interesting example of nZEB in Mediterranean climate. The building implements a monitoring and control system designed by eERG Group of Politecnico of Milano. [\[Read more\]](#) Energy and comfort data analysed during the first monitoring seasons showed high level performance both in heating and cooling seasons. The application of QUANTUM tools is expected to further enhance the building performances.



### 1.3.3 Digital Quality Management for Commissioning of a Research Building

synavision has successfully applied its software tool on the commissioning process of the HVAC installations of the new research center for applied materials (CAM) of the University of Heidelberg, Germany. [\[Read more\]](#) The 22 million Euro building has implemented a highly complex energy concept. Thanks to synavision, it was possible to detect optimization potential in terms of energy and comfort and to support the operation and maintenance staff on site.

### 1.3.4 QUANTUM field study results @ Next Facades Conference

QUANTUM partners from University of Athens and Factor4 presented partial results from the comfort assessments in QUANTUM demo buildings at the [Next Façades Conference](#), held in Munich on 7 November. The field investigation was performed with the Comfortmeter tool, which allowed the assessment of possible causes and solutions to users' dissatisfaction.



## 1.4 Promoting Quality Management

### 1.4.1 QUANTUM conquers Rome

On 27 November Energy Team was invited to the Italian launch of the H2020 *Secure, Clean and Efficient Energy Work Programme 2018-2020*, held by APRE (Italian Agency for promotion of EU research) in the ENEL conference centre in Rome. The event was also used as an opportunity for Energy Team to present to the Italian Banks Association the link between Quality Management, value of building and reducing risk in financing energy efficiency projects.

### 1.4.2 Showcasing QUANTUM tools for building performance optimization

On 14th November 2017, e7 organized an in-house event to introduce various approaches for building optimization to potential customers. The use of the QUANTUM tools was a key element. The application was illustrated using the example of the demonstration building project and was showcased by a statement from the buildings' internal facility manager.

## 1.5 Digitalizing Quality Management

### 1.5.1 QUANTUM @ “Digitization as a driver for process optimization” congress

Digitalization in the construction sector offers a huge opportunity for introducing quality management services in building projects. On November 21<sup>st</sup>, e7 further presented the QUANTUM project during the ‘Digitization as a driver for process optimization’ congress, hosted by the information platform IG Lebenszyklus Bau.

### 1.5.2 Synavision enters in partnership with MBS for automated data collection

Due to the variety of protocols used in building automation operators are struggling to use digital solutions and to support customers in gaining easy data access. To find a solution to this issue, synavision recently started a partnership with MBS. MBS is a company specializing in the development of Gateways which are able to access, read, connect, convert and send all the information required by synavision for the digital performance analyses of buildings.

## 1.6 Join QUANTUM on Social Media!

Like and share QUANTUM news on LinkedIn and Twitter to stay up to date!

## 1.7 Contact

NL-2016-12-02 | Stefan Plessner | [contact@quantum-project.eu](mailto:contact@quantum-project.eu) | +49 531 391 3555