

**PROJECT DOCUMENT**

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**Report**

**Workshop CENSE-REHVA, May 15, 2009 in Amsterdam**

*Which role do the HVAC-societies play in implementing the EPBD on the national level?*

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To: All Partners and Associated Partners

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**IEE-CENSE**

*Leading the CEN Standards on Energy performance of buildings to practice  
Towards effective support of the EPBD implementation and acceleration  
in the EU Member States*

Supported by

**Intelligent Energy**  **Europe**

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### Disclaimer:

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Moreover, if this is an interim report: the results are only preliminary and may change in the course of the project based on further feedback from the contributors, additional collected information and/or increased insight.

## **1 Executive summary**

### **1.1 The CENSE project**

The objective of the IEE CENSE project (2007-2010) is to accelerate the adoption and improved effectiveness of EPBD related building energy performance standards from CEN in the EU Member States.

The IEE CENSE project initiates a number of international/regional workshops:

- to present their work plan and the interim results on information on the CEN standards
- to get feedback from the Member States or other target groups on possible obstacles to use of the standards and on good practice examples
- to identify together the ways for an increased convergence

### **1.2 Aim and programme of the workshop**

The objective of the workshop is to give REHVA members a status on the project showing the results of questionnaires and other activities.

The objective of the workshop is to obtain delegates feedback and thoughts on the implementation of the EPBD and adoption of the EPBD related CEN standards.

Before the REHVA-GA a questionnaire will be send to the REHVA members. The questionnaire will deal with the role the national HVAC societies are or have played on the implementation of the EPBD on national level. One of the focuses of the questionnaire and the workshop will be the implementation of the inspections of HVAC systems. The results of the distributed questionnaire will be discussed

Another objective is to transfer information between HVAC-societies regarding active involvement in the implementation of the EPBD.

### **1.3 Conclusions and recommendations**

The workshop was well received by the participants.

The Workshop strongly recommended a more active role to REHVA in

- promoting the use of EPBD standards
- revision and further improvement of the EPBD package – also to make the standards more applicable to national legislators

- actions towards EU also in further developments in EU legislation – mainly the EPBD and EuP Directives – to give a way towards harmonised framework for all Europe in both regulations and practices.

REHVA was also strongly encouraged to take initiatives towards the EU to take up the current and future needs to develop the EPBD further, and to make sure that the EPBD will be interpreted in a reasonable way. For example, the recast EPBD will give an option to skip the inspections if the system is "monitored and controlled" – probably leaving the door open for too many interpretations, and probably giving not much help to the lack of qualified inspectors.

## 2 Aim and programme of the workshop

The objective of the workshop is to discuss the involvement of national HVAC societies in the implementations of the EPBD and use of the related CEN-standards.

### 2.1 Background

Several projects under the EU Intelligent Energy for Europe (IEE) are dealing with the implementation of the EPBD and use of related CEN standards. One project IEE-CENSE has the objective to lead the CEN Standards on Energy performance of buildings to practice by effective support of the EPBD implementation and acceleration in the EU Member States.

For more about CENSE, see: [www.iee-cense.eu](http://www.iee-cense.eu)

### 2.2 Objective

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## 3 Content of the workshop

### 3.1 Presentations

#### ***Products and findings from CENSE to date (introduced by Bjarne Olesen)***

Bjarne Olesen briefly summarised the background and present status of the CENSE project. All background material is available at the CENSE website, including information papers and power point presentations now available for most of the 44 standards published.

For the "clusters of standards" (typically there are some 3 to 8 standards in a cluster, e.g. inspection standards can be regarded as one cluster), questionnaires have been sent to the Member States, to representatives of different target groups, mainly

- universities
- practitioners (directly, or through HVAC societies)
- legislators

Before questionnaires for clusters or individual standards, a more general questionnaire was sent out. Bjarne Olesen presented the main results of the questionnaire. As a result, it can be stated that (roughly speaking), the EPBD standards' level of adoption is around 25%. One confusing issue is that several Member States are still preparing national standards in parallel, or even instead, even though this is against the main principles of European standardisation. It may be possible to stop this "illegal" situation in the future, but more difficult is to prevent putting the same requirements in national building regulations. So, more pressure should be put through organisations like REHVA to accelerate full harmonisation.

***CEN and ISO standardisation activities related to the EPBD (Bjarne Olesen):***

The original work for the EPBD standards was done by 5 CEN TC's between 2004 and 2007. The number of Work Items (some of these were split during the work, and some merged, so the numbers of standards differ from these figures) by different Technical Committees were:

<p>-7 standards under TC 156 "Ventilation for buildings" -19 standards under TC 228 "Heating systems" -12 standards under TC 89 "Thermal performance" -1 standard under TC 169 for lighting -1 standard under TC 247 for building automation.</p>
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There are now plans to develop these EPBD standards into International (ISO) Standards. A joint working group has been established between ISO TC 163 (mainly from "Building" point of view) and ISO TC 205 (mainly from the "Technical systems" point of view). Several work items have been specified and now several task groups are being formed.

Transferring the work to ISO can, generally speaking, be seen as an opportunity, because Europe is the global leader in most of the issues in energy performance of buildings. In the light of this, right now no radical changes are foreseen in transferring the work to ISO, provided that European experts involved in the EPBD standard work can maintain their activity also in ISO. In the best case, the work can proceed in parallel in both CEN and ISO, aiming at global standards, without any duplication of work.

**FEEDBACK FROM TECHNICAL AND RESEARCH COMMITTEE (TRC, Jorma Railio)**

The CENSE project was introduced at the TRC meeting held right before this Workshop. In the discussion at TRC, representatives from 11 countries gave their summaries of the situation about adoption of EPBD standards. The general feeling was that the standards are not yet well known, and neither fully referred to in national regulations nor adopted in practice. Some countries use and even revise national standards in parallel, or give an own method in national regulations and in addition may allow the use of EPBD standards as an alternative way. Yet, some of the standards are used in most countries, or at least the principles of these standards were adopted in national regulations.

It was noted that the results of the CENSE questionnaires give a slightly more positive response of adopting the EPBD standards. Much of this discussion dealt with inspections, and is summarised under the next item together with the discussion resulting from the "Harmonac" summary.

**INSPECTIONS – INCLUDING FEEDBACK FROM HARMONAC WORKSHOP (Jorma Railio).**

A few main highlights from the Harmonac workshop, held the day before, was presented. EN 15240, for inspections of air conditioning systems, is according to the recent experiences, one of the most widely adopted standards of the EPBD package. But the level of adoption varies a lot country by country, and there are different interpretations in different countries. Even for some basic issues like "what is included in the air conditioning system?". The existence of a parallel standard for "inspection of ventilation systems" adds the confusion, because these systems are very often integrated together (fully or partly). Ian Knight added that the Harmonac action included ventilation in its consideration only if ventilation is integrated in

the air conditioning system, but does not go in the ventilation system in detail (e.g. balance of air flows is excluded).

The Harmonac workshop had supported the idea of a REHVA Guidebook within its scope, but left the timing and contents somewhat open – one reason being that major changes in the EN 15240 standard are expected due to both the recast EPBD and gathered feedback. But the CENSE workshop expressed a clear need to accelerate the REHVA work, because of an urgent need for simple guidance how to apply the inspection methodology in different types of buildings. Now EN 15240 gives too many options, but a clear structure would clarify the "big picture" and still allow different extents of inspections, now within a common framework.

One possibility is to draw up a "REHVA Technical Report" quickly, just to pick up the essential practical issues from EN 15240, CIBSE TM 44 and other relevant documents, structured as

- the main methodology
- Annex A: refrigeration plant
- Annex B: air conditioning
- Annex C: ventilation

This kind of report can, after a couple of years, be revised and upgraded into a Guidebook.

### **3.2 Profile of participants**

About 10 participants were present at the workshop, They were all HVAC engineers representing national HVAC societies at the REHVA general assembly.

See also **annex C**: List of participants

## **4 Conclusions and recommendations**

The Workshop strongly recommended a more active role to REHVA in

- promoting the use of EPBD standards
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- actions towards EU also in further developments in EU legislation – mainly the EPBD and EuP Directives - to give a way towards harmonised framework for all Europe in both regulations and practices.

REHVA was also strongly encouraged to take initiatives towards the EU to take up the current and future needs to develop the EPBD further, and to make sure that the EPBD will be interpreted in a reasonable way. For example, the recast EPBD will give an option to skip the inspections if the system is "monitored and controlled" – probably leaving the door open for too many interpretations, and probably giving not much help to the lack of qualified inspectors.

## **Annex A - Workshop Programme**

### **Which role do the HVAC-societies play in implementing the EPBD on the national level?**

**Moderators: Jorma Railio, FIN and Bjarne W. Olesen, DEN**

**Friday, May 15, 15:30 -17.30, Henry Hudson Room I**

The objective of the workshop is to discuss the involvement of national HVAC societies in the implementations of the EPBD and use of the related CEN-standards.

#### **A.1 Background**

Several projects under the EU Intelligent Energy for Europe (IEE) are dealing with the implementation of the EPBD and use of related CEN standards. One project IEE-CENSE has the objective to lead the CEN Standards on Energy performance of buildings to practice by effective support of the EPBD implementation and acceleration in the EU Member States.

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#### **A.2 Objective**

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Another objective is to transfer information between HVAC-societies regarding active involvement in the implementation of the EPBD.

#### **A.3 Participants**

The workshop is intended for national HVAC societies. Please have one or more country representative participate in this workshop.

## **A.4 Results**

The results of the workshop will be used to improve the feedback from the CENSE project to .the commission and CEN standardisation

## A.5 Tentative programme

Chair: Bjarne W. Olesen, Technical University of Denmark

Co-chair: Jorma Railio, Finnish Association of Mechanical Building Services Industries (FAMBSI), Finland

<b>Time</b>	<b>Topic</b>	<b>Proposed speaker(s)</b>	<b>Organisation</b>
	<b><i>Opening</i></b>		
<i>20 min</i>	<b><i>Products and findings from CENSE to date</i></b>	Bjarne Olesen Jorma Railio	DTU, DEN FIN
<i>10 min</i>	<b><i>Questions and discussion</i></b>		
<i>20 min</i>	<b><i>Information on ISO standardisation activities related to the EPBD</i></b>	Bjarne Olesen Jorma Railio	DTU, DEN FIN
<i>5 min</i>	<b><i>Discussion</i></b>		
<i>15 min</i>	<b><i>Results of the REHVA-EPBD questionnaire to REHVA members</i></b>	Bjarne Olesen	DEN
<i>40 min</i>	<b><i>Discussion</i></b>		
<i>10 min</i>	<b><i>Conclusions from workshop</i></b>	Jorma Railio, Bjarne Olesen	FIN DEN

## **Annex B– Presentations**

**NOTE: The presentations are provided as separate PDF files and available on the CENSE website (<http://www.iee-cense.eu/>)**

## Annex C – List of participants

### Participants:

Joris Mampaey, Belgium  
Bjarne Olesen, Denmark  
Teet Tark, Estonia  
Jorma Railio, Finland  
Christian Feldmann, France  
Iolanda Colda, Romania  
Vincenc Butala, Slovenia  
Derrick Braham, UK  
Hywel Davies, UK  
Ian Knight, UK