

PROJECT DOCUMENT

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Draft report

CENSE Workshop April 16, 2009 at CLIMAMED in Lisbon

Bjarne Olesen* and Gerhard Zweifel**

DTU*

Email: bwo@byg.dtu.dk

HSLU – T&A**

gerhard.zweifel@hslu.ch

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*

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NOTE: Annex B is provided as a separate pdf file.

Disclaimer:

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Moreover, since 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 conference

Due to this fact, the workshop was very well attended, with a full auditorium of more than 100 participants. Attendants were mainly local members of the organizing professional associations. The local professional press was present at the workshop and reported about the event.

According to the location and the focus of the conference, the program included the following three presentations (ppt's included):

- A presentation by Bjarne Olesen on the CENSE and other related European projects (ASIEPI, ThermCo, Commoncense)
- A presentation by Gerhard Zweifel on EPBD-CEN Standards Related to Summer Comfort and Cooling
- A presentation by Bjarne Olesen on EN15251 on Indoor environmental input parameters for design and assessment of energy performance of buildings - addressing indoor air quality, thermal environment, lighting and acoustics

The auditory appreciated to be informed about these documents and the short discussion focused on a few questions to the standards.

2 The CENSE project

The aim of the CENSE project (2007-2010) is to support the EU Member States (MS) and other target groups in achieving better awareness and more effective use of the European (CEN) standards that are related to the EPBD.

The main activities in the project are:

- 1) to communicate the role, status and content of these standards as widely as possible, and to provide guidance on their implementation;
- 2) to collect comments and examples of good practice from the MS, so as to remove obstacles to implementation, and to collect and secure results from relevant SAVE and FP6 projects;
- 3) to prepare recommendations to CEN.

As part of the second type of activities, the IEE CENSE project initiates a number of international/regional workshops.

More information on the project can be found in the Information Paper P86, *The CENSE project. Leading the CEN Standards on Energy performance of buildings to practice. A project (2007-2010) under the*

Intelligent Energy Europe programme, one of a series of Information Papers that can be downloaded from the website (www.iee-cense.eu).

3 Aim and programme of the conference

The full programme is given in **annex A**.

4 Content of the conference

4.1 Presentations

According to the location and the focus of the conference, the program included the following three presentations (ppt's included):

- A presentation by Bjarne Olesen on the CENSE and other related European projects (ASIEPI, ThermCo, Commoncense)
- A presentation by Gerhard Zweifel on EPBD-CEN Standards Related to Summer Comfort and Cooling
- A presentation by Bjarne Olesen on EN15251 on Indoor environmental input parameters for design and assessment of energy performance of buildings - addressing indoor air quality, thermal environment, lighting and acoustics

All the presentations are attached (See **annex B**: copy of the presentations).

4.2 Profile of participants

The workshop was scheduled in coincidence with the welcome cocktail of the CLIMAMED conference in the Vila Galé Opéra Hotel (<http://www.climamed.net/workshop.html>).

Due to this fact, the workshop was very well attended, with a full auditorium of more than 100 participants. Attendants were mainly local members of the organizing professional associations. The local professional press was present at the workshop and reported about the event.

See also **annex C**: List of participants. Several additional participants did not sign up due to lack of registration formulas

5 Main discussion and results

The discussion focused on questions to the standards presented. This was mainly to clarify content and use of the standards. Interesting enough Portugal is the only country which officially requires a certification for the Indoor Environmental Quality together with the energy declaration.

Annex A- Conference Programme

Evaluation of summer comfort and use of sustainable "cooling" systems

Bjarne W. Olesen, PhD, International Centre for Indoor Environment and Energy, Technical University of Denmark (bwo@byg.dtu.dk)

Organized by the IEE-projects CENSE, ThermCo, ASIEPI and CommonCence

Workshop at ClimaMed Lisbon, 18:00-19:30 April 16th, 2009 at Hotel Vila Galé Opera

Several projects under the EU Intelligent Energy program is dealing with the Energy Performance of Buildings Directive (EPBD) and related CEN standards. The main objective of the **ThermCo** project is to establish a normative guideline for comfortable low-energy cooling concepts and consistent evaluation criteria for all European climate zones. The Objective of **CENSE** project is leading the CEN Standards on Energy performance of buildings to practice by effective support of the EPBD implementation and acceleration in the EU Member States. The **CommonCence** project seeks to use existing information from field surveys to test the limits set by EN15251 for temperature and lighting and to validate its recommendations using existing data and building simulations. Finally **ASIEPI** is dealing with the assessment and improvement of the EPBD Impact (for new buildings and building renovation) including summer comfort.

The objective of the workshop is briefly to present the projects and discuss the first results.

Low-energy cooling (e.g. ground cooling, evaporative cooling, night ventilation or thermally activated building systems TABS) is often a hybrid concept of "natural ventilation" and "mechanical cooling". But do standards like EN15251 or EN ISO 7730 on thermal comfort take these mixed-mode systems accurately into account.

Questions to be discussed during the workshop

1. Can existing standards be used to evaluate summer comfort conditions in buildings without cooling systems and should a fictive energy use in summer be included in the building energy use??
2. Should we evaluate low-energy cooling concepts using the adaptive approach for naturally ventilated buildings or the PMV approach for fully air-conditioned building? Or is there a third way?
3. What are typical problems with low-energy cooling concepts in day-to-day practice?
4. What experiences with low-energy cooling and thermal comfort do we have in different climate zones?
5. Do we have experiences with user acceptance during summer in low-energy buildings?
6. How do people perceive thermal comfort in mixed-mode buildings?

Annex B – Presentations

NOTE: Annex B is provided as a separate pdf file.

Annex C – List of participants

Evaluation of summer comfort and use of sustainable "cooling" systems

<April 16, 2009>

<Lisbon, Portugal>

Attendance list

organisation	persons	email	signature
AICARR	Renato Lazzarin		
AICARR	Max Smolowski		
APIRAC	FERNANDO BRITO		
APIEF	FERNANDO GOMES		
ATECYR	JULIO CAND		
Pedro Grumbar	Pedro Grumbar		
Fc Javier Rey	Ulises Vallés (ATECYR)		
Ulises Vallés	Ana Tejero		
AMF.Lda	Antonio Fernandes		
AMF.Lda	Paula Fernandes		
SPIE	MAFALDA TAVARES		
SPIE	João Monte		
EPATV	Domingos Silva		
ATECYR	JAVIER ZERVIERO		
ATECYR	JOSE M. PINARO		
AICUF	Bertrand MONTMOREAU		

Evaluation of summer comfort and use of sustainable "cooling" systems

<April 16, 2009>

<Lisbon, Portugal>

Attendance list

organisation	persons
LMVE	João Pinás
LMVE	Filipe Barreiro
PT COMUNICAÇÕES	JOÃO CORREIA PIRES
PT COMUNICAÇÕES	SÉRGIO FILIPE
PT COMUNICAÇÕES	ANA MARGARIDA BASTO
PT COMUNICAÇÕES	JOÃO MENeses

ATECYR
 REHVA
 BOMBAS WILCO

JACINTO SERRAS
 FRANCIS ALCARDO
 BRUNO CORANHO

Support



Univernd Volcaner
 1) Universidad. Polt. Val
 (Spain)

Julio Mestiz
 Victor Soto Frances

PT PRO
 Mendes Bello

TTMD
 LEVENT ALATCI

TTMD
 CAFER UNLU

Evaluation of summer comfort and use of sustainable "cooling" systems

<April 16, 2009>

<Lisbon, Portugal>

Attendance list

organisation	persons	email	signature
	...		
Galpenergia	Nuno Pereira		
Galpenergia	Jose Curvo		
AICARR	Alex Sambalwati		
Luis Fonseca e Silva	APIRAC		
	Jorge Carvalho Duarte		
	Jose Rocha Duarte		
UNIVERSIDAD DE CS.RD.BA	MANUEL TRIZ DE ADANA		
FROSILINE LDA.	LUIS FILIPE GAMA		
EAPS, SA	Joana Fesneiro		
EAPS SA	Anna Costa		
DAIKIN	Rodrigo D'Alva		
APIRAC	Nuno Lopes		
POLITECNICO TORINO	Stefano Gyndi		
UNIVERSITY OF PADOVA	MARCO NORE		
UNIVERSITY OF PADOVA	FILIPPO BUSATO		