



European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung



Status EU Mandate (M480) for CEN to develop the second generation CEN-EPBD standards supporting the implementation of the EPBD Recast.

Jaap Hogeling
Chair CEN TC 371 Program Committee
on EPBD

j.hogeling@isso.nl

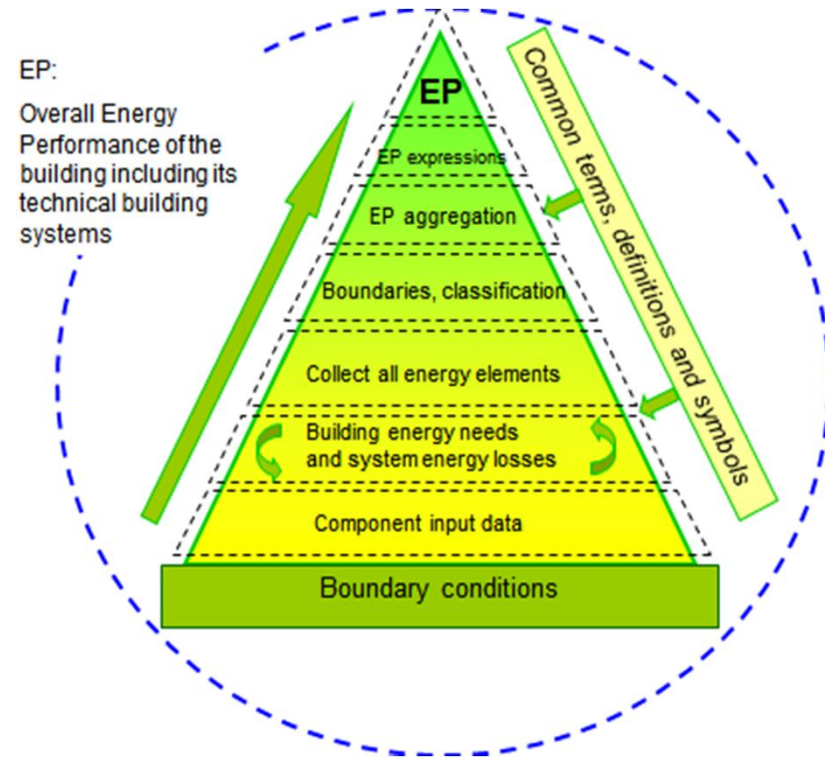


REHVA seminar-Oct-2011



Current set of CEN EPBD (Energy Performance Buildings Directive) standards

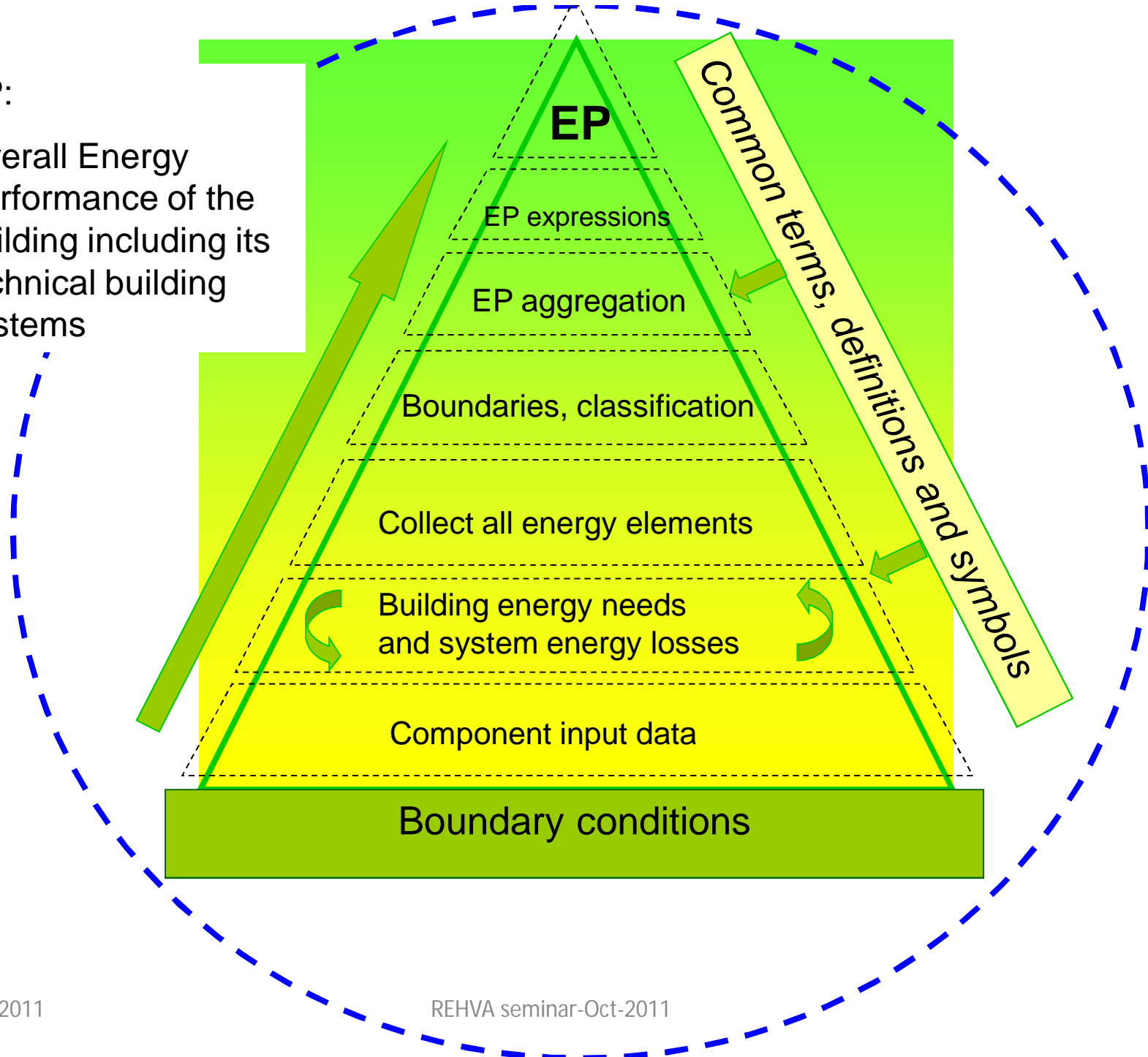
- Total 42 standards: 31 EN- and 11 EN-ISO standards published in 2007-2008
- Presented as a “pyramid” structure



Most are **used** in many EU Member States, as required by national legislation based the EPBD implementation

EP:

Overall Energy Performance of the building including its technical building systems



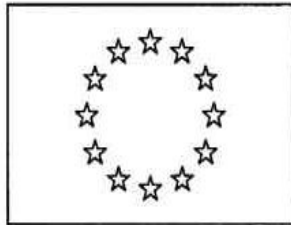
Starting point for second mandate



- Extensive feed back organised within the IEE-CENSE project (2007-2010)
 - Including extensive contacts with persons responsible for EPBD implementation in the EU Member States
 - Report from the Concerted Action 2-CEN Working group
- Communication with EDMC
- Discussion in the CEN-CA2-experts
- Etc.

This lead, as announced last year's seminar, to the 2nd Mandate on EPBD from the EU Commission to CEN

CEN received Mandate 480



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY

Directorate C - New and renewable sources of energy, Energy efficiency & Innovation
C.3 - Energy efficiency of products & Intelligent Energy – Europe

Brussels, 14th December 2010
M/480 EN

**MANDATE TO CEN, CENELEC AND ETSI FOR THE ELABORATION AND ADOPTION OF
STANDARDS FOR A METHODOLOGY CALCULATING THE INTEGRATED ENERGY
PERFORMANCE OF BUILDINGS AND PROMOTING THE ENERGY EFFICIENCY OF
BUILDINGS, IN ACCORDANCE WITH THE TERMS SET IN THE RECAST OF THE DIRECTIVE
ON THE ENERGY PERFORMANCE OF BUILDINGS (2010/31/EU)¹**

Actual situation: How are the CEN-EPBD standards implemented in practice?

- CEN-EPBD standards are used in many EU Member States in a “practical way”:
 - Some are translated and used as they are
 - Others are copying parts of CEN standards into national guidelines or standards and/or building codes also adding national elements (climate, typical regional issues etc.)
- But all EU MS’s use these standards as basis for their building codes (EN 13790 is always indicated)
- Deep analysis of the current use and reported additional functional requirements of the EU MS’s are the basis for a Second Mandate of the EU Commission to CEN in order to facilitate the further development of these standards.

Main issues for the further development the current CEN EPBD standards:

- **CEN EPBD standards need to be improved to be more fit for code intended use (more fit for regulators):**
 - More modular structure and unambiguous
 - Clear split common method <versus> national choices
e.g. : Climate data, primary energy factors, and other legal requirements are typical national/regional issues.
 - Software proof: all calculation descriptions will at least be checked by available spread sheet calculations
 - More Focus on retrofit technics seems necessary
 - More consistent and in line with requirements to be specified by the Member States legislators

Expected positive Impact of 2nd generation of CEN-EPBD standards on energy performance



- standards more usable as direct reference & have high transparency in national or regional choices
- Improved international knowledge exchange and shared research in this field of expertise
 - Increased circulation of products, services and property (real estate) data
 - Towards **more** EU product data coupled to EP calculations
 - Towards **less** use of confusing national or non-EU labels...

Impact of 2nd generation of CEN-EPBD standards



- Faster implementation of new solutions
 - This will support innovations
- Increased credibility of EU in the world
 - Retaining the initiative in the global arena
- EPBD Recast ready:
 - Inspection of building systems gets more attention
 - Sustainable energy options will be included in more detail
 - Net or Nearly Zero Energy Buildings to be included: calculation models have to be reconsidered given the required accuracy.
- **Ultimate goal: High performance European tools leading to high performance buildings**

Stronger position of the EU industry on a global market by using harmonised procedures

- EU producers need harmonised procedures to evaluate the energy impact of their product in EU
- The (improved) CEN EPBD standards make this (better) possible, if applied in a transparent way by all EU-MS
- This harmonisation will lead to a stronger position of the EU-producers on the global market
- By developing ISO standards in parallel, this frontrunner position of the EU producers could even be strengthened

Timing for revision

- Reasonable timescale for implementing harmonized approach?
 - Majority of Member States: major changes in national procedures planned roughly between 2015 and 2020
- → Phased approach

Preparation of the first Phase started in 2011

Phase 1 (2011-2012):

- Preparation of **basic principles** and **rules**
 - Together with MS
 - Based on the overall requirements & expectations on the standards
- Development of a **modularly structured overarching standard**
 - Offering an overall continuous but modular structure for EP buildings, for different applications and levels of detail
- Preparation of **technical rules** for drafting all standards
 - Common format, software proof, ...

This is essential, before decisions can be made on the kind of revisions per standard (2012-2014) →

Phase 2 (2012- end of 2014):

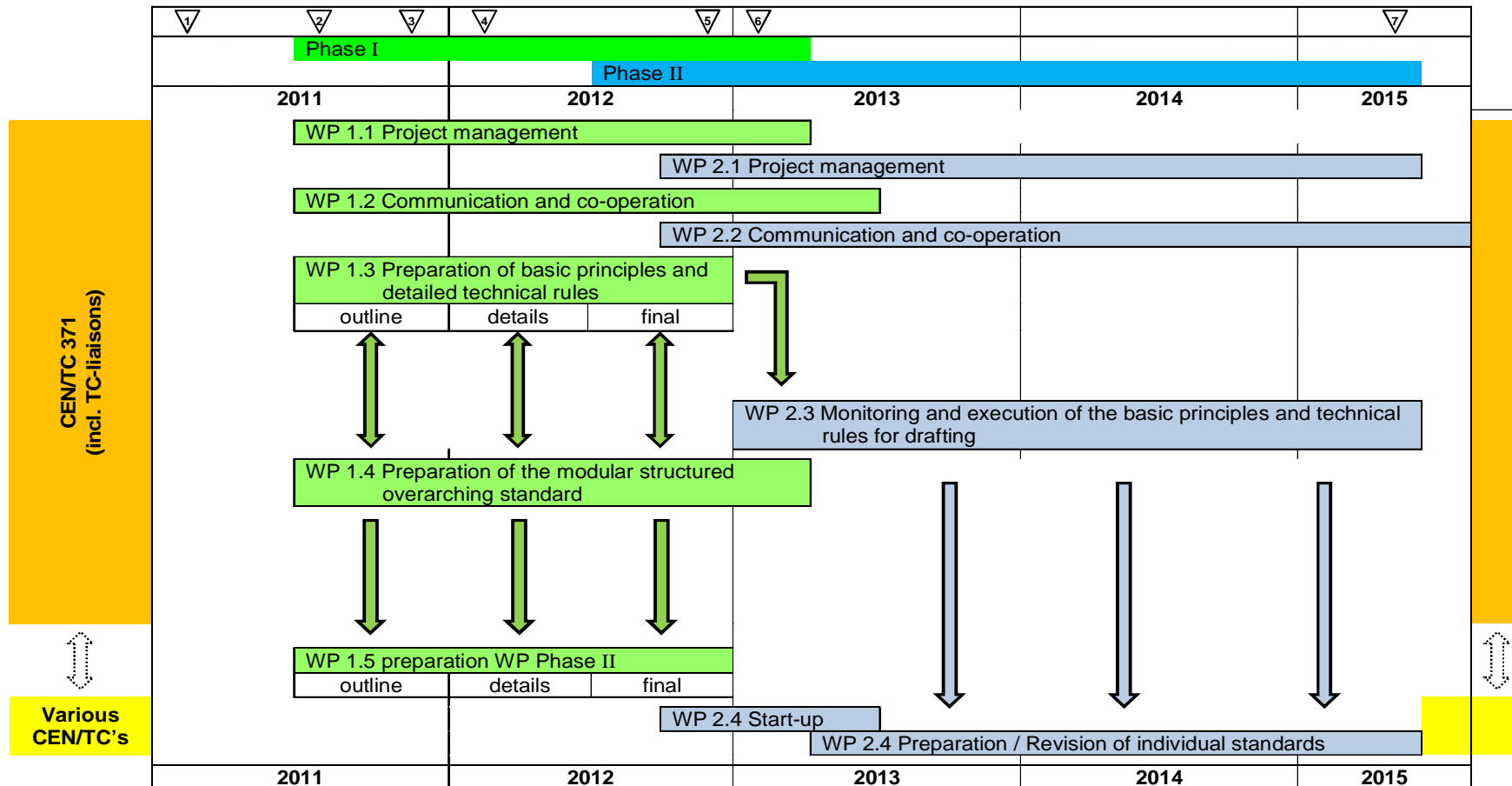
- Revision of the existing set of EPBD standards
 - In order of priority

Starting Phase 1

- CEN BT accepted M480 by April 2011
- CEN-CMC and the Commission prepare a Grant Agreement regarding the M480>> expected this week???
- CENTC371 has prepared a detailed project plan, based on this a call for experts has been issued this summer, the contracts for the 5 project teams are now being prepared
- After 4 months: -a comprehensive list of existing CEN, ISO or national standards (published or under development) and other relevant documents
- After 8 months: -a detailed proposal for the Work Programme indicating clearly to what extent each of the current standards has to be redrafted, also indicating which new standards need to be drafted and by which date these tasks could be delivered
- Expected Start Phase 2 :revision of the set of EPBD standards : during 2012>>>>>>> end 2014

→ Draft detailed planning

M40
M44



CEN/TC 371
(incl. TC-liaisons)

Various
CEN/TC's

- ▽ M 480 to CEN
- ▽ Detailed work plan Phase I
- ▽ Comprehensive list of standards
- ▽ Detailed proposal Phase II

- ▽ Final basic principles and detailed technical rules
- ▽ Modular structured overarching standard
- ▽ Whole set of revised EPBD standards

M480: The standards will take proper account of the work

of the CEN Product TCs, and of other EU Directives,

- Construction Products Directive (89/106/EEC),
- Energy Labelling Directive 2010/30/EU,
- Ecodesign Directive 2009/125/EC,
- Boiler Efficiency Directive(92/42/EC),
- Energy End Use Efficiency and Energy Services Directive 2006/32/EC,
- INSPIRE Directive (2007/2/EC),
- Renewable Energy Directive 2009/28/EC
- Mandate M324 (DHW-systems).

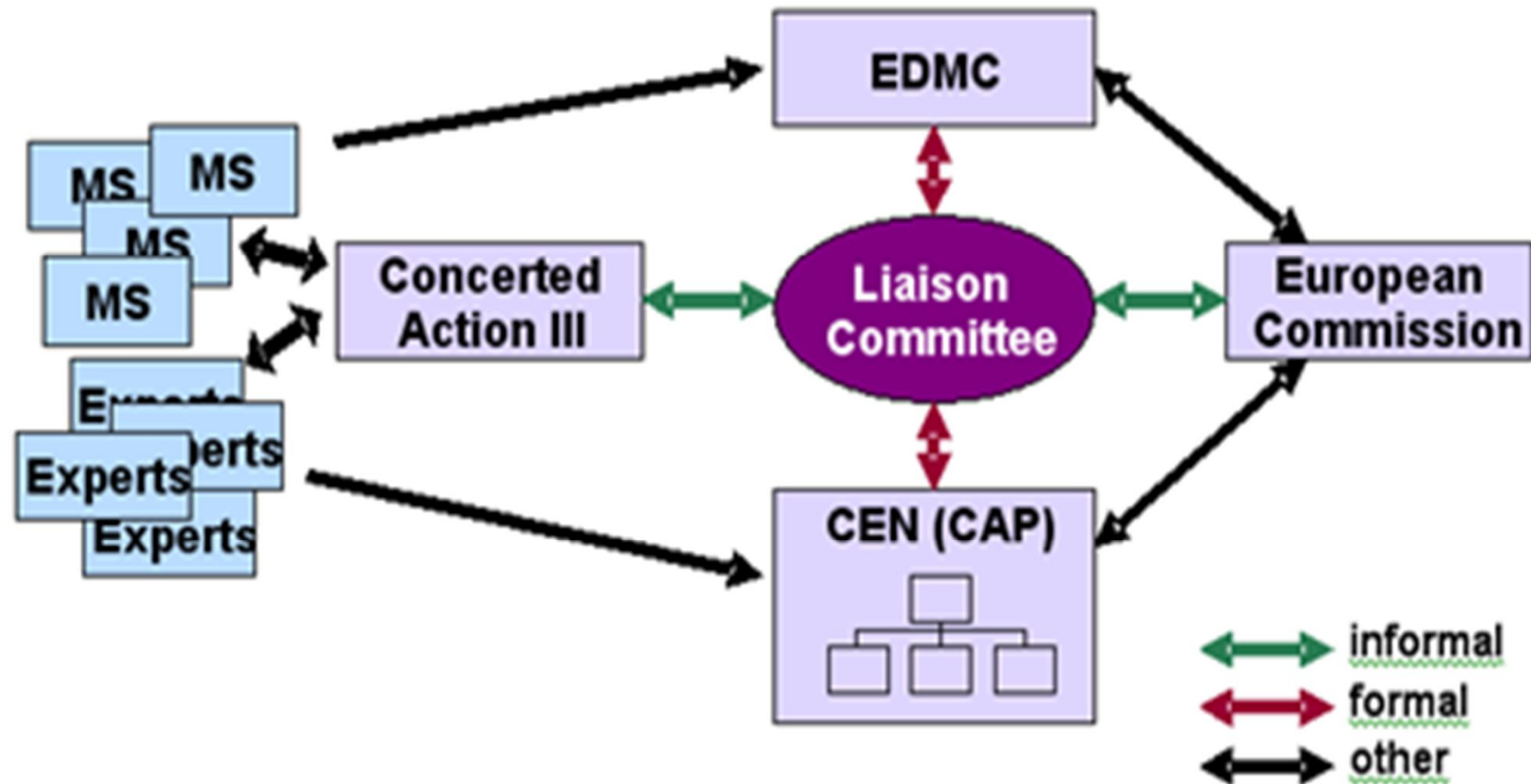
Central coordination by small team of experts in CEN TC 371-CAP

- CEN TC 371 will organise this central coordination team in cooperation with the other relevant CEN TC's
- (small) Core Project Teams on different clusters, related to the various CEN TC's:
 - TC 89, Thermal performance of buildings and building components: CT-leader Dick van Dijk (NL)
 - TC 228, Heating systems in buildings: CT-leader Johann Zirngibl (F)
 - TC 156, Ventilation for buildings: CT-leader Gerhard Zweifel (CH)
 - TC 247, Controls for mechanical building services: CT-leader Dan Napar (F)
 - TC 169, Light and lighting: CT-Leader Dieter Schornick (D)

Organisation

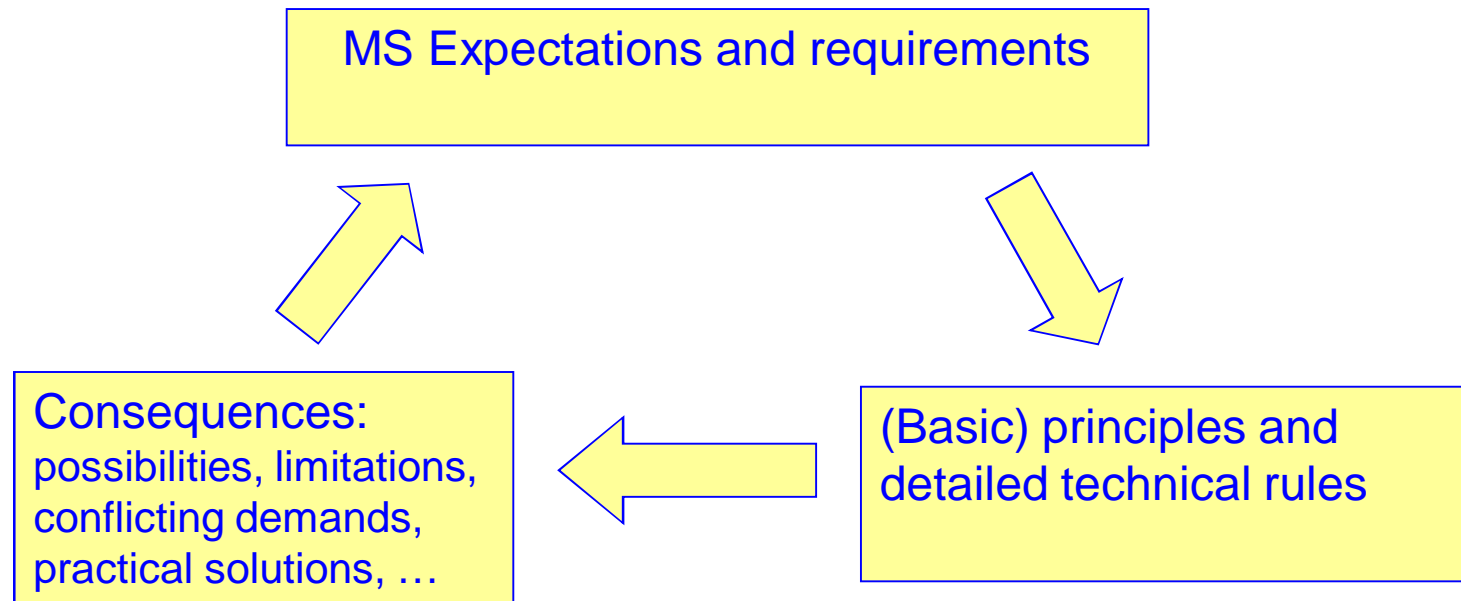
- Central coordination by core team of experts in CEN/TC 371-CAP (the Chair Advisory Panel)
- Regular report to and meeting of CENTC371 (next 13-12-2011 ?)
- Close cooperation with a Liaison Committee from the Member States including experts nominated by the EDMC in cooperation with the EPBD-CA3 action (next WS 12-12-2011).
 - 6 MS Experts representing EDMC:
 - Horst Schettler Kohler (Ge);
 - Bart Poel (NL);
 - Bjorn Mattson (Se);
 - Giovanni Riva (It) ;
 - Jana Bendžalová (Sk);
 - Søren Aggerholm (De);

CENTC371- CAP-EDMC-Liaison Committee

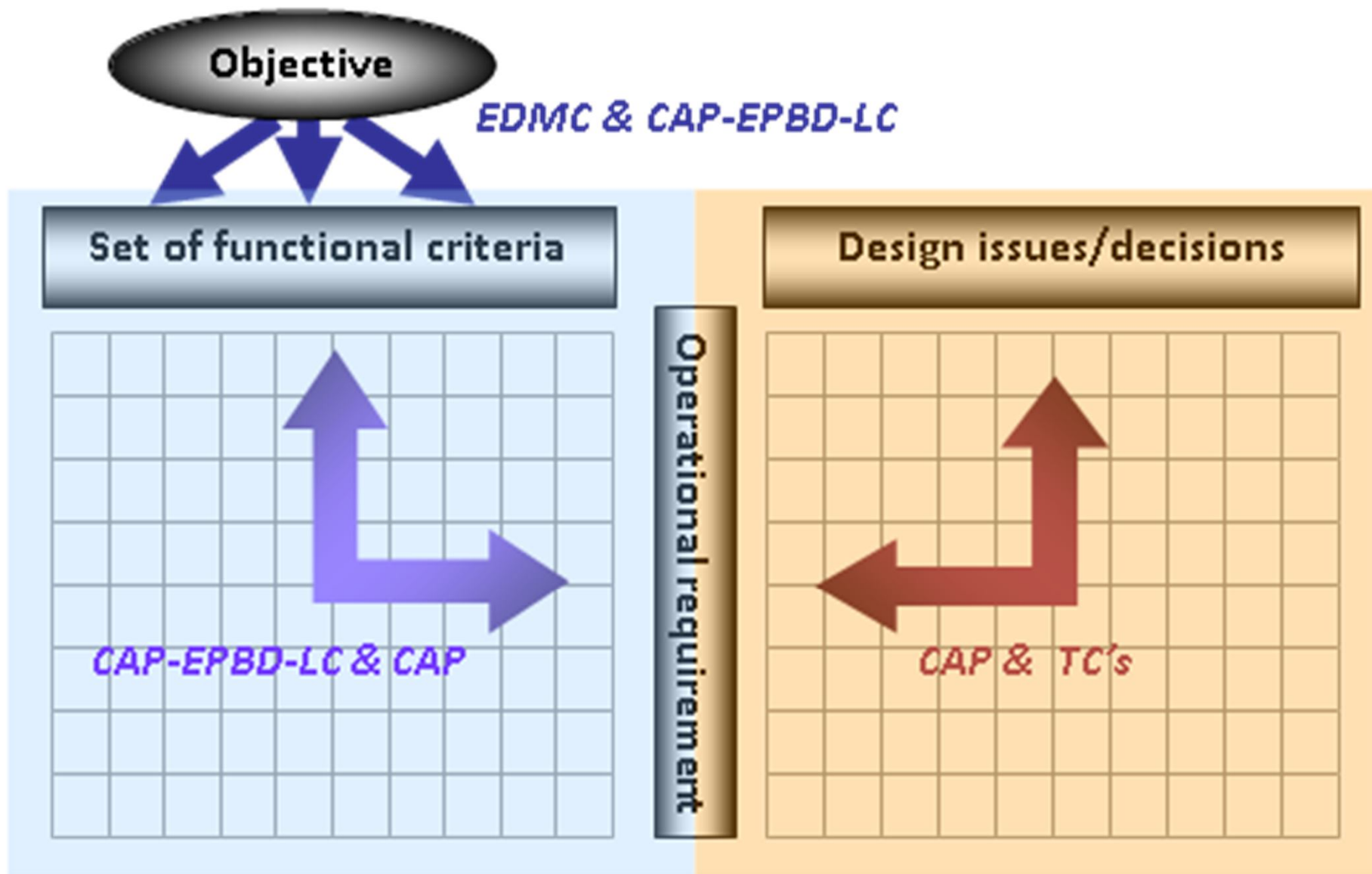


Not only exchange of documents, but more direct interaction

- Why? Because it is a highly dynamic process:



- ➔ Continuous feed back and mechanisms for adjustments needed
- ➔ Transparent, practical procedures for exchange of views, cooperation and feed back of all interested parties
- ➔ Continuous central coordination and monitoring

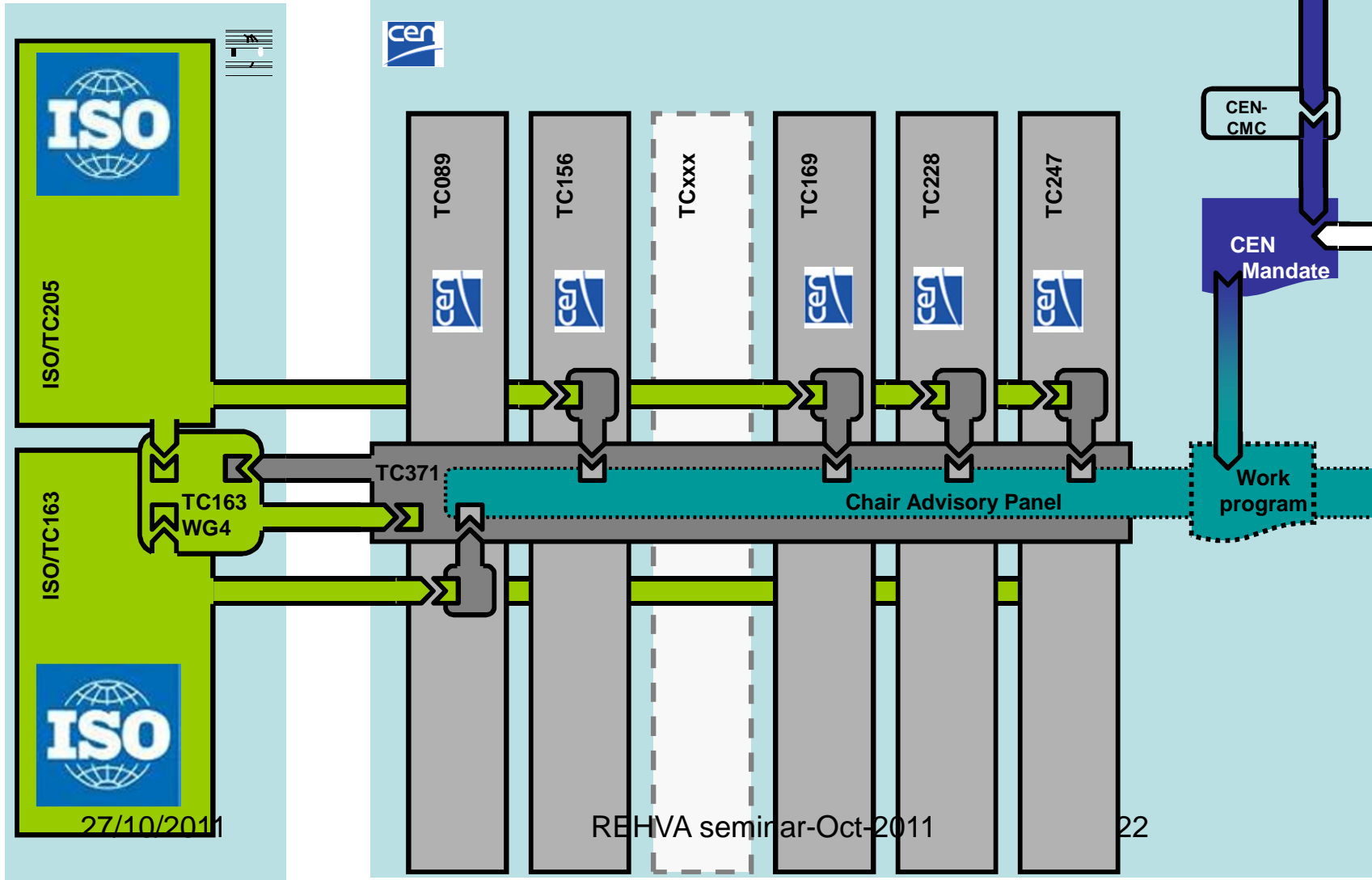
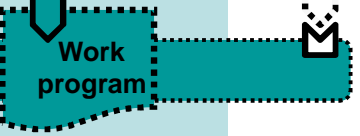
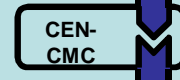


Starting in phase 1

- Start with setting up basic principles and preparation of overarching standard (EN15603)
- In parallel: setting up common technical rules for drafting all other EPBD standards
- Development of a software kernel to support this
- Including a pilot of the conversion of current standards
- Open communication : interim results will be shared with the broad EPBD community



European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung



27/10/2011

REHVA seminar-Oct-2011

22

Coordination with ISO



- As work **is intended** to be carried out under the Vienna Agreement; CENTC371 is in close contact with ISO counterpart: ISO-TC163 WG4 , the JWG of ISOTC 163 and 205: "*Energy performance of buildings using holistic approach*"
- The leadership and secretariat of both groups is overlapping and well coordinated

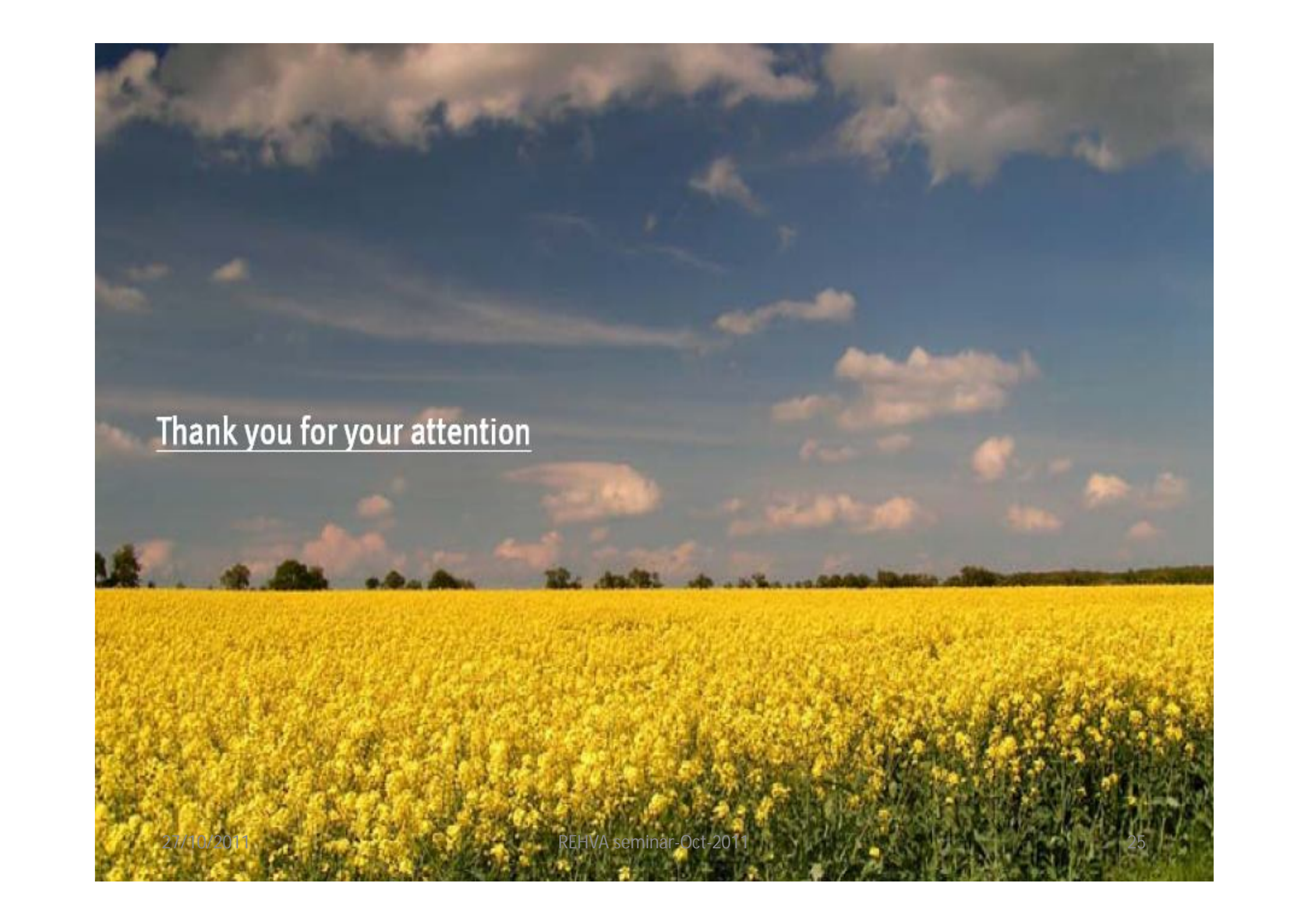




Conclusion



- Two phase approach:
 - **First phase** to define the *basic principles, modularly structured overarching standard and common rules* for the 2nd generation of CEN standards to support the EPBD
 - **Second phase** to revise the set of standards
- This is a highly **dynamic process**
 - → Continuous feed back and **mechanisms for adjustments** needed
 - → **Transparent, practical procedures** for exchange of views and principles, cooperation and feed back of all interested parties
 - → Continuous central **coordination** and **monitoring** of the progress in terms of consistency, efficiency and efficacy
 - → In close **cooperation** with the **MS legislators** (CAP-EDMC-LC)



Thank you for your attention