Workshop – Design of Concrete Buildings, Brussels, 20-21 October 2011

Eurocodes:
Implementation, Training and Further Development

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OTHER DGs
# JRC Support to the Implementation of the Eurocodes

**MoU between the JRC and DG**

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Eurocodes Implementation: e-tools

Development of e-tools to facilitate national implementation, training, further harmonisation and development of the Eurocodes

- Eurocodes website
- NDPs database
- Background documents database
- Centralised Eurocodes helpdesk

http://eurocodes.jrc.ec.europa.eu
1504 NDPs in 58 parts are expected to be set by countries.

In 40% of the cases the divergence could be estimated by statistical analysis.

Expert analysis is needed of the rest of the cases.
Increase in rate of upload within last months..!
0Ps database: acceptance of recommended values

(05/08/11)

Average: 70%

(10/09/2010) – 68%
(11/04/2011) – 70%
(19/05/2011) – 69%
NDPs database – preliminary statistical analysis

A case study on EN 1992
NDPs database – preliminary statistical analysis

Only **Type-1.1 NDPs of EN 1992 Part 1-1** are considered (parameters with recommended values)

- NDPs from **7 countries**, namely, Czech Republic, Denmark, Finland, The Netherlands, Portugal, Romania and Slovakia were used. These countries were the only ones that completed uploading their NDPs for the considered EN 1992 Part 1-1
NDPs database – preliminary statistical analysis

A case study on EN 1992

NDPs with mean values and standard deviations

Nb. Of “Recommended Values” approx. 81%
Eurocodes Training and promotion: Strategy and Actions (events)
Training Workshops

- Three levels of training:
  - **Level 1** - policy of Eurocodes implementation, National Annexes, co-existence with National Codes etc. aimed at National Authorities, NSBs and senior personnel in the companies
  - **Level 2** - introductory courses to each individual Eurocode
  - **Level 3** – comprehensive design examples of a number of typical structures using a particular package of Eurocodes

- All material from the workshop (presentations, papers etc) are available to download from the JRC Eurocodes website
Level 1 Training Workshop

Eurocodes: Background and Applications

Brussels, 18-20 Feb 2008

- **First European-wide workshop covering all Eurocodes (except EC6)**
- **Prepared by expert involved in the development of the Eurocodes**
- **320 participants, 60 lecturers**
- **All material from the workshop available to download from the Eurocodes website, translate and use**
Level 2/3 Training Workshops

Workshops with worked examples

- **Design of Bridges** with the Eurocodes
  Programme coordination: Steve Denton (HG Bridges)
  4-6 Oct 2010, Vienna

- **Eurocode 8: Seismic Design of Buildings** (RC and Steel)
  Programme coordination: Eduardo Carvalho (SC8)
  10-11 Feb 2011, Lisbon

- **Eurocode 2: Design of Reinforced Concrete Buildings**
  Programme coordination: Giuseppe Mancini (SC2) and Francesco Biasi
  Oct 20-21 2011, Brussels

- **Eurocodes 3, 4, 5, 6, 7, 9 and fire design:**
  Programme coordination: Chairmen of SCs
  2 days average (2012-2013)
The Commission/JRC, BSI, and experts have promoted Eurocodes globally through promotional seminars and lectures at conferences.
Promotion of Eurocodes to third counties

Eurocodes workshop in Moscow
Moscow, Russia, 2008

- **Objective:** gather and make available information on EU and Russia standardisation systems
- **Support from:** CMC, CEN/TC250, Russian Federal Agency on Technical Regulation and Metrology, World Academy of Sciences for Complex Security
Further development

Basic Requirements for Construction Works (BWRs)

- BWR1 - MECHANICAL RESISTANCE AND STABILITY
- BWR2 - SAFETY IN CASE OF FIRE
- BWR3 - HYGIENE, HEALTH AND THE ENVIRONMENT
- BWR4 – SAFETY IN USE
- BWR5 – PROTECTION AGAINST NOISE
- BWR6 – ENERGY ECONOMY AND HEAT RETENTION
- BWR7 – SUSTAINABLE USE OF NATURAL RESOURCES

Goal:
“A set of Interoperable European Standards for construction works addressing all BWRs”
Eurocodes: DG ENTR – DG JRC Future Activities/Priorities

- Achieve full implementation (speed-up, training, exchange of information and tools between countries) → Facilitate implementation and Use

- New Programming Mandate: New Materials, Assessment and retrofit, More Harmonization, ...

- Other Basic Works Requirements (Energy efficiency, Env. Sustainability,

- Promotion outside of EU (Russia, East, Africa, ...)
Thank you for your attention

http://eurocodes.jrc.ec.europa.eu