The European Commission’s science and knowledge service

Joint Research Centre

Training and promotion on the European standards for construction

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Outline

- The EN Eurocodes – What are they
- Training on the Eurocodes
- IT tools supporting dissemination and training
- Awareness raising in third countries
- Coordination of activities – stakeholder involvement
The EN Eurocodes – What are they?

- Common European standards based on best available knowledge for the design of structures (e.g. buildings, bridges)

- **Aim**: prevent the creation of new risks and reduce existing ones related to natural and man-made disasters (*earthquakes, extreme weather events, etc.*)
The EN Eurocodes – What are they?

- First published in 2007

- Further emphasis on **disaster risk reduction** in the 2\textsuperscript{nd} generation, e.g.
  - Assessment and retrofitting of existing structures
  - Strengthening of robustness requirements
  - Adaptation of structural design to climate change
Training on the use of Eurocodes

2003
Commission Recommendation on the implementation and use of Eurocodes for construction works

2005
Start of the JRC training on the Eurocodes with pilot events

2007
All Eurocode Parts published by CEN

2008
General training on the use of Eurocodes in EU and awareness raising

2010 and beyond
Eurocodes training with practical worked examples

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Workshop on the use of Eurocodes in the Euro-Mediterranean area

JRC Report: Strategy for training and promotion in EU

EUROCODES Background and Applications

Workshop on BRIDGE DESIGN TO EUROCODES with worked examples
Training strategy on the Eurocodes

Commission Recommendation 2003/887/EC
“on the implementation and use of Eurocodes”

✓ Technical training and continuing professional development courses (national and international)

✓ Universities to base their teaching of structural design on the Eurocodes

✓ Knowledge transfer from the Eurocode developers to potential national trainers
Training strategy on the Eurocodes

Three levels of training depending on the audience:

- **Level 1**: policy of Eurocodes implementation, National Annexes, co-existence with National Codes, the Eurocodes system
- **Level 2**: introductory courses to each individual Eurocode
- **Level 3**: comprehensive design examples of typical structures using a particular Eurocodes parts (i.e. practical use)
Raising awareness and training

**Workshop** "Eurocodes: Background and applications" (2008)

- first major European training event
- organized by the European Commission
- support by CEN and Member States

**Aim**: transfer knowledge and information to key stakeholders
Raising awareness and training

Workshops with worked examples (2010-2014)

- **Aim**: transfer of background knowledge and expertise of the Eurocode Parts writers (CEN/TC250) to potential trainers at national level and Eurocode users
The Eurocodes Website

Eurocodes IT tools

- General info
- Events & News
- Archive of all training events
- Publications database
- Example of structures designed with the Eurocodes

http://eurocodes.jrc.ec.europa.eu
Eurocodes IT tools

Examples of structures
Eurocodes IT tools

The Eurocodes Publications Database

- Searchable database
- More than 500 publications (open source or full reference)
- Publication references in 16 languages

http://eurocodes.jrc.ec.europa.eu
Eurocodes IT tools

The Eurocodes Publications Database

- Promotion material
- Background documents
- Reports with worked examples
- Lectures & training material
- Pre-normative material on the Eurocodes 2G
Eurocodes IT tools

The Eurocodes Publications Database

- JRC reports on the Workshops with worked examples > 45,000 downloads
- Non EU or EFTA MS show interest in the Website
What do the world say about the European Standards for construction?

- news gathering engine developed by the JRC
- real-time monitoring and analysis of online media
- news in 60 languages

http://eurocodes.jrc.ec.europa.eu
Objective: provide a link between users of the Eurocodes, National Standards Bodies and CEN/TC250

- Allows National Contact Points to submit questions received at national level
- Queries are answered by CEN/TC250 and its Subcommittees
Eurocodes status of implementation

- Enquiry on the Eurocodes status in the EU conducted by the Commission in 2015

**Aim:**
- establish the state of implementation of the Eurocodes in the EU MS
- detect potential barriers
- gather comments regarding experience in the implementation of the Eurocodes

- Two parts - addressed to the National Authorities and the National Standardisation Bodies

*Publication of National Standards (% all Eurocode parts)*
Eurocodes status of implementation

Publication of National Annexes on the Eurocodes

(a) All Eurocode Parts (59 parts)
(b) EC8 Parts (6 parts)
Training and Promotion in third countries

2005
Start of the JRC – Eurocodes promotion with pilot events

2008
Strategy for Promotion (JRC Report)

2009 – 2011
‘BSI project’ Promotion in 3rd countries

2014 – 2016 & beyond
Coordinated promotion of European standards and policies in third countries

2012 -2014 Eurocodes Promotion on the Basis of Political Drivers
(e.g. EU-Russia dialogue and E&I-Balkan Region)
Regional Training and Promotion (Balkans)

**Scope:** support to the adoption and implementation of the Eurocodes in the non-EU Balkan countries

**Objectives:**
- ✓ Assess progress, specific needs and difficulties
- ✓ Boost and facilitate regional collaboration
- ✓ Facilitate transfer of knowledge from EU MS experts
- ✓ Increase awareness of instruments for further activities
Regional Training and Promotion (Balkans)

2018 - Workshop
(Albania or Bosnia and Herzegovina)
- process of implementation of the Eurocodes
- identification of needs for training and information

2019 - Summer school
(Montenegro)
- train on the use of Eurocodes in the design practice
- focus on most common design cases (seismic design of concrete buildings)

2020 - Thematic Seminar
(JRC – Ispra)
- increase awareness of national stakeholders on the current Eurocodes
- inform on the Eurocodes 2nd generation (2020)

Establish a Community of Practice for the Eurocodes in the Balkan Region
International awareness raising

Eurocodes booth:

- **Aim**: inform the visitors on the Eurocodes and stimulate their use of Eurocodes in third countries

- Disseminate information on JRC’s training material for designers

**Session**: Recovery Opportunity: *Building Regulations and Standards for Long-term Resilience*

- Presentation on the Eurocodes prepared with CEN-CENELEC MC
The Eurocodes international promotion

Co-ordination of the international promotion of European policies and standards for construction

✓ JRC and DG GROW co-leading the activities

✓ JRC collects, compiles and assess information

✓ Dissemination and exchange of information

✓ Involvement of all interested stakeholders (Commission, EU Delegations, MS, NSBs …)
Thank you

Any questions?
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