



Eurocodes

Background and Applications

Design of **Steel Buildings** with worked examples



16-17 October 2014
Brussels, Belgium

Organised and supported by

European Commission

DG Enterprise and Industry
Joint Research Centre

European Convention for Constructional Steelwork
European Committee for Standardization
CEN/TC250/SC3

Joint
Research
Centre

Participants

The Workshop is aimed for participants from EU Member States, EFTA Member States and EU candidate and potential candidate countries.

Any individual professional interested in training on the Eurocodes and particularly in the design of steel buildings may apply for participation.

Priority will be given to participants recommended by National Authorities and/or National Standardisation Bodies.

A "first come, first served" policy will be applied for registration acceptance as there is a limited number of participants. An average of three participants from each country will have the possibility to participate.

Event Registration

The application for participation is individual. Interested participants are requested to register online at:

<https://jrc-meeting-registration.jrc.ec.europa.eu>

The Workshop is announced under **Other Locations > October 2014 > Workshop with worked examples on design of steel buildings with the Eurocodes.**

The registration site is open from 15 July 2014. The deadline for application in the Workshop registration site is **7 September 2014, 12:00.**

Shortly after the application deadline, a confirmation of registration acceptance will be sent to the applicant by the Organising Committee.

Attendance Fees

No registration/attendance fees are requested from the participants. They are responsible for their own travel, accommodation and subsistence costs, which will not be reimbursed by the European Commission.

The participants should take care of their own travel and accommodation arrangements.

Workshop Material

Relevant materials will be distributed to the participants

Venue

The Hotel
Boulevard de Waterloo 38, 1000 Brussels
T +32 (0)2 504 11 11 | F +32 (0)2 504 21 11
www.thehotel.be

Language

English (no translation will be provided).

Organising Committee

A. Pinto, S. Dimova, M.L. Sousa, M. Poljanšek and G. Sachs | Joint Research Centre
Milan Veljkovic | European Convention for Constructional Steelwork

With the Support of

European Commission
DG Enterprise and Industry:
M. Rogalska, M. Fuchs

CEN Technical Committee 250 "Structural Eurocodes" (CEN/TC250):
S. Denton (Chairman)
U. Kuhlmann (Chairman CEN/TC250/SC3)
T. Wilkins (Secretariat CEN/TC250)

CEN Management Centre:
G. Ascensão

Further Information

Secretariat of the Workshop Design of steel buildings with the Eurocodes

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The European Commission website on the Eurocodes

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Towards the Eurocodes Era

The EN Eurocodes are a set of European standards which provide common rules for the design of construction works, to check their strength and stability against live extreme loads such as fire and earthquakes. After the publication of the set of 58 Eurocodes Parts in 2007, the implementation of the Eurocodes is taking place in all EU and EFTA Member States and there are firm steps towards their adoption internationally.

The European Commission contributes towards consistency in the adoption and use of the Eurocodes in the Member States and to facilitate training and awareness campaigns. The website “Eurocodes: Building the future” <http://eurocodes.jrc.ec.europa.eu> serves as a platform for the collection, exchange and dissemination of training and promotional material and information.

In the framework of the project “Support to the implementation and further development of the Eurocodes” the JRC, together with DG Enterprise and Industry, established a strategy and a general programme to foster the awareness and training on the Eurocodes, including the organisation of workshops with emphasis on worked examples and the publication of reports compiling the technical papers and the practical examples prepared by the lecturers of the workshops.

Objectives

The Workshop ‘Design of steel buildings with the Eurocodes’, with emphasis on worked examples, intends to contribute towards the transfer of background knowledge and expertise on the Eurocodes, mainly the EN 1993, from specialists of the European Convention for Constructional Steelwork (ECCS) to potential trainers and Eurocodes users.

The principal objectives of the Workshop are:

- transferring knowledge and information on the Eurocodes to trainers and users, namely representatives of key organisations, institutions, industry and technical associations;
- providing state-of-the-art training material, background information and worked examples to trainers and users of the Eurocodes;
- facilitating exchange of views, networking and cooperation.

Preliminary Programme

The Workshop will commence in the morning of October 16 and conclude in the afternoon of October 17. The Workshop will include presentations mainly on the EN 1993 general rules, basic design principles and design methods, and relevant worked examples. Specific rules for fire and earthquake resistance of steel buildings, and sustainability aspects relevant for designers will also be presented. The Workshop sessions will address:

- General rules and rules for buildings (Part 1-1 of EN 1993);
- General rules for structural fire design (Part 1-2 of EN 1993);
- Supplementary rules for cold-formed members and sheeting (Part 1-3 of EN 1993);
- Design of joints (Part 1-8 of EN 1993);
- Specific rules for the design of steel buildings for earthquake resistance (Part 1-1 of EN 1998);
- Sustainability aspects (several Parts of EN 1993 and other sources).

Training delivered by

Luís Simões da Silva University of Coimbra, Portugal; Director of the Institute for Sustainability and Innovation in Structural Engineering. President of the Portuguese Steelwork Association.

Rui Simões University of Coimbra, Portugal.

Frantisek Wald Czech Technical University in Prague, Czech Republic.

Jean-Pierre Jaspert University of Liege, Belgium.

Dan Dubina ‘Politehnica’ University of Timisoara, Romania. Chairman of the Romanian Association for Constructional Steelwork (APCMR).

Raffaele Landolfo University of Naples “Federico II, Italy. Actual president of the European Convention for Constructional Steelwork, ECCS.

Paulo Vila Real University of Aveiro, Portugal. Head of the Fire Resistance Laboratory of the University of Aveiro.

Milan Veljkovic Luleå University of Technology, Sweden. Chairman of the Technical Management Board of ECCS.

Helena Gervásio University of Coimbra, Portugal. Secretary of the Portuguese Technical Committee on the Sustainability of construction works.

Thursday, October 16

9:00 – 9:30	Registration
9:30 – 10:00	Welcome addresses and introduction A. Pinto , DG JRC, European Commission M. Rogalska , DG Enterprise and Industry S. Denton , Chairman CEN/TC250
10:00 – 10:15	The present and future of the Eurocodes S. Denton, Chairman CEN/TC250
10:15 – 10:30	Overview of EN 1993 U. Kuhlmann , Chairman CEN/TC250/SC3
10:30 – 11:00	Coffee break
11:00 – 12:15	Basics of design, a case study building L. Simões da Silva
12:15 – 13:45	Lunch break
13:45 – 15:00	Member design R. Simões
15:00 – 16:15	Bolts, welds, column base F. Wald
16:15 – 16:45	Coffee break
16:45 – 18:00	Design of structural steel joints J.-P. Jaspert

Friday, October 17

9:00 – 9:30	Registration
09:30 – 10:45	Cold-formed steel design D. Dubina
10:45 – 11:15	Coffee break
11:15 – 12:30	Seismic design of steel structures R. Landolfo
12:30 – 14:00	Lunch break
14:00 – 15:15	EN 1993-1-2 - Resistance of members and connections to fire P. Vila Real
15:15 – 15:45	Coffee break
15:45 – 17:00	Sustainability aspects, inventory, comparisons M. Veljkovic, H. Gervásio
17:00 – 17:30	Conclusions and closure DG JRC, European Commission

There will be a dedicated part (15 min.) for “Discussion and Questions”, at the end of each lecture