CEN/TC250/SC7 Seminar – Paris

DESIGN WITH 2ND GENERATION

EUROCODE 7

GUIDELINES AND GEOTECHNICAL DESIGN

EXAMPLES

NEN

21 and 22 October 2024

DEVELOPMENT OF 2nd GENERATION OF EUROCODE 7

Since 2015 project teams and taskgroups of CEN/Technical Committee 250 "Structural Eurocodes" / Sub-Committee 7 "Geotechnical design" have been involved in developing a 2nd Generation Eurocode 7. In 2024 the three parts of Eurocode 7 went for Formal Vote, terminating this intensive process. Now is the time for the National committees to draft their National Annexes, which should be ready by 2027.

Many new topics have now been included in Eurocode 7: ground model, groundwater issues, rock engineering, pile groups and rafts, reinforced fill structures, soil nails, rock bolts and ground improvement.

In the past 4 years, Taskgroups in SC7 have developed guidelines for the application of the new Eurocode and set up examples for testing the new code.

These guidelines and examples will be presented and discussed in 1.5 hour sessions during the 2 day seminar.

WHAT IS PRESENTED:

Guidelines on designing with the 2nd Generation Eurocode 7:

1. How to obtain representative ground parameter values from data of individual geotechnical tests
2. What is a Ground Model and how is it derived
3. What other probabilistic methods next to partial factors are available for use in geotechnical ULS-design
4. What is the link between design and execution made in Eurocode 7 for the daily practice

Design examples on the 2nd Generation Eurocode 7:

Groundwater Limit States, Rock engineering, Slopes, Spread foundations, Piles, Retaining Structures, Anchors, Reinforced Fill, Soil nails, Rock Bolts and Ground Improvement.

Guidance on setting up the National Annex:

Explaining the TC250-rules on drafting the National Annex, Link with the overall code EN1990/1991, Structural codes (EN1992 – EN1999) and Seismic design code EN1998.

PARTICIPATION

The location is the Université Gustave Eiffel, 5 Boulevard Descartes, Champs-sur-Marne, Paris
The fee for participating is € 100,-.
Recommended hotels are closed to "RER A" stations : Gare de Lyon (Place Louis Armand 75012 Paris) or Nation (Place de la Nation, 75012 Paris).
Detailed programme and other information see below.

You can register for the Seminar through the following link;

https://v4.event-vert.org/en/sc7

DESIGN WITH 2ND GENERATION EUROCODE 7 - GUIDELINES AND GEOTECHNICAL DESIGN EXAMPLES

Day 1: 21-10-2024 - 8.30 – 17.30

08.30 **Plenary meeting** **Amphitheatre**
Welcome and introduction
A van Seters, chairman SC7

09.00 **Session 1**
Representative values – Guideline
General Concepts - *J. Estaire*
Value determination procedures - *T. Orr*
Special topics - *J. Sorgatz*

10.30 **Coffeebreak**

11.00 **Reliability analysis - Guideline**
Introduction guideline contents - *T. Schweckendiek*
Uncertainties and reliability methods - *J. Spross*
Application/benchmark examples - *S. Commend / K. Lesny*
Hands-on example

12.30 **Lunch**

14.00 **Design examples (TG B1/B2) – Overview**
L Batali, Convenor TG B2
G. Franzen, Convenor TG B1

14.30 **Spread foundations - Design examples**
Introduction - *K Lesny*
Example TG B2 - *W Bogusz*
Benchmark – *G. Franzen*
Example TG B1 - *F Deckner*
Discussion

16.00 Coffeebreak

16.30 **Hydraulic design - Design examples**
Introduction – *A. van Seters*
Example UPL/HYD TG B2 - *J. Perez Romero*
Example Grouting TG B1 - *B. Ashcroft*
Discussion

Room B015-019

Session 2
Ground Model – Guideline
Introduction - *H. Garin*
Purpose and process of the Ground Model - *M. Baldwin*
Input basis - *M. Baldwin*
Ground Model uncertainties - *P. Reiffsteck*
Examples - *K-J van der Made and R. Wudtke*

Design/Execution - Guideline

Introduction - *D. Hard*
General Concepts
Plans required by the Code
Examples

Retaining structures and anchors - Design examples
Introduction - *S Burlon*
Example TG B2 - *S. Foti*
Benchmark – *L. Batali*
Example TG B1 - *T. Le Cor*
Discussion

Reinforced Fill - Design examples
Introduction – *N. Freitag*
Example Reinforced slope TG B2 - *H. Hangen*
Example on Reinforced retaining wall TG B2 - *H. Hangen*
Example TG B1 - *I. Puig*
Discussion

Day 2: 22-10-2024 - 8.30 – 16.30

Amphitheatre

08.30 **Session 1**
Pile foundations - Design examples
Introduction - *C. Moormann*
Example pile testing and ground investigation TG B2 - *P. IJnsen*
Benchmark – *L. Batali*
Example TG B1 – *B. Janssen*
Discussion

10.00 **Coffeebreak**

10.30 **Ground improvement - Design examples**
Introduction - *N Denies*
Example TG B2 - *K. Trybocka*
Example TG B1 - *P. Pandrea*
Discussion

12.00 Lunch

13.30 **Plenary meeting**
Links between EN1997 and other Eurocodes
UK approach to preparing second-generation National Annexed – *A. Bond*

14.00 EN1997 and Concrete codes EN1992 & EN206 - *K. Beckhaus*

14.30 EN1997 and Basis of design EN1990 - *A. van Seters*

15.00 EN1997 and Steel code EN1993-5 - *O. Moller*

15.30 EN1997 and Seismic codes EN1998 – *S. Foti*

16.00 Closure

Room B015-019

Session 2
Rock engineering - Design examples
Introduction - *L. Lamas*
Two Examples TG B2 - *J. Estaire, W. Bogusz*
Benchmark – *G. Franzen*
Example Rock bolt slope TG B1 - *R Ghazal*
Discussion

Slopes and Soil nailed structures - Design examples
Introduction - *N. Maca*
Example on soil slope - TG B1 – *S. Kamp*
Example Soil nailed slope - TG B2 - *N. Maca*
Example on rock slope TG B1 - *C. Reilly*
Discussion