



IMPLEMENTATION OF EUROCODES IN AUSTRIA

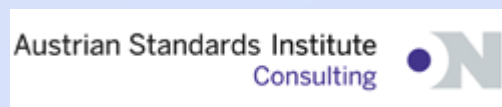
Presentation by
Jochen Fornather
Podgorica, 2012-07-11



Information of expert



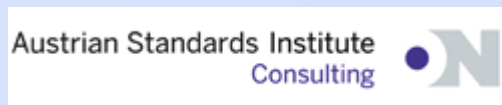
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 - Civil Engineer
(studied construction works at TU Vienna and BOKU)
 - Committee-Manager for Committees at Austrian Standards Institute:
 - Manager for Eurocodes in Austria (EC 0, 1, 2, 3, 4, 5, 8 and 9) (2002 – 2010)
 - Manager for pipes and fittings for water supply (plastics, cast iron, concrete, sewage works)
 - Certification for building products
 - Lecturer at University of BOKU Vienna and University of applied Sciences in Salzburg (Fire behaviour and fire design)



National implementation of EUROCODES – General (1)

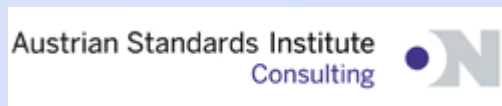
- In the Foreword of the Eurocode is stated; this has to be followed by CEN-members:
 - EUROCODES shall be given the status of a National Standard, either **by publication of an identical text or by endorsement**, and conflicting National Standards shall be withdrawn at latest by March 2010.

NOTE: New CEN-members have to adapt all European standards before becoming a CEN-member.



National implementation of EUROCODES – General (2)

- The National Standards implementing Eurocodes will comprise
 - the full text of the Eurocode (including any annexes), as published by CEN,
 - which may be preceded by a National title page
 - and National foreword,
 - and may be followed by a **National annex**.



National implementation of EUROCODES – General (3)

- The **National annex** may **only contain information on** those parameters which are left open in the Eurocode for national choice, known as **Nationally Determined Parameters**, to be used for the design of buildings and civil engineering works to be constructed in the country concerned.



National implementation of EUROCODES – General (4)

- Examples for **Nationally Determined Parameters**:
 - values and/or classes where alternatives are given in the Eurocode,
 - values to be used where a symbol only is given in the Eurocode,
 - country specific data (geographical, climatic, etc.), *e.g.* snow map,
 - the procedure to be used where alternative procedures are given in the Eurocode.
 - It may contain
 - decisions on the application of informative annexes,
 - references to non-contradictory complementary information to assist the user to apply the Eurocode.

Implementation in Austria

1. Enquiry, if prEN 199x-x-x will become national standard (including comments)
2. EN 199x-x-x is published as **ÖNORM EN 199x-x-x** with a national title page and the National Foreword.
3. The possible national decisions to a **ÖNORM EN 199x-x-x** can be found in a **National Annex**. This is a national standard, designated **ÖNORM B 199x-x-x**, which has to be applied in conjunction with the European standard.
4. The **connection between** those two standards is **established by a National Foreword** in **ÖNORM EN 199-x-x-x**.

Implementation in Austria

ÖNORM EN 199x-x-x

Nationales Vorwort/
National Foreword

ÖNORM B 199x-x-x

- National festgelegte Kenngrößen/Nationally Determined Parameters (NDP)
- Erläuterungen/Comments
- Weitere Anwendungsregeln/
Further rules of application



Implementation in Austria

- The essential content of a National Annex are the **Nationally Determined Parameters**, NDP (e.g. partial factors).
- **Comments**: Should the responsible technical committee be of the opinion that the general application of the content of an EUROCODE can not be suggested, e.g. for safety reasons, a limited field of application will be proposed. Obscurities, based on the translation into the german language, are being clarified.
- **Further rules of application**: Should a specific topic not be dealt with in an EN 199x-x-x, respective definitions - which are not in contradiction to the EUROCODES - can be found in this chapter.



Example: EN 1998-1

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1998-1

December 2004

+ AC

July 2009

ICS 91.120.25

English version

Eurocode 8: Design of structures for earthquake resistance Part 1: General rules, seismic actions and rules for buildings

Eurocode 8: Calcul des structures pour leur résistance
aux séismes — Partie 1: Règles générales, actions
séismiques et règles pour les bâtiments

Eurocode 8: Auslegung von Bauwerken gegen Erdbeben —
Teil 1: Grundlagen, Erdbebeneinwirkungen und Regeln
für Hochbauten

EN 1998-1:2004 was approved by CEN on 2004-04-23 and Amendment AC:2009 on 2009-07-08.

CEN members are bound to comply with the CEN/CENLEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels



Eurocode 8: Design of structures for earthquake resistance

Part 1: General rules, seismic actions and rules for buildings

(consolidated version)

Eurocode 8: Auslegung von Bauwerken gegen Erdbeben —
Teil 1: Grundlagen, Erdbebeneinwirkungen und Regeln für Hochbauten
(konsolidierte Fassung)

Eurocode 8: Calcul des structures pour leur résistance aux séismes —
Partie 1: Règles générales, actions sismiques et règles pour les bâtiments
(version consolidée)

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ICS	91.010.30; 91.120.25
Identical (IDT) with	EN 1998-1:2004-12 + AC:2009-07
Superseded responsible	ÖNORM EN 1998-1:2005-06 Committee 176 Assessment of loads in building and construction

National Foreword EN 1998-1

National Foreword

The present EN 1998-1 has been prepared by the Technical Committee CEN/TC 250 "Structural Eurocodes", Sub-committee SC 8 "Earthquake resistance design of structures".

Parameters (NDPs) for which, according to CEN Internal Regulation, a national decision is taken should be published as National Annex.

NOTE:

This is also recommended by Guidance Paper L¹) of the European Commission.

In Austria, the National Annex is being prepared by the competent Technical Committee 176 „Assumed loads in building and construction" and published as ÖNORM B 1998-1.

ÖNORM EN 1998-1 and ÖNORM 1998-1 are to be applied jointly.

This ÖNORM EN 1998-1 shall be applied jointly with the other standards of the ÖNORM EN 199x series.

For further Information concerning this document see www.eurocode.at.

Possible printing errors in this ÖNORM are announced by an "Errata Sheet". This document is available at the internet platform www.eurocode.at



Thank you for your attention!