



Theoretical Background

National Annexes to EN 1999

All information in this document is subject to modification without prior notice. No part of this manual may be reproduced, stored in a database or retrieval system or published, in any form or in any way, electronically, mechanically, by print, photo print, microfilm or any other means without prior written permission from the publisher. Scia is not responsible for any direct or indirect damage because of imperfections in the documentation and/or the software.

© Copyright 2010 Scia Group nv. All rights reserved.

Table of contents

Table of contents	iii
Version Information	1
Introduction	2
National Choice in EN 1999	3
EN 1999-1-1	3
National Annexes	5
EN 1999-1-1	5
Czech Republic	5
Germany.....	5
France	5
Netherlands	5
Austria	5
Belgium	5
Finland.....	6

Version Information

Welcome to the Theoretical Background for National Annexes to EN 1999.

This document provides background information regarding the application of NDP items according to different countries.

Version info

Document Title	Theoretical Background – National Annexes to EN 1999
Release	2010.1
Revision	07/2010

Introduction

In this Theoretical background in depth information is given regarding the application of National Annexes to EN 1999 for different countries.

More specifically this concerns the following codes:

Eurocode 9
Design of aluminium structures
Part 1 - 1: General structural rules
EN 1999-1-1:2007

The first chapter gives an overview of all NDP articles given in EN 1999 and specifies which of those articles are supported by Scia Engineer.

The subsequent chapters provide details on the specific implementation of the supported articles for different countries.

National Choice in EN 1999

This chapter specifies the articles of EN 1993 in which a national choice is allowed. In addition for each article information is given if the article is supported within Scia Engineer.

EN 1999-1-1

Article	Commentary
1.1.2(1)	The NA may define minimal material thickness <i>No default implementation/Not supported for Scia Engineer</i>
2.1.2(3)	The NA may specify reliability level <i>No default implementation/Not supported for Scia Engineer</i>
2.3.1(1)	The NA may define additional actions <i>No default implementation/Not supported for Scia Engineer</i>
3.2.1(1)	The NA may define additional alloys <i>No default implementation/Not supported for Scia Engineer</i>
3.2.2(1)	The NA may give additional rules <i>No default implementation/Not supported for Scia Engineer</i>
3.2.2(2)	The NA may give additional rules <i>No default implementation/Not supported for Scia Engineer</i>
3.2.3.1(1)	The NA may give additional rules <i>No default implementation/Not supported for Scia Engineer</i>
3.3.2.1(3)	The NA may give additional provisions <i>No default implementation/Not supported for Scia Engineer</i>
3.3.2.2(1)	The NA may give additional rules <i>No default implementation/Not supported for Scia Engineer</i>
5.2.1(3)	The NA may give a different criterion <i>No default implementation/Not supported for Scia Engineer</i>
5.3.2(3)	The NA may define the bow imperfections <i>NA data supported in Scia Engineer</i>
5.3.4(3)	The NA may define the imperfection k <i>NA data supported in Scia Engineer</i>
6.1.3(1)	The NA may define the safety factors <i>NA data supported in Scia Engineer</i>

6.2.1(5)	The NA may define the constant C <i>NA data supported in Scia Engineer</i>
7.1(4)	The NA may give further guidance <i>No default implementation/Not supported for Scia Engineer</i>
7.2.1(1)	The NA may define deflection limits <i>No default implementation/Not supported for Scia Engineer</i>
7.2.2(1)	The NA may define deflection limits <i>No default implementation/Not supported for Scia Engineer</i>
7.2.3(1)	The NA may define vibration limits <i>No default implementation/Not supported for Scia Engineer</i>
8.1.1(2)	The NA may define the safety factors <i>No default implementation/Not supported for Scia Engineer</i>
8.9(3)	The NA may give additional provisions <i>No default implementation/Not supported for Scia Engineer</i>
A(6) (Table A.1)	The NA may give additional provisions <i>No default implementation/Not supported for Scia Engineer</i>
C.3.4.1(2)	The NA may define the safety factors <i>No default implementation/Not supported for Scia Engineer</i>
C.3.4.1(3)	The NA may define the safety factors <i>No default implementation/Not supported for Scia Engineer</i>
C.3.4.1(4)	The NA may define the safety factors <i>No default implementation/Not supported for Scia Engineer</i>
K.1(1)	The NA may give additional provisions <i>No default implementation/Not supported for Scia Engineer</i>
K.3(1)	The NA may specify the method <i>No default implementation/Not supported for Scia Engineer</i>

National Annexes

This chapter provides details on the specific implementation of the supported articles for different countries. Only those items for which a country differs from the default EN are elaborated. For more information reference is made to the EN code and the respective National Annex documents.

EN 1999-1-1

Czech Republic

No National Annex currently available, using default EN.

Germany

No National Annex currently available, using default EN.

France

No National Annex currently available, using default EN.

Netherlands

According to Dutch National Annex NEN-EN 1999-1-1:2006/NB:2006 Ontw.

Article	Commentary
5.3.2(3)	<i>Using the default EN</i>
5.3.4(3)	<i>Using the default EN</i>
6.1.3(1)	<i>Using the default EN</i>
6.2.1(5)	<i>Using the default EN</i>

Austria

No National Annex currently available, using default EN.

Belgium

According to Belgian National Annex prNBN EN 1999-1-1 ANB: 2009.

Article	Commentary
5.3.2(3)	<i>Using the default EN</i>
5.3.4(3)	<i>Using the default EN</i>
6.1.3(1)	<i>Using the default EN</i>
6.2.1(5)	<i>Using the default EN</i>

Finland

According to Finnish National Annex SFS EN 1993-1-1 NA.

Article	Commentary
5.3.2(3)	<i>Using the default EN</i>
5.3.4(3)	<i>Using the default EN</i>
6.1.3(1)	<i>Using the default EN</i>
6.2.1(5)	<i>Using the default EN</i>