CYS National Annex to CYS EN 1994-2:2005

Eurocode 4:

Design of Composite steel and concrete structures

Part 2: General rules and rules for bridges

Prepared by
Eurocodes Committee, Scientific and Technical
Chamber of Cyprus under a Ministry of Interior's Programme

NATIONAL ANNEX

TO

CYS EN 1994-2:2005 Eurocode 4: Design of composite steel and concrete structures

Part 2: General rules and rules for bridges

This National Annex has been approved by the Board of Governors of the Cyprus Organisation for Standardisation on 11/06/2010.

INTRODUCTION

This National Annex has been prepared by the Eurocodes Committee of the Technical Chamber of Cyprus which was commissioned by the Ministry of Interior of the Republic of Cyprus

NA 1 SCOPE

This National Annex is to be used together with CYS EN 1994-2:2005

This National Annex gives:

(a) Nationally determined parameters for the following clauses of CYS EN 1994-2:2005 where National choice is allowed (see Section NA 2)

- 1.1.3 (3)
- 2.4.1 (1)
- 2.4.1.2 (5)P & (6)P
- 5.4.4 (1)
- 6.2.1.5 (9)
- 6.2.2.5 (3)
- 6.3.1 (1)
- 6.6.1.1 (13)
- 6.6.3.1 (1)
- 6.8.1 (3)
- 6.8.2 (1)
- 7.4.1 (4) & (6)
- 8.4.3 (3)

(b) Decision on the use of the Informative Annex C (see Section NA 3)

(c) References to non-contradictory complementary information to assist the user to apply CYS EN 1994-2:2005. In this National Annex such information is provided for the following clauses in CYS EN 1994-2:2005 (see Section NA 4)

NA 2 NATIONALLY DETERMINED PARAMETERS

NA 2.1 Clause 1.1.3 (3) Scope of Part 2 of Eurocode 4

No other guidance for shear connectors is provided.

NA 2.2 Clause 2.4.1.1 (1) Design values of actions

The recommended value of $\gamma_P = 1,0$ is adopted, both for favourable and unfavourable effects.

NA 2.3 Clause 2.4.1.2 (5)P Design values of material or product properties

The recommended value of $\gamma_V = 1,25$ is adopted.

NA 2.4 Clause 2.4.1.2 (6)P Design values of material or product properties

The recommended value of $\gamma_{Mf,s} = 1,0$ is adopted.

NA 2.5 Clause 5.4.4 (1) Combination of global and local action effects

The values of the combination factor ψ shown in Figure E.2 of Annex E of EN 1993-2 are recommended.

NA 2.6 Clause 6.2.1.5 (9) Elastic resistance to bending

Methods (7) and (8) or Section 10 of EN 1993-1-5 may be used.

NA 2.7 Clause 6.2.2.5 (3) Additional rules for beams in bridges

The recommended values of $C_{Rd,c} = 0,15/\gamma_C$, $k_1 = 0,12$ and $\sigma_{cp,0} = 1,85 N/mm^2$ are adopted.

NA 2.8 Clause 6.3.1 (1) Filler beam decks – Scope

No further reference for transverse filler beams is provided.

NA 2.9 Clause 6.6.1.1 (13) Shear connection – Basis of design

No further guidance is provided.

NA 2.10 Clause 6.6.3.1 (1) Headed stud connectors – Design Resistance

The recommended value of $\gamma_V = 1,25$ is adopted.

NA 2.11 Clause 6.8.1 (3) Fatigue – General

The recommended value of $k_s = 0,75$ is adopted.

NA 2.12 Clause 6.8.2 (1) Partial factors for fatigue assessment of bridges

The recommended value of $\gamma_{Mf,s} = 1,0$ is adopted.

NA 2.13 Clause 7.4.1 (4) Cracking of concrete – General

The recommended values of $w_k = w_{max}$ found in the Note to EN 1992-2, 7.3.1 (105) are adopted.

NA 2.14 Clause 7.4.1 (6) Cracking of concrete – General

The recommended temperature difference 20K is adopted.

NA 2.15 Clause 8.4.3 (3)

No further information is provided.

NA 3 DECISION ON USE OF THE INFORMATIVE ANNEX C

NA 3.1 Annex C

Annex C may be used.

NA 4 REFERENCES TO NON-CONTRADICTORY COMPLEMENTARY INFORMATION

None

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