

CYS National Annex to CYS EN 1993-2:2006

Eurocode 3: Design of steel structures

Part 2: Steel bridges

Prepared by

Eurocodes Committee, Scientific and Technical

Chamber of Cyprus under a Ministry of Interior's Programme



NATIONAL ANNEX
TO
CYS EN 1993-2:2006 Eurocode 3: Design of steel structures
Part 2: Steel 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 1993-2:2006

This National Annex gives:

(a) Nationally determined parameters for the following clauses of CYS EN 1993-2:2006 where National choice is allowed (see Section NA 2)

- 2.1.3.2 (1)
- 2.1.3.3 (5)
- 2.1.3.4 (1) & (2)
- 2.3.1 (1)
- 3.2.3 (2) & (3)
- 3.2.4 (1)
- 3.4 (1)
- 3.5 (1)
- 3.6 (1) & (2)
- 4 (1) & (4)
- 5.2.1 (4)
- 5.4.1 (1)
- 6.1 (1)P
- 6.2.2.3 (1)
- 6.2.2.5 (1)
- 6.3.2.3 (1)
- 6.3.4.2 (1) & (7)
- 7.1 (5)
- 7.3 (1)
- 7.4 (1)
- 8.1.3.2.1 (1)
- 8.1.6.3 (1)
- 8.2.1.4 (1)
- 8.2.1.5 (1)
- 8.2.1.6 (1)
- 8.2.10 (1)
- 8.2.13 (1)
- 8.2.14 (1)
- 9.1.2 (1)
- 9.1.3 (1)
- 9.3 (1)P & (2)P
- 9.4.1 (6)
- 9.5.2 (2), (3), (5), (6) & (7)
- 9.5.3 (2) (2 places)
- 9.6 (1) (2 places)

- 9.7 (1)
- A.3.3 (1)P
- A.3.6 (2)
- A.4.2.1 (2), (3) & (4)
- A.4.2.4 (2)
- C.1.1 (2)
- C.1.2.2 (1) & (2)
- E.2 (1)

(b) Decisions on the use of the Informative Annexes A, B, C, D and E (see Section NA 3)

(c) References to non-contradictory complementary information to assist the user to apply CYS EN 1993-2:2006. In this National Annex such information is provided for the following clauses in CYS EN 1993-2:2006 (see Section NA 4)

NA 2 NATIONALLY DETERMINED PARAMETERS

NA 2.1 Clause 2.1.3.2 (1) Design working life

The recommended value of 100 years is adopted for the design working life of a permanent bridge.

NA 2.2 Clause 2.1.3.3 (5) Durability

No additional recommendations are provided for durable details.

NA 2.3 Clause 2.1.3.4 (1) Robustness and structural integrity

No recommendation is provided for components subject to accidental design situations.

NA 2.4 Clause 2.1.3.4 (2) Robustness and structural integrity

No recommendation is provided for the choice of a design method.

NA 2.5 Clause 2.3.1 (1)

No additional actions are specified beyond EN 1991.

NA 2.6 Clause 3.2.3 (2)

No additional requirements are specified for the toughness of the base material.

NA 2.7 Clause 3.2.3 (3)

Use Table 2.1 of EN 1993-1-10 for $\sigma_{Ed} = 0,25f_y(t)$ as recommended.

NA 2.8 Clause 3.2.4 (1)

Use Table 3.2 as recommended.

NA 2.9 Clause 3.4 (1)

No types of cables for specific bridge types are specified.

NA 2.10 Clause 3.5 (1)

No further guidance is provided.

NA 2.11 Clause 3.6 (1)

No further guidance is provided.

NA 2.12 Clause 3.6 (2)

No further guidance is provided.

NA 2.13 Clause 4 (1)

No further guidance is provided.

NA 2.14 Clause 4 (4)

No further guidance is provided.

NA 2.15 Clause 5.2.1 (4)

No further guidance is provided.

NA 2.16 Clause 5.4.1 (1)

No further guidance is provided.

NA 2.17 Clause 6.1 (1)P

The recommended values for the partial factors γ_{Mi} are adopted.

NA 2.18 Clause 6.2.2.3 (1)

No further guidance is provided.

NA 2.19 Clause 6.2.2.5 (1)

Both methods 1 and 2 may be used. No further guidance is provided for method 2.

NA 2.20 Clause 6.3.2.3 (1)

No further information is provided.

NA 2.21 Clause 6.3.4.2 (1)

The recommended values of $\bar{\lambda}_{c,0} = 0,2$ and $k_{fl} = 1,0$ are adopted.

NA 2.22 Clause 6.3.4.2 (7)

The recommended method is adopted.

NA 2.23 Clause 7.1 (5)

No further guidance is provided.

NA 2.24 Clause 7.3 (1)

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

NA 2.25 Clause 7.4 (1)

No further guidance is provided.

NA 2.26 Clause 8.1.3.2.1 (1)

No further guidance is provided.

NA 2.27 Clause 8.1.6.3 (1)

No further guidance is provided.

NA 2.28 Clause 8.2.1.4 (1)

No further guidance is provided.

NA 2.29 Clause 8.2.1.5 (1)

No further guidance is provided.

NA 2.30 Clause 8.2.1.6 (1)

No further guidance is provided.

NA 2.31 Clause 8.2.10 (1)

No further guidance is provided.

NA 2.32 Clause 8.2.13 (1)

No further guidance is provided.

NA 2.33 Clause 8.2.14 (1)

No further guidance is provided.

NA 2.34 Clause 9.1.2 (1)

No further guidance is provided.

NA 2.35 Clause 9.1.3 (1)

No further guidance is provided.

NA 2.36 Clause 9.3 (1)P

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

NA 2.37 Clause 9.3 (2)P

The recommended values of γ_{Mf} from Table 3.1 of EN 1993-1-9 are adopted.

NA 2.38 Clause 9.4.1 (6)

No further guidance is provided.

NA 2.39 Clause 9.5.2 (2)

The recommended values of λ_1 from Figure 9.5 are adopted.

NA 2.40 Clause 9.5.2 (3)

No further guidance is provided.

NA 2.41 Clause 9.5.2 (5)

The recommended value of $t_{Ld} = 100$ years is adopted.

NA 2.42 Clause 9.5.2 (6)

No further guidance is provided.

NA 2.43 Clause 9.5.2 (7)

The recommended values of λ_{\max} from Figure 9.6 are adopted.

NA 2.44 Clause 9.5.3 (2) (2 places)

Note 1: No further guidance is provided.

Note 3: No further guidance is provided.

NA 2.45 Clause 9.6 (1) (2 places)

Note 1: No details from EN 1993-1-9 are excluded for the design of bridges.

Note 2: No further guidance is provided.

NA 2.46 Clause 9.7 (1)

No further guidance is provided.

NA 2.47 Clause A.3.3 (1)P

The recommended values of $\gamma_{\mu} = 2,0$ for steel on steel and $\gamma_{\mu} = 1,2$ for steel on concrete are adopted.

NA 2.48 Clause A.3.6 (2)

The recommended values of a from Table A.2 are adopted.

NA 2.49 Clause A.4.2.1 (2)

No further guidance is provided.

NA 2.50 Clause A.4.2.1 (3)

The recommended values of ΔT_0 from Table A.4 are adopted.

NA 2.51 Clause A.4.2.1 (4)

The values of ΔT_0 from Table A.4 are adopted. The additional safety term is $\Delta T_{\gamma} = 5 \text{ }^{\circ}\text{C}$.

NA 2.52 Clause A.4.2.4 (2)

No further guidance is provided.

NA 2.53 Clause C.1.1 (2)

No further guidance is provided.

NA 2.54 Clause C.1.2.2 (1)

The recommended values for the plate dimensions are adopted as they appear in Note 1 and Figure C.2

NA 2.55 Clause C.1.2.2 (2)

The recommended minimum stiffness values from Figure C.4 are adopted.

NA 2.56 Clause E.2 (1) Combination factor

The recommended values of the combination factor ψ shown in Figure E.2 are adopted.

NA 3 DECISION ON USE OF THE INFORMATIVE ANNEXES A, B, C, D and E

NA 3.1 Annex A

Annex A may be used.

NA 3.2 Annex B

Annex B may be used.

NA 3.3 Annex C

Annex C may be used.

NA 3.4 Annex D

Annex D may be used.

NA 3.5 Annex E

Annex E may be used.

NA 4 REFERENCES TO NON-CONTRADICTORY COMPLEMENTARY INFORMATION

None

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