

Annex P

National Forewords and National Annexes

1. General

(1) This Annex brings together the information to be used by National Standards Bodies when transposing EN Eurocode Parts into national standards. They may need to prepare either National Forewords and/or National Annexes, although there is no requirement to do so under the CEN rules. A National Foreword is likely to be added by National Standards Bodies to all EN Standards; a National Annex may not always be necessary.

(2) In practice it will be essential, in most cases, to provide a National Annex to each EN Eurocode Part, even if only to confirm that the recommended values for Nationally Determined Parameters (NDPs) are to be used in a Country.

NOTE A National Annex need not be published if an EN Eurocode Part is not relevant in a Country e.g. seismic EN Eurocode Parts in some Countries, although a statement to this effect will need to be made.

NOTE It is recommended that National Annexes are made available separately from EN Eurocode Parts, and preferably with an English language version.

NOTE In some countries a different document may fulfil the purpose of a National Annex.

(3) In this document, N 250, National Annexes are referred to in

- 7.16 (2)
- Annex J g
- Annex L 4 and 5
- Annex P

(4) Examples of the types of information that may be included in National Annexes are given below in 4.

(5) Guidance paper L *Application and Use of Eurocodes*, published by the European Commission refers to National Annexes in 2.3.

(6) CONSTRUCT 02/519 *Nationally Determined Parameters and National Annexes for EN Eurocodes* gives the position of the Commission.

2. National Foreword

2.1 Status

(1) The status of a National Foreword is Informative.

2.2 Typical content

(1) A possible form of wording is

“This *British* Standard is the official *English* language version of EN xxx. It supersedes DD ENV yyy, which is withdrawn.

“The *UK* participation in its preparation was entrusted to *BSI Committee B/525* ...

“Where a normative part of this EN allows a choice to be made at the national level, the relevant parameter will be given in the normative text and a Note will qualify it as a Nationally Determined Parameter. The Note will state that the choice to be used in a country will be found in its National Annex.

“To enable EN xxx to be used in the *UK*, the NDPs will be published in a National Annex, which will be incorporated by amendment into this *British* Standard (or be given in the National Annex if one is published separately);”

As an alternative to the preceding paragraph, when a Country does not wish to choose Nationally Determined Parameters different from the recommended values: “To enable EN xxx to be used in the *UK*, all of the recommended values are adopted.”

3. National Annex

3.1 Status

(1) The status of a National Annex is Informative. The NDPs may be given Normative status in National Provisions, as defined in Guidance Paper L.

3.2 Items that can be included in a National Annex

(1) The Foreword to each EN Eurocode Part contains a common clause, under “National Standards implementing Eurocodes”, about the information that may be given in a National Annex (see also Annex K) and it is repeated here:

“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, *i.e.* :

- 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 also contain

- decisions on the application of informative annexes,
- references to non-contradictory complementary information to assist the user to apply the Eurocode.”

(2) Matters that are not appropriate to a National Annex are given in 3.7

(3) The above six types of information that may be included in a National Annex are also given in Annex L 5.1. The first four types are Nationally Determined Parameters (NDPs). Examples are given below.

3.3 Items that need to be covered in a National Annex

(1) The clauses in the EN Eurocode Part that provide for national choice i.e the Nationally Determined Parameters, are listed in the Foreword of each EN Eurocode Part. The listed items need to be covered in the National Annex.

(2) References to a National Annex in an EN Eurocode Part can be made only in a NOTE, not in a Normative Clause

3.4 Timetable of availability of National Annexes

(1) A timetable for publication of National Standards transposing an EN Eurocode Part is given in Guidance Paper L, relative to the DAV (Date of Availability) of the Part.

(2) Withdrawal of National Standards covering the same scope as the EN Eurocode Part is covered in Guidance Paper L.

(3) The EN Eurocode Part, with its National Annex, is to be published within 24 months from DAV (see Guidance Paper L), even though subsequent improvement to the National Annex may be necessary. Amendment of National Annexes may be made at any time using the procedures applicable within the National Standards Body.

3.5 Recommended values for Nationally Determined Parameters

(1) Notes to Clauses in EN Eurocode Parts referring to Nationally Determined Parameters should give recommended values, although exceptionally it may not be possible. In some cases, rather than a single recommended value, the Note may give a range of values, with or without an explicit recommendation within that range.

(2) It is strongly recommended that Countries adopt the recommended values. However, when justified, a Country may give a different value or may allow a range to be used for a project, from which the designer, owner or other relevant person can make a choice.

(3) When a choice of procedures is given in an EN Eurocode Part, a Country may choose one or, if appropriate, more in its National Annex, taking the relevant conditions for their use into account.

3.6 Decisions on use of Informative Annexes

(1) The possible decisions are given in N 250 Annex L 5.2, together with indicative wording.

3.7 Unacceptable uses of a National Annex

The scope of a National Annex is defined above and it is not permitted to:

- (1) introduce alternative Application Rules into a National Annex.
- (2) amend any clauses, values or methods, except as provided by 3.3 above.
- (3) make the National Annex become a handbook.
- (4) explain CEN procedures.
- (5) give design guidance (other than by the choice of Nationally Determined Parameters) but there may be reference to separate documents.
- (6) give interpretation of the meaning of clauses.
- (7) amplify clauses under the heading of non-contradictory complementary information, but reference may be made to complementary documents.
- (8) change normative values, as if they were Nationally Determined Parameters. (Notes to clauses will identify when NDPs can be used).

4 Examples of the use of Nationally Determined Parameters (following 3.5)

4.1 Type 1. Values and/or classes where alternatives are given in the Eurocode

- (1) The possible values are explicit, as the choices will be stated in the Eurocode.

4.2 Type 2. Values to be used where a symbol only is given in the Eurocode

4.2.1 Choice

- (1) The choice of NDP is free in this case for the national competent authority.

4.2.2 Example from EN 1990

- (1) The Notes to Tables A.1.2 (A), (B), give recommended values for γ and ξ but their use is not obligatory.

4.2.3 Example from EN 1991-1-1, clause 6.3.1.2 (1)P

- (1) Symbols only are given in the clause.
- (2) A range of values, together with a recommended value, is given in a note for imposed loads on floors, balconies and stairs for various categories of use.

(3) The following, in italics, is extracted from 6.3.1.2 Values of actions:

(1)P The categories of loaded areas, as specified in Table 6.1, shall be designed by using characteristic values q_k (uniformly distributed load) and Q_k (concentrated load).

NOTE Values for q_k and Q_k are given in Table 6.2 below. Where a range is given in this table, the value may be set by the National annex. The recommended values, intended for separate application, are underlined. q_k is intended for determination of general effects and Q_k for local effects. The National annex may define different conditions of use of this Table.

Table 6.2 - Imposed loads on floors, balconies and stairs in buildings

<i>Category A</i>		
<i>- Floors</i>	<i>1,5 to <u>2,0</u></i>	<i><u>2,0</u> to 3,0</i>
<i>- Stairs</i>	<i><u>2,0</u> to 4,0</i>	<i><u>2,0</u> to 4,0</i>
<i>- Balconies</i>	<i><u>2,5</u> to 4,0</i>	<i><u>2,0</u> to 3,0</i>
<i>.....</i>	<i>.....</i>	<i>.....</i>
<i>.....</i>	<i>.....</i>	<i>.....</i>

- End of extract

4.3 Type 3. Country specific data (geographical, climatic, etc) e.g. snow map

4.3.1 Choice

(1) The choice of NDP is free in this case for the national competent authority.

4.3.2 Example from EN 1991-1-3, Clause 4.1

(1) NOTE 1 allows a National Annex to give a snow map. The note refers to characteristic values in order to accommodate countries that provide data about individual places instead of a map.

(2) The following, in italics, is extracted from 4:

Section 4 Snow load on the ground

4.1 Characteristic values

(1) The characteristic value of snow load on the ground should be determined in accordance with EN 1990, 4.1.2 (7) and the definition for characteristic snow load on the ground given in 1.6.1.

NOTE 1 The National Annex gives the characteristic values to be used.

NOTE 2 To cover unusual local conditions the National Annex may allow, for an individual project, the client and the relevant authority to agree upon a different characteristic value.

NOTE 3 Annex C gives the European ground snow load map, resulting from studies commissioned by DGIII/D-3. The National Annex may make reference to this map in order to eliminate, or to reduce, the inconsistencies at countries' borderlines.

(2) In special cases where more refined data may be necessary, the characteristic value of snow load on the ground s_k may be refined using an appropriate statistical analysis of long records taken in a well sheltered area near the site and approved by the appropriate National Authority.

NOTE As there is usually considerable variability in the number of recorded maximum winter values, record of periods less than 20 years will not generally be suitable.

(3) Where, in particular locations, snow load records show individual, exceptional values which cannot be treated by the usual statistical methods, the characteristic values should be determined without taking into account these exceptional values. The exceptional values may be considered outside the usual statistical methods in accordance with 4.3.

- End of extract

4.4 Type 4. The procedure to be used where alternative procedures are given in the Eurocode

4.4.1 Choice

(1) The guidance given above in 3.5 (3) should be followed.

4.4.2 Example from EN 1990

(1) The following, in italics, is extracted from A1.3.1 (1):

The design values of actions for ultimate limit states in the persistent and transient design situations (expressions 6.9a to 6.10b) should be in accordance with Tables A1.2 (A) to (C).

5. Examples of other information that can be included in a National Annex

5.1 Type 5. Decisions on the application of informative annexes

(1) The decision on the use of an informative annex will normally be made by the appropriate national competent authority and given in the National Annex. If information is given it should follow the guidance in Annex L, 5.2.

5.2 Type 6. References to non-contradictory complementary information to assist the user to apply the Eurocode

(1) This possibility gives limited scope to provide explanation of a clause, perhaps in comparison with existing national rules.

(2) The provision of other material should be in documentation separate from the National Annex, whether endorsed by a national competent authority or published independently.

(3) As an example of separate documentation, EN 1991-1-3 for snow loads gives guidance on shape coefficients for determining the snow distributions on the more common roof shapes but does not cover all shapes. Reference may be made in the National Annex to guidance published separately on the shape coefficients for shapes of roof not covered by EN 1991-1-3. But such guidance shall not be included in the National Annex itself.