EUROCODES DATABASE FOR NATIONALLY DETERMINED PARAMETERS

Support to the implementation, harmonization and further development of the Eurocodes

K. Mehr, A. Altinyollar, A. Pinto, S. Dimova, F. Taucer, G. Tsionis, M. Geradin
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The mission of the JRC is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies. As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union. Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.
Acknowledgements

This report summarises several deliverables within the framework of the Administrative Arrangement between DG ENTR and JRC on support to the implementation, harmonization and further development of the Eurocodes No FIF.2004740 (17.12.2004).

The contribution of CEN/TC250 into database development and in particular the consultation of the procedures for Nationally Determined Parameters data input, is gratefully acknowledged.
Summary

This document provides description of the Eurocodes database for Nationally Determined Parameters (NDPs database), which was created in the frame of the Administrative Arrangement (AA) between the Enterprise and Industry Directorate General (DG ENTR) and the Joint Research Centre (JRC) regarding the support to the implementation, harmonization and further development of the Eurocodes.

The Eurocodes and their National implementation are presented in order to outline the role of the NDPs in the process. The Commission Recommendation of 11 December 2003 on the implementation and use of the Eurocodes for construction works and construction products is overviewed as the EU policy background for the definition of the purpose and the relevant design, development and maintenance strategies of the NDPs database.

The NDPs database will constitute the basis for the analysis of the NDPs and for the definition of strategies tending to achieve further convergence and consequently aiming at facilitating the achievement of the European Single Market for construction works and structural construction products.

The administration of the database provides the necessary security conditions so that it exclusively serves the above mentioned purpose. The information contained in this NDPs database is only provided to the authorized users and cannot, in any circumstances and by any means, be transmitted to third parties. The user is prompted to read and accept the rules and the disclaimer provided.

The database contains information about the National Annexes to each Eurocode Part and the respective NDPs, their recommended values and the values chosen by the EU and EFTA Member States and the EU Candidate Countries. The developed by the JRC classification of the NDPs, which aims at simultaneous mirroring the functionality of the NDPs in the code and the data type needed for the definition of the database fields, is presented.

The conditions for access to the database, NDPs upload rules and the possibilities for data post-processing are overviewed. The user's manuals regarding the upload of the NDPs and data post-processing are incorporated as annexes to the report.
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1 Introduction

On 17.12.2004 DG ENTR and the JRC signed an Administrative Arrangement (No FIF.2004740) in support of the implementation, harmonization, international promotion and further development of the Eurocodes. It encompasses a three years period (01.03.2005 – 29.02.2008) of activities on the following five objectives related to the European standards for construction and construction products (EN 1990 to 1999 series) named “Eurocodes”:

1. Harmonization of European Design of Constructions and Construction products
   (Harmonization objective)

2. Implementation of the Eurocodes (Training programme)
   (Training for Implementation objective)

3. International Promotion of the Eurocodes (increase impact and competitiveness of EU industry internationally)
   (International Promotion objective)

4. Achieving increased protection of constructions against earthquakes and fire
   (Safety objective)

5. Fostering innovation in construction (increase competitiveness of EU industry)
   (Innovation objective)

The JRC work in the context of the first Administrative Arrangement progresses according to the foreseen planning and schedule and generates a fruitful interaction with the other stakeholders involved in the implementation and use of the Eurocodes, in particular with CEN/TC250.

The NDPs database was created by JRC in the framework of the Administrative Arrangement with DG ENTR/G5 in view of implementing the concerned parts of the Commission Recommendation of 11 of December, 2003, on the implementation and use of Eurocodes for construction works and structural construction products, namely in notifying the Commission on the NDPs and assessing their impact as regards the technical differences for works or parts of work.

The Eurocodes database for Nationally Determined Parameters (NDPs database) is an online database where users can access the NDPs and the National Annexes of the participating countries by means of the Internet and a web browser. It is administrated by the JRC, ELSA Unit.
2 The Eurocodes and their National Implementation

2.1 The Eurocodes

The EN Eurocodes (referred to further on as Eurocodes) are a series of 10 European Standards, EN 1990 – EN 1999, providing a common approach for the design of buildings and other civil engineering works. Their publication has been completed in 2007 and the National implementation for most Eurocodes parts is expected to be completed in 2010.

It is mandatory that the EU Member States accept designs to the Eurocodes, since the National Standards implementing the Eurocodes will become the standard technical specification in all contracts for public works and public services.

The Eurocodes apply to structural design of buildings and other civil engineering works including:

- geotechnical aspects
- structural fire design
- situations including earthquakes, execution and temporary structures

For the design of special construction works (e.g. nuclear installations, dams, etc.) other provisions than those in the Eurocodes might be necessary.

The Eurocodes standards cover:

- basis of structural design (EN 1990)
- actions on structures (EN 1991)
- the design of concrete (EN 1992), steel (EN 1993), composite steel and concrete (EN 1994), timber (EN 1995), masonry (EN 1996) and aluminium (EN 1999) structures, together with
- geotechnical design (EN 1997) and
- the design, assessment and retrofitting of structures for earthquake resistance (EN 1998).

The Member States of the EU and the European Free Trade Association (EFTA) recognise that the Eurocodes serve as reference documents for the following purposes:

- as a means to prove compliance of building and civil engineering works with the Essential Requirements of the Construction Products Directive, particularly Essential Requirement 1 "Mechanical resistance and stability" and Essential Requirement 2 "Safety in case of fire",
- as a basis for specifying contracts for construction works and related engineering services,
- as a framework for drawing up harmonised technical specifications for construction products (ENs and ETAs).
2.2 National Implementation of the Eurocodes

Member States, National Authorities in liaison with National Standards Bodies (NSBs) and other relevant parties, should design and set-up an appropriate Implementation Plan for the Eurocodes in their country. As part of that plan, National Authorities and NSBs, when an Eurocode Part is made available, should:

- translate the Eurocode Part in authorised National languages,
- set the Nationally Determined Parameters (NDPs) to be applied on their territory,
- publish the National Standard transposing the Eurocode and the National Annex, containing the National choice on the NDPs and reference to non-contradictory complementary information, and notify the European Commission,
- adapt, as far as necessary, their National Provisions so that the Eurocode Part can be used on their territory: as a means to prove compliance of construction works with the National requirements for “mechanical resistance and stability” and “resistance to fire” as a basis for specifying contracts for the execution of public construction works and related engineering services,
- promote training on the Eurocodes.

The National Standard transposing the Eurocode Part, when published by a National Standardisation Body, will be composed of the Eurocode text (preceded by a National Title page and by a National Foreword), generally followed by a National Annex (see Figure 1).

![Figure 1. National publication of a Eurocode Part](image)

During the Coexistence Period, both the National Standard transposing the Eurocode and any existing National Standard can be used. At the end of the Coexistence Period, the NSBs should withdraw all conflicting National Standards.

Eurocodes recognise the responsibility of regulatory authorities in each Member State and have safeguarded their right to determine values related to regulatory safety matters at a National level where these continue to vary from State to State.
Eurocodes provide for National Choices full sets of recommended values, classes, symbols and alternative methods to be used as Nationally Determined Parameters (NDPs).

The National Annex contains information on the Nationally Determined Parameters, to be used for the design of buildings and other 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,
- 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.

When Member States lay down their NDPs, they should:

- choose from the classes included in the Eurocodes, or
- use the recommended value, or choose a value within the recommended range of values, for a symbol where the Eurocodes make a recommendation, or
- when alternative methods are given, use the recommended method, where the Eurocodes make a recommendation,
- take into account the need for coherence of the NDPs laid down for the different Eurocodes and the various Parts thereof.

When the Eurocodes are used for the design of construction works, or parts thereof, the NDPs of the Member State on whose territory the works are located shall be applied.

### 2.3 Commission Recommendation to the Member States on the implementation and use of Eurocodes (2003/887/EC)

A shared effort between the Commission, the Member States and Industry is put forward by the Commission Recommendation of 11 December 2003 on the implementation and use of the Eurocodes for construction works and construction products. The actions recommended could be summarized as follows:

1. Adopt the Eurocodes as a suitable tool for designing construction works, checking the mechanical resistance of components, or checking the stability of structures.
2. Lay down the Nationally Determined Parameters (NDPs) usable in their territory.
3. Use the recommended values of the NDPs provided by the Eurocodes.
4. Compare the NDPs implemented by each Member State and assess their impact.
5. Refer to the Eurocodes in their National provisions for conformity assessment.
6. Undertake research to facilitate the integration into the Eurocodes of the latest developments in scientific and technological knowledge.
7. Promote instruction in the use of the Eurocodes.

The recommendations which directly concern the NDPs are:

“2. Member States should lay down the parameters usable in their territory, hereinafter ‘the nationally determined parameters.’”

“3. Member States should use the recommended values provided by the Eurocodes when nationally determined parameters have been identified in the Eurocodes. They should diverge from those recommended values only where geographical, geological or climatic conditions or specific levels of protection make that necessary. Member States should notify the Commission of the nationally determined parameters in force on their territory within two years of the date on which the Eurocodes become available.”

and

“4. Member States should, acting in coordination under the direction of the Commission, compare the nationally determined parameters implemented by each Member State and assess their impact as regards the technical differences for works or parts of works. Member States should, at the request of the Commission, change their nationally determined parameters in order to reduce divergence from the recommended values provided by the Eurocodes.”

The NDPs database described below establishes the technical background needed for implementation of recommendations 3 and 4.
3 Purpose of the NDPs Database

The main functions of the NDPs database are as follows:

- It is a means of notification by the Member States to the European Commission of the National implementation of the Eurocodes (Member States duty);
- It is a fundamental and unique tool to register and collect the full set of data for the National Annexes and the NDPs;
- The completion of the database is an absolute pre-requisite for comparison of the NDPs of the Member States and for further harmonization efforts of the Eurocodes, as indicated in the Commission Recommendation of 11 December 2003.

The purpose of the NDPs database is to form the basis for the analysis of the NDPs and for the definition of strategies tending to achieve further convergence and consequently aiming at facilitating the achievement of the European Single Market for construction works and structural construction products.

The NDPs database exclusively serves the above mentioned purpose. The information contained in this NDPs database is only provided to the authorized users and cannot, in any circumstances and by any means, be transmitted to third parties. The user is prompted to read and accept the rules and the disclaimer provided.
4 Contents of the Database

The database contains the description of the NDPs and their recommended values for EN 1990 to EN 1999. By 30.04.2007 all the 58 Eurocode Parts have reached Stage 64 (Date of availability at the CEN Management Centre). At this stage, the database contains 1501 NDPs, their recommended values and the uploaded National choices for the NDPs. In Figure 2 the number of NDPs contained in the different Eurocodes is shown.

![Figure 2. Number of NDPs contained in the different Eurocodes](image)

The only Eurocodes Parts that are visible to the users are those which have been already consulted with the respective Sub-committee of CEN/TC250. Due to physical time needed for final check of the NDPs, the parts which reached Stage 64 are visible in the database few months after their availability in the Eurocodes database of the DG ENTR.

The database includes also the National Annexes to each Eurocode Part. Initially separate databases for the NDPs and for the National Annexes were planned. They were merged, because:

- the same data security rules and rules for access apply to the users of the NDPs and National Annexes databases,
- the use of a single database for all information regarding the National Implementation of the Eurocodes is more convenient for rapid access to the information.

The database is also a tool for collection of background information on the choice of the NDPs by the Member States. When uploading the accepted NDPs, Member States are
requested to provide explanation of the reasons for deviation from the recommended value. The explanation can be given in the corresponding text box, and/or uploaded as a PDF or a MS-doc file. The explanations provided by the Member States will be linked to the Eurocodes database for background documents.

4.1 Types of NDPs

In a number of cases an NDP cannot be represented by a single value. There are many NDPs which take the form of tables, graphs, acceptance of the recommended procedure, choice of calculation approach, when alternatives are given, or introduction of a new procedure, provision of further, more detailed information, etc. For this reason a classification of the NDPs types was developed by the JRC aiming at simultaneous mirroring of the functionality of the NDPs in the code and of the data type needed for the definition of the database fields. In Table 1 the types the NDPs considered in the database are presented.

Table 1. Types of NDPs

<table>
<thead>
<tr>
<th>General type</th>
<th>Type</th>
<th>Description</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>Description #</td>
<td>Description</td>
<td>Description</td>
<td>#</td>
</tr>
<tr>
<td>1</td>
<td>Value(s) of (a) parameter(s)</td>
<td>1.1</td>
<td>Predetermined Parameters (with recommended value)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2</td>
<td>Predetermined Parameters (without recommended value)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3</td>
<td>No Predetermined Parameters</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Reference to some set of values – table(s)</td>
<td>2.1</td>
<td>Fixed Tables (only cell values can be changed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.2</td>
<td>Flexible Tables (rows and columns can be changed)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Acceptance of the recommended procedure, choice of calculation approach, when alternatives are given, or introduction of a new procedure</td>
<td>3.1</td>
<td>Acceptance of recommended procedures / approaches or introduction of new ones</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2</td>
<td>Country procedures / approaches</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3</td>
<td>Alternative choice from given options (with recommended value)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.4</td>
<td>Alternative choice from given options (without recommended value)</td>
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<td></td>
<td></td>
<td>3.5</td>
<td>Choice from given options (without recommended value)</td>
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<td></td>
<td></td>
<td>3.6</td>
<td>Choice from given options (without recommended value) or introduction of new procedures / approaches</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.7</td>
<td>Acceptance of recommended procedures / approaches in fixed tabular form or introduction of new ones</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.8</td>
<td>Acceptance of recommended procedures / approaches in flexible tabular form or introduction of new ones</td>
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</tr>
<tr>
<td>4</td>
<td>Country specific data (geographical, climatic, etc.)</td>
<td>4</td>
<td>Country specific data (geographical, climatic, etc.)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>National chart(s) or table(s) of a parameter</td>
<td>5</td>
<td>National chart(s) or table(s) of a parameter</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Diagrams</td>
<td>6</td>
<td>Diagrams</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>References to non-contradictory complementary information</td>
<td>7</td>
<td>References to non-contradictory complementary information</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Decisions on the application of informative Annexes</td>
<td>8</td>
<td>Decisions on the application of informative Annexes</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Provision of further, more detailed information</td>
<td>9</td>
<td>Provision of further, more detailed information</td>
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</tr>
<tr>
<td>10</td>
<td>Reference to information</td>
<td>10.1</td>
<td>Reference to information which is included in an informative annex</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>10.2</td>
<td>Reference to information which is included in other parts of the EN text</td>
<td></td>
</tr>
</tbody>
</table>
In Figure 3 the number of the NDPs corresponding to the different general types in all Eurocodes Parts is presented.

![Figure 3: Number of the NDPs corresponding to the different general types in all Eurocodes Parts](image)

As seen from the above figure, only 563 NDPs (37.5% of all NDPs) have numerical values. The majority of the NDPs relate to choice of calculation approach, country specific data (geographical, climatic, etc.), diagrams, references to non-contradictory complementary information, decisions on the application of informative annexes and provision of further more detailed information.

The analysis of the distribution of the NDPs over the different types is important for the forward planning of the activities on comparison of the NDPs chosen by the Member States and analysis of their divergence from the recommendation. The fact that some 62% of the NDPs are not presented by numerical values naturally calls for broad involvement of expert analysis for assessment of the degree of the divergence from the recommendation and further harmonization potential.
5 Access to the Database

The site has restricted and controlled access and it is administrated by the DG JRC, ELSA Unit. Access is allowed to the following users groups:

- Group 1: The interested Commission Services (DG ENTR, JRC),
- Group 2: CEN TC250 Coordination Group and its Sub-Committees,
- Group 3: The interested National Authorities (NAs) of the EU and EFTA Member States and of the EU Candidate Countries,
- Group 4: National Standardization Bodies (NSBs) of the EU and EFTA Member States and of the EU Candidate Countries,
- Group 5: Possibly others to be designated by the Commission.

The policy agreed to access to the NDPs database is the following:

*National Authorities or National Standardization Bodies, must state if their NDPs can be seen by all database users (open view) or if the view is restricted to Groups 1 and 2 (restricted view). The ‘open view’ choice will allow seeing the NDPs from the other countries that have made the ‘open view’ choice, while the ‘restricted view’ choice allows the country to access only to its own NDPs.*

The Heads of Delegation to the Standing Committee 89/106/EC were officially notified about the start of the upload of the NDPs and National Annexes in the database by a letter of DG ENTR on 07.07.2006. The National Authorities should send a Reply form to the database administration informing about their decisions concerning:

- the visibility of data,
- the persons nominated for upload of NDPs, and
- the persons nominated for view access

Before getting access authorization to the database, all the nominated users should sign and send to the database administration a reply form for acceptance of conditions and rules for use of the database.

By 21.05 2007, the state of nomination and registration of users from Groups 3 and 4 in the NDPs database is as follows (Table 2):

- 14 Countries sent their reply form nominating persons responsible for uploading of the NDPs and persons for view access,
- 39 persons have been nominated for uploading,
- 90 persons have been nominated for view access;
- 26 persons who were nominated for uploading of the NDPs signed and sent their reply form back and received username and password,
- 50 persons who were nominated for view access signed and sent the reply form back and received username and password.
### Table 2. State of nomination and registration of users from Groups 3 and 4 by 21.05.2007:

<table>
<thead>
<tr>
<th>#</th>
<th>Country</th>
<th>Number of persons nominated and registered in the NDPs database</th>
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<td>Uploading of NDGs (Group 4)</td>
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<td>32</td>
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</table>

Note: Countries (14) which have sent letter for nomination of users are marked in red colour.

Total 39 26 90 50
6 Upload of NDPs

The upload of the NDPs for each country is made by the National Authority (NA), which may delegate on the corresponding National Standardization Body (NSB). Instructions are available by clicking on the information icon (?) of the webpage. The developed by the JRC “Detailed guide for uploading of NDPs” is presented in Annex A. It is also available on-line for the users of the database.

The JRC, as developer and administrator of the website, provides further information if necessary as well as eventually required assistance to upload the country NDPs.

By 21.05.2007, four countries have uploaded NDPs and National Annexes in the NDPs database.

6.1 Language

The NDPS containing text and the National Annexes should be uploaded in English. The upload of the National Annexes in English is required for harmonization purposes and the translation does not need to be officially approved by the Member State.

6.2 Modification rights

Only the persons delegated by each country to upload the NDPs have the right to modify the data for the country.
7 Data Post-Processing

The development of tools for data post-processing in the NDPs database aims at facilitating:

- the supervision of the progress and status of the National implementation of the Eurocodes,
- the access, visualization and analysis of the NDPs, needed for the strict application of the Commission Recommendation of 11 December 2003.

The following queries are available by 21.05.2007:

- Queries for the Parts with open access for upload and for data post-processing:
  - Parts with open access for upload of NDPs,
  - Parts with open access for data post-processing.

- Eurocodes Parts related queries:
  - Status of uploading of selected Part,
  - Status of uploading of the National Annexes to the selected Part.

- NDPs related queries:
  - Status of uploading of selected NDP,
  - Acceptance of the recommendation for selected NDP,
  - Supplied documents for the selected NDP.

- Country related queries:
  - Status of the uploading of Parts,
  - Status of the uploading of National Annex to the Parts,
  - Documents related to the uploaded NDPs for a specific Part.

The queries developed are presented in the Users Manual for Data Post-processing (Annex B). The examples in this Manual are based on fictitious data for four countries which have been uploaded in a mirroring database in order to test the queries developed.
8 Future Activities

The maintenance of the NDPs database will concentrate on users’ registration and support. The experience gained from the first uploading exercise indicates that there is a need for systematic assistance and control of the Member States in issues related to wrong format or content of the NDPs and poor understanding of the requested information. The support helps to provide data which can be effectively used in the further harmonization efforts, and most importantly, in many cases helps to prevent publication of National Annexes which are inconsistent with the Eurocodes requirements.

The development of the NDPs database will mainly concentrate on the optimization of the data post-processing, aiming at facilitating the users’ access to appropriate modes of data presentation. Such development will provide enhanced visibility on the progress in the implementation and make easier the extraction of data needed for specific applications in further harmonization. In particular, feedback from the harmonization work might justify further enhancement of the presentation modes of the NDPs to facilitate the work of the persons engaged in harmonization issues.
Annex A. Detailed Guide for uploading the NDPs
Detailed Guide for Uploading the Nationally Determined Parameters (NDPs)

Eurocodes: Nationally Determined Parameters

Version 2.0
1 Foreword

The purpose of this guidance is to explain and facilitate to authorised users the uploading of the National Determined Parameters (NDPs), adopted in the EU and EFTA countries implementing the Eurocodes, into the NDPs database.

The website for uploading the NDPs was created by JRC in the framework of the Administrative Arrangement with DG ENTR/G5 in view of implementing the concerned parts of the Commission Recommendation of 11 of December, 2003, on the implementation and use of Eurocodes for construction works and structural construction products, namely in notifying the Commission on the NDPs.

The NDPs database will constitute the basis for the analysis of the NDPs and for the definition of strategies tending to achieve further convergence and consequently aiming at facilitating the achievement of the European Single Market for construction works and structural construction products.

2 Access to the NDPs Database

The site has restricted and controlled access and it is administrated by the JRC, ELSA Unit. The access policy operates with five groups:

1. The interested Commission Services (DG ENTR, JRC)
2. CEN TC250 Coordination Group and its Sub-Committees
3. The interested National Authorities
4. National Standardization Bodies
5. Possible others to be defined by the Commission.

The policy agreed to access to the NDPs database is the following: National Authorities or National Standardization Bodies, must state if their NDPs can be seen by all database users (open view) or if the view is restricted to Groups 1 and 2 (restricted view). The open view choice will allow to see the NDPs from the other countries that have chosen open view, while the restricted view choice allows to access to the own country NDPs only.

When accessing the NDPs database the following window will appear, requesting to the user the username and corresponding password.

![Figure 1 Window requesting username and password](image-url)
3 The NDPs Database

The database contains a description of the NDPs and their recommended values for EN 1990 to EN 1999. The users will only see those Parts of the Eurocodes which have already reached Stage 64 (Date of availability at the CEN Management Centre). The Eurocodes Parts with no open access for uploading the NDPs are marked by “This section is not yet accessible”.

The list of the Eurocodes from EN1990 to EN1999, and corresponding sections and annexes, is accessible via a navigation menu on the left part of the screen.

The NDP website is composed of six different pages, namely:

- **Welcome Page**: States the purpose of the NDPs database, the rules for access and the address for online assistance and further information.
- **EN-Parts page**: Shows the Eurocode selected from the navigation menu and the corresponding list of Parts and Annexes.
- **NDP-List page**: Shows the list of sections and clauses corresponding to the Parts and Annexes selected in the EN-Parts page of the corresponding Eurocode (the Part or Annex may also be selected directly from the navigation menu), together with the description of the clause, the NDP “Type” and the “State” of the action taken by the user on the adoption of the NDP of the corresponding clause or annex. The state on the NDP may show as:
  - “Recom.”, indicating that the recommended value has been adopted;
  - “Other”, indicating that a value, or choice, different from the recommended value has been adopted; and
  - “Uploaded”, indicating that the corresponding National Annex has been uploaded.

The state on the NDP remains blank when no action has been taken by the user.

At the bottom of the page the button “**Completed**” enables the user to confirm the completion of the insertion of the NDPs of the corresponding EN-Part; once the EN-Part is completed the message “**Confirmed**” will show below the column corresponding to the state of the NDP.

- **NDP-List page (not yet accessible)**: Same as the NDP-List page, but with no open access for uploading the NDPs, therefore it is not possible to make a selection on a clause or Annex to further access the NDP-Show page.

- **NDP-Show page**: Shows detailed information on the NDP corresponding to the selected clause or Annex, and offers the possibility for further actions related to the choice and/or acceptance of the recommended value.

- **NDP-Edit page**: Is accessed from the NDP-Show page when clicking the button “**Edit NDP**” and offers different possibilities of action to the user according to the NDP Type (see the section ‘Getting ready to Input the NDPs’).

A schematic representation of the NDP website is given in Figure 2, while an example of the pages described above is given in a sequential, cascading order (Figure 3 through Figure 8):

---

1 The list of clauses in the database reflects the order given in the NDPs list appearing at the beginning of the corresponding EN Eurocode.

2 The NDP “Types” are defined for the purposes of the database and do not attempt to give a more general, exhaustive classification of the NDPs.
Figure 2 Structure of the NDPs database web page

This is the NDPs website facilitating the creation of a database with the Nationally Determined Parameters adopted in the EU and EFTA countries implementing the EN Eurocodes. The site was created by DO-JRC in the framework of the Administrative Agreement with DG ENTR/ISO in view of implementing the concerned parts of the Commission Recommendation 11 of December, 2004, on the implementation and use of Eurocodes for construction works and structural construction products, namely in notifying the Commission of the NDPs.

Purpose: The NDPs database will constitute the basis for the analysis of the NDPs and for the definition of strategies tending to achieve further convergence and consequent aiming at facilitating the achievement of the European single Market for construction works and structural construction products.

Access: The site has restricted and controlled access and it is administrated by the DG-JRC, ELISA Unit.

Uploading of NDPs: The upload of the NDPs for each country is made by the National Authority, which may delegating to the corresponding National Standardization Bodies. Instructions are available by clicking on the information icon of the webpage.

Very Important: The NDPs database exclusively serves the above mentioned purpose. The information contained in this NDPs database is only provided to the authorized users and cannot, in any circumstances and by any means, be transmitted to third parties. You are kindly asked to read "Copyright & Legal Notice".

Help: The JRC as developer and administrator of the website is available to provide further information if necessary as well as eventually request assistance to upload the country's NDPs. info@ntd.jrc.it

Good work and thank you for the cooperation.

©Copyright & Legal Notice

Figure 3 Welcome Page
EN1991 Actions on structures

1.1 General actions: Dead, self-weight, imposed loads for buildings

<table>
<thead>
<tr>
<th>Section &amp; class</th>
<th>Description</th>
<th>Type</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.3.4</td>
<td>Procedure for dynamic effects for imposed loads</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>3.2.3.4</td>
<td>Upper and lower characteristic values of dead load for non-structural parts</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>3.2.3.4</td>
<td>The nominal depth of heated on railway bridges</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>3.2.3.4</td>
<td>Deviation of the total thickness from the nominal or other specified values</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>3.2.3.4</td>
<td>The upper and lower characteristic values for the self-weight of cables, pipes and service ducts</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>3.3.4.3</td>
<td>The characteristic values for the self-weight of other non-structural elements</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>3.3.4.4</td>
<td>Values for q, and G</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>3.3.4.4</td>
<td>The reduction factor ( f_a )</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>3.3.4.4</td>
<td>The reduction factor ( f_b )</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>3.3.4.4</td>
<td>Characteristic values of uniformly distributed load and G</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>3.3.4.4</td>
<td>See Annex A for dates</td>
<td>10.1</td>
<td></td>
</tr>
<tr>
<td>3.3.4.4</td>
<td>Improved loads on piers and vehicle traffic areas</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>3.3.4.4</td>
<td>Improved loads on route of category H</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>3.3.4.4</td>
<td>Horizontal loads on partition walls and parapets</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Annex A (Table A.1 to A.3)</td>
<td>Tables for nominal density of construction materials</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Annex B (Table B.1 to B.1)</td>
<td>Vehicle barriers and parapets for car parks</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>NCCI</td>
<td>Reference to other Non-Contradictory Complementary Information</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>National Annexes</td>
<td>Contains information on those parameters which are left open in the Eurocodes for national choice</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>
This part is not yet accessible.

Figure 6 NDP- List Page (Not accessible)

Figure 7 NDP- Show Page
### EN1991-1-1 5.2.3 (3)

**Edit NDP Value for Spain**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower deviation if a post-execution coating is included in the nominal value (%)</td>
<td>30</td>
</tr>
<tr>
<td>Lower deviation if such a coating is not included (%)</td>
<td>30</td>
</tr>
<tr>
<td>Upper deviation if a post-execution coating is included in the nominal value (%)</td>
<td>30</td>
</tr>
<tr>
<td>Upper deviation if such a coating is not included (%)</td>
<td>40</td>
</tr>
</tbody>
</table>

**Reasons for not adopting the Recommended Value**

You can write in the box below and/or upload a file with further information.

File types accepted are: PDF, Word, HTML, DOC, XLS, TXT, GIF, JPG.

Replace 25.04.18 Final P0_FF.doc with [ ]

Delete file: 25.04.18 Final P0_FF.doc

[Submit] [Cancel]

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**Figure 8 NDP- Edit Page**
## 4 Getting Ready to Input the NDPs

The NDP-Show Page gives information to the user which is grouped in three blocks:

The first block on the top of the page shows the section of the Eurocode, clause number, description and Type, corresponding to the clause selected in the NDP-List Page.

The second block gives the ‘Recommended value’, complemented in some cases by file attachments, as well as an ‘Explanation’ of the NDP prepared by the JRC using the wording from the Eurocodes.

The third block at the bottom of the page corresponds to the “NDP for Country” and gives information relative to the action taken on the NDP.

The first and second blocks are static, while the third block displays a message that indicates the choice on the NDP made by the user (Country), as explained in the paragraphs below; the “N/A” message is displayed to indicate that the user has not submitted or made a choice on the NDP.

The user can input the NDPs only after selecting her/his country from the country list; the country of the user appears as default when the user logs in. When the selected country coincides with the authorization of the respective user, on the top right of the NDP-Show page appear the buttons “Accept as is” and “Edit NDP”. For some NDP types only the “Edit NDP” button appears, while for other NDP types (in particular, for NDP Type 10, which is informative and no action needs to be taken) no button appears at all.

There are different types of NDPs; accordingly different actions are requested to the user.

The following actions are enabled by the “Accept as is” and “Edit NDP” buttons:

The “Accept as is” button is used to accept the recommended NDPs. When the NDPs are accepted by the user the “NDP for Country” box at the bottom of the NDP-Show page shows thereafter the message: “The recommended value is adopted”. Note: The “Accept as is” button appears for NDPs for which a ‘Recommended value’ may or may not be available. When a ‘Recommended value’ is not available (N/A), the “Accept as is” indicates that the EN text is accepted as it is.

The “Edit NDP” button is used to submit or choose an NDP, by transferring the user to the NDP-Edit page. Once the NDP is submitted, the information relative to the NDP is shown in the “NDP for Country” box at the bottom of the NDP-Show page.

The user can change the choice for “Accept as is” or “Edit NDP” for an unlimited number of times; the last choice overwrites all the previous ones. The action taken by the user in accepting or editing a particular NDP can be reviewed by checking the right most column of the NDP-List page; the information contained in this column is updated each time the user changes his/her choice on accepting or editing the NDP.

The user is reminded that when re-editing an NDP that involves uploading a new or updated file, the new file replaces the previously uploaded file.

The user is expected to click on the “Completed” button at the bottom of the NDP-List page after having inserted all the NDPs of the corresponding EN Part; thereupon the NDP-List page will remain inaccessible for further re-editing of the NDPs, by showing the message “NDPs of this part are reported as completed” in the area corresponding to the “Accept as is” and “Edit NDP” buttons of the NDP-Show Page.

If the user pushes the “Completed” button without having inserted all the NDPs of the corresponding EN Part, a window will warn the user with the following message: “You have not filled all the NDPs, are you sure you consider upload as completed?”, the user will then decide whether to click the “OK” button or to click the “Cancel” button for further editing the NDPs. The user does not need to complete the clauses corresponding to NDP Type 10 and
to the submission of the National Annex in order to successfully complete the insertion of all the NDPs.

It is also noted that for several NDP Types (Types 3.3, 3.4, 3.5 and 3.6), the term “option” is used, which may include a procedure, approach or method of application of the NDP.

5 Colour Codes Used in the NDP Pages

Different colours are used in the NDP-List, -Show and -Edit pages, as well as in the EXCEL files, to assist the user in completing the actions to upload the NDPs:

**NDP-List Page** (colour of the row corresponding to a particular clause under the ‘Description’ column):

- **Grey**: The user has entered the NDP-Show Page by selecting the corresponding clause in the NDP-List Page and has made a selection on either the “Accept as is” or “Edit NDP” buttons.
- **Beige**: The user has not made a selection on the corresponding clause on neither the “Accept as is” or “Edit NDP” buttons.

**NDP-Show Page**:

- **Green**: Colour of the “Accept as is” button.
- **Red**: Colour of the “Edit NDP” button.

**NDP-Edit Page**:

- **Orange**: Colour of the cell where an NDP value in the form of a number must be given; the recommended value is given as default.
- **Pink**: Colour of the cell where an NDP value in the form of a number must be given; no recommended value is given as default.

**EXCEL file**:

- **Yellow**: Cell containing the title of a table.
- **Orange**: Colour of the cell where an NDP value should be given; the recommended value is given as default. The remaining cells of the file are protected.
- **Pink**: Colour of the cell where an NDP value should be given; no recommended value is given as default.

6 Other Instructions

All information concerning the NDPs, as well as the National Annexes, should be uploaded in English. The translation of the National Annexes in English is required for harmonization purposes and does not need to be officially approved by the respective State.

The decimal sign of the numerical data uploaded shall be a point, i.e. the numerical values shall be presented as 0.05 and not as 0,05.
7 The User Actions for Each Type of NDP

The user actions for each Type of NDP are given in the following sections; the list of NDP Types and corresponding uploading actions are given in Table 1 at the end of the present Guide.

7.1 NDP Type 1.1 Predetermined Parameters (with recommended value)

**NDP-Show page:** The recommended value is given as a set of parameters. The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The NDPs must be written in the given cells as numbers. The requested reason for deviation from the recommended value can be given in the corresponding text box, and/or uploaded as a PDF file.

7.2 NDP Type 1.2 Predetermined Parameters (without recommended value)

**NDP-Show page:** The recommended value is defined as a set of predetermined parameters for which no specific values are given; therefore a recommended value is not available (N/A). The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The NDPs must be written in the given cells as numbers.

7.3 NDP Type 1.3 No Predetermined Parameters

**NDP-Show page:** The recommended value is not available (N/A). In some cases an EXCEL file is given in the explanation section and may be used as reference by the user when uploading the NDPs in the NDP-Edit page. The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The NDPs can be uploaded as EXCEL, PDF or WORD files.

7.4 NDP Type 2.1 Fixed Tables (only cell values can be changed)

**NDP-Show page:** The recommended value is given in EXCEL tables, accompanied, in some cases, by explanatory figures. The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** EXCEL protected template files can be downloaded by the user to edit the NDPs. The format of the table (rows and columns) cannot be changed; only predisposed relevant parts of the table can be modified. The modified EXCEL files are then submitted by the user. The requested reason for deviation from the recommended value can be given in the corresponding text box, and/or uploaded as a PDF file.
7.5 NDP Type 2.2 Flexible Tables (rows and columns can be changed)

**NDP-Show page:** The recommended value is given in EXCEL tables. The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** EXCEL unprotected template files can be downloaded by the user to edit the NDPs. The format of the table (rows and columns) can be changed according to the NDP needs. The modified EXCEL files are then submitted by the user.

The requested reason for deviation from the recommended value can be given in the corresponding text box, and/or uploaded as a PDF file.

7.6 NDP Type 3.1 Acceptance of recommended procedures / approaches or introduction of new ones

**NDP-Show page:** The recommended value is given in the form of procedures / approaches. The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The user can upload the NDPs as PDF, WORD, EXCEL or image files, or may submit them in written form in the given text box.

The requested reason for deviation from the recommended value can be given in the corresponding text box, and/or uploaded as a PDF file.

7.7 NDP Type 3.2 Country procedures / approaches

**NDP-Show page:** No procedures / approaches are given, therefore the recommended value is not available (N/A). The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The user can submit the procedures / approaches in the given text box, and/or upload them as PDF, WORD, EXCEL or image files.

7.8 NDP Type 3.3 Alternative choice from given options (with recommended value)

**NDP-Show page:** Several options are given; among these one is explicitly recommended. The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The user must select one of the NDP options displayed on the user interface.

Note: If the recommended option is selected, in the “NDP for Country” box at the bottom of the NDP-Show page, the NDP will show in its entire expression, rather than as “The recommended value is adopted”.

7.9 NDP Type 3.4 Alternative choice from given options (without recommended value)

**NDP-Show page:** The recommended value is not available (N/A). Only the “Edit NDP” button is enabled. A list of NDP options is given to the user.
The user must select one of the NDP options displayed on the user interface.

**7.10 NDP Type 3.5 Choice from given options (without recommended value)**

**NDP-Show page:** The recommended value is not available (N/A). Only the **“Edit NDP”** button is enabled. A list of NDP options is given to the user.

**NDP-Edit page:** The user can select one or more options among those given in the NDP-Edit Page.

**7.11 NDP Type 3.6 Choice from given options (without recommended value) or introduction of new procedures / approaches**

**NDP-Show page:** The recommended value is not available (N/A). Only the **“Edit NDP”** button is enabled. A list of NDP options is given to the user.

**NDP-Edit page:** The user can select one or more options among those given in the NDP-Edit Page, or introduce new procedures / approaches by uploading PDF, WORD, EXCEL or image files, or may submit them in written form in the given text box.

**7.12 NDP Type 3.7 Acceptance of recommended procedures / approaches in fixed tabular form or introduction of new ones**

**NDP-Show page:** Recommended procedures / approaches are given in EXCEL tables. The **“Accept as is”** and **“Edit NDP”** buttons are enabled.

**NDP-Edit page:** EXCEL protected template files can be downloaded by the user to edit the NDP options. The format of the table (rows and columns) cannot be changed; only predisposed relevant parts of the table can be modified. The modified EXCEL files are then submitted by the user.

The requested reason for deviation from the recommended value can be given in the corresponding text box, and/or uploaded as a PDF file.

**7.13 NDP Type 3.8 Acceptance of recommended procedures / approaches in flexible tabular form or introduction of new ones**

**NDP-Show page:** Recommended procedures / approaches are given in EXCEL tables. The **“Accept as is”** and **“Edit NDP”** buttons are enabled.

**NDP-Edit page:** EXCEL template files can be downloaded by the user to edit the NDP options. The format of the table (rows and columns) can be changed according to the NDP needs, by modifying the recommended procedures / approaches or by introducing new ones. The modified EXCEL files are then submitted by the user.
The requested reason for deviation from the recommended value can be given in the corresponding text box, and/or uploaded as a PDF file.

### 7.14 NDP Type 4  Country specific data

**NDP-Show page:** The recommended value is not available (N/A). The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The user can give reference to country specific data (geographical, climatic, etc.) in the corresponding text box, and/or upload the specific data as PDF, WORD, EXCEL or image files.

### 7.15 NDP Type 5  National charts or tables

**NDP-Show page:** The recommended value is not available (N/A). The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The user can give reference to optional National charts or tables containing the NDPs in the corresponding text box, and/or upload the charts or tables as PDF, WORD, EXCEL or image files.

### 7.16 NDP Type 6  Diagrams

**NDP-Show page:** The recommended value is given in the form of diagrams. The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The user can upload the NDP diagrams as PDF, WORD, EXCEL or image files, or may give reference in the corresponding text box.

The requested reason for deviation from the recommended value can be given in the corresponding text box, and/or uploaded as a PDF file.

### 7.17 NDP Type 7  References to non-contradictory complementary information

**NDP-Show page:** The recommended value is not available (N/A). The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** Reference to Non-Contradictory Complementary Information (NCCI) to assist the designer to apply the Eurocodes can be given in the corresponding text box and/or uploaded as PDF or WORD files.

### 7.18 NDP Type 8  Decisions on the application of informative Annexes

**NDP-Show page:** The recommended value is not available (N/A). Only the “Edit NDP” button is enabled.

**NDP-Edit page:** The user must decide on the application of informative Annexes, among one of the following three choices: to remain informative as part of the Standard (same as if the National Annex is silent on the use of an informative annex); to become normative; or not to be used at the National
7.19 NDP Type 9 Provision of further, more detailed information

**NDP-Show page:** The recommended value is not available (N/A). The “Accept as is” and “Edit NDP” buttons are enabled.

**NDP-Edit page:** The user can give further, more detailed information for the NDPs in the corresponding text box, and/or upload the information as PDF or WORD files.

7.20 NDP Type 10.1 Reference to information which is included in an informative annex

**NDP-Show page:** Reference to information which is included in an informative annex is given. There is no need to take action, therefore no buttons are enabled.

7.21 NDP Type 10.2 Reference to information which is included in other parts of the EN text

**NDP-Show page:** Reference to information which is included in the text of other parts of the Eurocodes is given. There is no need to take action, therefore no buttons are enabled.

8 Non-Contradictory Complementary Information

Reference(s) to other Non-Contradictory Complementary Information (NCCI) not explicitly allowed in the text of the Eurocode may be given by choosing “NCCI” in the NDP-List page.

**NDP-Show page:** The recommended value is not available (N/A). The “Accept as is” and “Edit NDP” buttons are enabled. The user may click the “Accept as is” button when there is no Reference to Other NCCI, or the “Edit NDP” button when there is Reference to Other NCCI in the National Annex for the corresponding Eurocode Part. Reference to Other NCCI excludes any eventual reference to a NCCI which is explicitly considered in the text of Eurocode (referred to by the sentence: “may be given in the National Annex”).

**NDP-Edit page:** A WORD file template can be downloaded by the user to give Reference(s) to Other NCCI, providing information concerning the corresponding Eurocode Section or Clause number, as well as the title, publisher and year of publication of the Reference(s). In addition, the user may check whether the Reference to Other NCCI is normative or
informative in his/her country. The filled-in WORD file is then submitted by the user.

9 National Annex

The “National Annex” appears at the end of NDP list of each Eurocode part of the NDP-List page, as shown in Figure 5.

**NDP-Show page:** Only the “*Edit NDP*” button is enabled.

**NDP-Edit page:** The National Annex should be submitted (English version) by uploading PDF or WORD files.
## 10 List of NDP Types and summary of uploading actions

### Table 1 - List of NDP Types and corresponding uploading actions

<table>
<thead>
<tr>
<th>NDP</th>
<th>Recommended value</th>
<th>NDP-Show Page</th>
<th>Buttons enabled</th>
<th>NDP-Edit Page</th>
<th>Provide reasons for deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type</td>
<td>Given</td>
<td>Field</td>
<td>Attachments</td>
<td>Accept as is</td>
</tr>
<tr>
<td>1.1</td>
<td>Yes</td>
<td>Parameters</td>
<td>Yes</td>
<td>Parameters</td>
<td>✓</td>
</tr>
<tr>
<td>1.2</td>
<td>N/A</td>
<td>Parameters</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>1.3</td>
<td>N/A</td>
<td>Parameters</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.1</td>
<td>Yes</td>
<td>Tables</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2.2</td>
<td>Yes</td>
<td>Tables</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.1</td>
<td>Yes</td>
<td>Procedures / approaches</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.2</td>
<td>N/A</td>
<td>Procedures / approaches</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.3</td>
<td>Yes</td>
<td>Options</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.4</td>
<td>N/A</td>
<td>Options</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.5</td>
<td>N/A</td>
<td>Options</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.6</td>
<td>N/A</td>
<td>Options or Procedures / approaches</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.7</td>
<td>Yes</td>
<td>Procedures / approaches</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.8</td>
<td>Yes</td>
<td>Procedures / approaches</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4</td>
<td>N/A</td>
<td>Specific data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5</td>
<td>N/A</td>
<td>Charts / Tables</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>6</td>
<td>Yes</td>
<td>Diagrams</td>
<td>GIF</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>7</td>
<td>N/A</td>
<td>Non-contradictory complementary information</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>8</td>
<td>N/A</td>
<td>Decision</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>9</td>
<td>N/A</td>
<td>Further data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>10.1</td>
<td>N/A</td>
<td>Information</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>10.2</td>
<td>N/A</td>
<td>Information</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Annex B. Users Manual for Data Post-Processing
Users Manual for Data Post-Processing

Eurocodes: Nationally Determined Parameters

Version 1.0
1 Introduction

The NDPs database Users Manual for Data Post-processing addresses the tools for user-friendly access to the content of the database. The development of statistical tools aims at facilitating:

- the supervision of the progress and status of the National implementation of the Eurocodes,
- the access, visualization and analysis of the NDPs, needed for the strict application of the Commission Recommendation of 11 December 2003.

This manual is intended for:

1. The interested Commission Services (DG ENTR/G05, DG JRC/ELSA),
2. CEN TC250 Coordination Group and its Sub-Committees,
3. The interested National Authorities (NAs),
4. National Standardization Bodies (NSBs),
5. Possibly Others to be defined by the Commission.

The examples in this Manual are based on fictitious data for four countries which have been uploaded in a mirroring database in order to test the queries developed.

This Manual will be updated regularly following the future refinement and/or development of the tools for data post-processing.

2 Use of Data

The NDPs database exclusively serves the analysis of the NDPs and the definition of strategies to achieve further convergence in the National applications of the Eurocodes. The information contained in this NDPs database is provided to the authorized users only and cannot, in any circumstances and by any means, be transmitted to third parties. The user is prompted to read and accept the rules and disclaimer provided in the bottom of the home page.

3 Getting Ready

The Queries navigation button is located in the bottom of the navigation pane on the left part of the screen, as shown in Figure 1.
After choosing "queries", the shown in Figure 2 main queries menu opens.
4 Queries for the Parts with Open Access for Upload and for Data Post-Processing

4.1 Parts with open access for upload of NDPs

The database contains list of all NDPs for EN 1990 to EN 1999. The users can access only the Parts which have already reached Stage 64 (Date of availability at the CEN Management Centre) and whose input data have been consulted with the respective Sub-committee of CEN/TC250. Due to technological time needed for the final check of the NDPs, the Parts which reached Stage 64 are visible several months after their availability in the Eurocodes database of the DG ENTR.

The query gives the list of the Parts open for upload of NDPs, as shown in Figure 3.

![Figure 3. Parts with open access for upload of NDPs](image)

4.2 Parts with open access for data post-processing

The user can inquire the list of the Parts which are open for data post-processing. The access to data post-processing will be open when the number of countries that have uploaded NDPs for the available Parts will reach some reasonable number. As seen in Figure 4, the list is empty by 21.05.2007.
Figure 4. Parts with open access for data post-processing

5 Eurocodes Parts Related Queries

5.1 Status of uploading of selected Part

As shown in Figure 5, the user can inquire for a list of the countries which:

- have uploaded the selected Part,
- have not uploaded the selected Part, and
- do not apply the selected Part.
5.2 Status of uploading of the National Annexes to the selected Part

As shown in Figure 1.2.6, the user can inquire for a list of the countries which:

- have uploaded the National Annex to the selected Part,
- have not uploaded the National Annex to the selected Part, and
- do not apply the selected Part.
6 NDPs Related Queries

6.1 Status of uploading of selected NDP

As shown in Figure 7, the user can inquire for a list of the countries which:

- have uploaded the selected NDP,
- have not uploaded the selected NDP,
- do not apply the selected NDP since they do not apply the respective Eurocode Part.

![Figure 7. Status of uploading of selected NDP](image)

6.2 Acceptance of the recommendation for selected NDP

As shown in Figure 8, the user can inquire for a list of the countries which:

- have accepted the recommendation for the selected NDP,
- have not accepted the recommendation for the selected NDP, and
- do not apply the selected NDP since they do not apply the respective Eurocode part.
Figure 8. Acceptance of the recommendation for the selected NDP

This query is applicable to the NDPS which are of type 1.1, 2.1, 2.2, 3.1, 3.3, 3.7, 3.8 and 6 (see Table 1).

Table 1 - Type of NDPS in the NDPS database

<table>
<thead>
<tr>
<th>NDP Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Predetermined Parameters (with recommended value)</td>
</tr>
<tr>
<td>1.2</td>
<td>Predetermined Parameters (without recommended value)</td>
</tr>
<tr>
<td>1.3</td>
<td>No Predetermined Parameters</td>
</tr>
<tr>
<td>2.1</td>
<td>Fixed Tables (only cell values can be changed)</td>
</tr>
<tr>
<td>2.2</td>
<td>Flexible Tables (rows and columns can be changed)</td>
</tr>
<tr>
<td>3.1</td>
<td>Acceptance of recommended procedures / approaches or introduction of new ones</td>
</tr>
<tr>
<td>3.2</td>
<td>Country procedures / approaches</td>
</tr>
<tr>
<td>3.3</td>
<td>Alternative choice from given options (with recommended value)</td>
</tr>
<tr>
<td>3.4</td>
<td>Alternative choice from given options (without recommended value)</td>
</tr>
<tr>
<td>3.5</td>
<td>Choice from given options (without recommended value)</td>
</tr>
<tr>
<td>3.6</td>
<td>Choice from given options (without recommended value) or introduction of new procedures / approaches</td>
</tr>
<tr>
<td>3.7</td>
<td>Acceptance of recommended procedures / approaches in fixed tabular form or introduction of new ones</td>
</tr>
<tr>
<td>3.8</td>
<td>Acceptance of recommended procedures / approaches in flexible tabular form or introduction of new ones</td>
</tr>
<tr>
<td>4</td>
<td>Country specific data (geographical, climatic, etc.)</td>
</tr>
<tr>
<td>5</td>
<td>National chart(s) or table(s) of a parameter</td>
</tr>
<tr>
<td>6</td>
<td>Diagrams</td>
</tr>
<tr>
<td>7</td>
<td>References to non-contradictory complementary information</td>
</tr>
<tr>
<td>8</td>
<td>Decisions on the application of informative Annexes</td>
</tr>
<tr>
<td>9</td>
<td>Provision of further, more detailed information</td>
</tr>
<tr>
<td>10.1</td>
<td>Reference to information which is included in an informative annex</td>
</tr>
<tr>
<td>10.2</td>
<td>Reference to information which is included in other parts of the EN text</td>
</tr>
</tbody>
</table>

Note: Analysis is not necessary NDP type 10.1 and 10.2.
6.3 Supplied documents for the selected NDP

The user can inquire for a list of the supplied documents which justify the divergences of the country choice for the selected NDP.

7 Country Related Queries

7.1 Status of the uploading of Parts

As shown in Figure 9, the user can inquire for the status of the uploading of the NDPS for the different Parts by a chosen country:

- the number of NDPS which belong to the Eurocode Part,
- the number NDPS that have been uploaded by the chosen country for the different Parts, and
- the completion date for uploading of the NDPS for the different Parts.

![Figure 9. Status of the uploading of the NDPS by a chosen country](image-url)
7.2 Status of uploading of National Annexes to the parts

As shown in Figure 10, the user can inquire for a list of the National Annexes which:

- have been uploaded by a selected country,
- have not been uploaded by a selected Country, and
- belong to the Parts not applicable in the selected country.

![Figure 10. Status of uploading of National Annexes by a selected country](image)

7.3 Documents related to the uploaded NDPs for a specific Part

The user can inquire for a list of the documents related to the uploaded NDPs for a specific Eurocodes Part.
This document provides description of the Eurocodes database for Nationally Determined Parameters (NDPs database), which was created in the frame of the Administrative Arrangement (AA) between the Enterprise and Industry Directorate General (DG ENTR) and the Joint Research Centre (JRC) regarding the support to the implementation, harmonization and further development of the Eurocodes.

The database contains information about the National Annexes to each Eurocode Part and the respective NDPs, their recommended values and the values chosen by the EU and EFTA Member States and the EU Candidate Countries. The classification of the NDPs aiming at simultaneous mirroring the functionality of the NDPs in the code and the data type needed for the definition of the database fields is presented.

The NDPs database will constitute the basis for the analysis of the NDPs and for the definition of strategies tending to achieve further convergence and consequently aiming at facilitating the achievement of the European single Market for construction works and structural construction products.

The conditions for access to the database, NDPs upload rules and the possibilities for data post-processing are overviewed. The user’s manuals regarding the upload of the NDPs and data post-processing are incorporated as annexes to the report.
The mission of the JRC is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies. As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union. Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.