

06 February 2024

Nordic priority paper to harmonise the national annexes for eurocodes

Background

Since 2018, the Nordic countries have collaborated on lowering the climate and environmental impact of construction in order to make the Nordics the most sustainable and competitive region in the world as a part of the Nordic Vision 2030. This vision has been reaffirmed by the Nordic Ministerial Declaration on '*Nordic commitment to low carbon construction and circular principles in the construction sector – common effort and common gain.*' in September 2023¹.

Due to the revision of the eurocode standards at European level and the subsequent development of national annexes, the Nordic authorities have been discussing how to move towards a common Nordic understanding of harmonisation and green initiatives in the national annexes.

Based on these discussions, the Nordic steering group for harmonisation of building regulations agreed to aim for a partial harmonisation solution. This includes harmonisation of selected requirements for safety, loads, load combinations and materials, which should be suitable and realistic for Nordic harmonisation.

On that basis, it was decided that the Nordic authorities formulate this common Nordic priority paper to act as a framework and statement of intent for future harmonisation of the national annexes to the eurocodes in the Nordic countries.

Purpose and goals

The revision of the national annexes provides an opportunity to look into potential Nordic harmonisation areas while at the same time looking into whether some areas in the annexes causes unintended and disproportionate negative effects on the climate and environment. Improved rules for building design to ensure minimised use of construction material leads to positive effects on the environment, climate as well as the cost of construction.

To support the Nordic Vision, the green potential should act as a focal point in the Nordic harmonisation of the national annexes. However, changes to ensure green and sustainability objectives shall result in efficiency and not potential administrative burdens. It is therefore important that Nordic harmonisation of the eurocodes is

¹ [Nordic Ministerial Declaration on Commitment to Low Carbon Construction | Nordic Sustainable Construction](#)



guided by a central objective to support efficient markets by promoting free and fair competition and robust framework conditions.

Furthermore, the green focus of the Nordic countries can contribute to the work on a European level, and the results of a Nordic harmonisation could contribute to the European work in CEN for future changes in the European Eurocode system to minimise the use of construction material.

The Nordic experts involved in the work are already discussing the differences found in the national annexes of the Nordic countries, but without an overall frame for specific goals for the Nordic Harmonisation and green benefits.

Therefore, this priority paper is meant as an overall framework for the experts working with the revision of national annexes in all areas and groups with the purpose of presenting guidelines that will lead to useful results for creating harmonised Nordic national annexes.

The Nordic authorities propose the following focal points as inspiration to determine the direction for the future harmonisation of national annexes for eurocodes:

For eurocode 0 - Basis of structural design:

- a) Level of reliability
- b) National partial safety factors for actions and resistances
- c) Combination of actions
- d) Allow relaxation of regulations followed by ongoing monitoring of the construction

For eurocode EC 2-7, EC9 and EC10 (concrete, steel, composite steel and concrete, timber, masonry, Geotechnical, aluminium, glass):

- e) Methods of Design model structural analysis for each material
- f) Constructive rules for each material
- g) Possibility of reuse and recycling of building components and building materials
- h) Requirements for strength and development of strength (maturity)
- i) Use of more advanced methods or calculation for material

The Nordic authorities propose the following process in the harmonisation work of the focal points stated above:

1. Nordic experts in the main groups for each eurocode part should identify the areas with most potential for harmonisation and include them in their work
2. The Nordic experts should identify the areas that are not suitable for harmonisation and justify the reason behind.



3. The Nordic authorities recommends to the Nordic experts that the results of the discussions will be presented to the Nordic Sustainable Construction programme for an evaluation of the harmonisation potential and next steps. A status of the progress of the work and preliminary results should be presented at a common meeting before end of 2024.

It is the goal that the results from this process shall strengthen the Nordic market and provide input to be presented in the European work.

To support the Nordic Vision 2030, the areas in the national annexes that are not suitable for harmonisation should follow the same principles of moving in a similar green direction even if the starting point differs.