



# SCIENCE FOR POLICY BRIEF

Joint Research Centre, the European Commission's in-house science service

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## The Eurocodes are implemented in 23 EU Member States<sup>1</sup>

### Headlines

- The Report is part of the Commission Action Plan to COM (2012) 433. It analyses the state of the Eurocodes implementation in all EU Member States and Norway.
- In 23 EU Member States and in Norway the Eurocodes are implemented.
- There is need of a Commission Recommendation on the regulatory environment for use of the Eurocodes, to achieve their full implementation.

### Policy context

The report presents the results of the enquiry on the implementation of the Eurocodes in the EU Member States and Norway, which was performed by DG GROW and DG JRC of the European Commission in 2014-2015. The enquiry consisted of two questionnaires addressed to the National Authorities, and to the National Standardization Bodies.

The report is part of the activities envisaged in the Action Plan to "Strategy for the sustainable competitiveness of the construction sector and its enterprises" aimed to assess the need of action to

strengthen or enforce the use of Eurocodes in Public Procurement and other instruments. The results reported will be used also in the analyses envisaged for the fitness check of EU legislation affecting the construction sector. Although the Commission Recommendation on the implementation and use of Eurocodes for construction works and structural construction products is non-binding, it is intended to explore whether the Eurocodes are de facto mandatory for some segments of the construction sector (i.e. for public work suppliers) or in some Member States, and whether they create benefits in terms of market and business opportunities.

### Key conclusions

The analysis of the state of implementation of the Eurocodes in the EU Member States and Norway concludes that in 83% of the analysed countries the Eurocodes are implemented; Malta, Portugal and Spain should speed the progress in adoption of National Annexes; Italy and Romania should remove the legal restrictions impeding the implementation of the Eurocodes.

The identified restrictions imposed by existing National Regulations which define technical rules different from the provisions of the Eurocodes, indicate that the CEN requirement for withdrawal of conflicting

<sup>1</sup> This brief is based on the JRC Science for Policy report: State of implementation of the Eurocodes in the European Union, authors S. Dimova, M. Fuchs, A. Pinto, B. Nikolova, L. Sousa, S. Iannaccone, EUR 27511, doi:10.2788/854939

## Quick guide

The publication of the Eurocodes by the European Committee for Standardization (CEN) in May 2007 marked a major milestone in the European standardisation for construction, since they introduced common technical rules for calculation of the mechanical and fire resistance, and the stability of constructions and construction products. The on-going implementation of Eurocodes in the Member States of the European Union and of the European Free Trade Association (EFTA) does enhance the functioning of the Internal Market for construction products and services by removing the obstacles arising from different national practices.

standards is not enough to guarantee the enforcement of the Eurocodes in countries where the National Regulations introduce directly design rules. There is need of a Commission Recommendation on the regulatory environment for use of the Eurocodes.

## Main findings

The results show that the Eurocodes are already accepted as National Standards in Europe: all EU Member States and Norway published as National Standards 100% of the Eurocodes Parts, except Germany and Luxembourg, which did not publish one part, and Spain, which published or ratified 83% of the Eurocodes Parts. 90% of the considered in the analysis countries published National Annexes to more than 70% of all Eurocodes Parts, which is a very good progress in enforcing the use of the Eurocodes.

There are no National Standards used in parallel with the Eurocodes Parts in 80% of the analysed countries. However, this positive result shall be considered having in mind the regulatory environment in some EU Member States, where the National Regulations introduce directly design rules.

In more than half of the analysed countries the National legislative provisions refer to standards and in many cases make the compliance with them compulsory. The results of the enquiry show that:

- As regards the need of amendment of the National Regulations to allow use of the Eurocodes, 41% of the analysed countries reported that no amendment was needed, in 14% of the countries amendment was (or will be – in Portugal and Spain) needed for less than 40% of the Eurocodes Parts, and in 45% of the countries amendment was needed for more than 40% of the Eurocodes Parts.
- As regards the obligatory use of the Eurocodes Parts, 55% of the analysed countries declared that none of the Eurocodes Parts is obligatory, in 10% of

the countries all Eurocodes Parts are obligatory, and in 35% of the countries different amount of Eurocodes Parts (varying between 6 and 46) is obligatory.

Besides the restrictions posed by references to non-contradictory complementary information in Ireland, or by special conditions for the application of some general methods of calculation in Germany, the regulatory environment in Italy and Romania poses strong restrictions to the implementation of the Eurocodes.

Regulatory Framework enforcing the use of the Eurocodes in Public Procurement exists (or will be implemented) in 41% of the analysed countries, another 17% of the countries consider that the Eurocodes are well-placed in the Public Procurement without having a particular Regulatory Framework, thus 60% of the analysed countries reported a good place of the Eurocodes in their Public Procurement.

The preliminary results on the acceptance of the recommended values of the Nationally Determined Parameters show that in almost three out of four cases the recommended values were accepted. Such a high mean rate of acceptance is an essential prerequisite for the harmonized implementation of the Eurocodes.

## Related and future JRC work

Since March 2005 the JRC provides scientific and technical support to DG GROW in the frame of Administrative Arrangements on the Eurocodes. The mission initially devoted to the JRC included support to the national implementation and harmonization of the Eurocodes, support to the training, international promotion and further development of the Eurocodes. Since 2015 the scope of the JRC contribution has been extended to support to policies and standards for sustainable construction.

