

# European Commission formally recommends Eurocodes

European governments have been told to start preparing now for the new structural Eurocodes. But for civil engineers the decision on when to start making the switch is more complex, says **Haig Gulvanessian** of Eurocodes Expert.

The European Commission has formally recommended the impending set of 56 structural Eurocodes as 'a suitable tool' for designing construction works, checking the mechanical resistance of components and checking the stability of structures.

Recommendation 4639 of 11 December 2003 says member states should recognise that construction works designed using Eurocodes will conform with the essential requirements of mechanical resistance and stability, safety in use and safety in case of fire.

According to Erkki Liikanen, European commissioner for enterprise and the information society: 'The importance of this recommendation for European harmonisation in the construction industry cannot be underestimated. Eurocodes are a state-of-the-art tool which will provide a better level of safety for our citizens. Member states should encourage their use as the standard for designing buildings and civil engineering works.'

## Most significant document to date

The recommendation is certainly the most significant document to date on the Eurocodes. It is the first time that the Commission has given a strong recommendation to member states on adoption – all we had before were objectives. It signals to the construction industry that the Eurocodes are here and sets the wheels in motion for full-blooded implementation across the board.

The Commission has warned member states that they should only diverge from recommended values in Eurocodes when 'geographical, geological or climatic condi-

tions, or specific levels of protection make that necessary'. States diverging too far from recommended values, such that they result in 'unjustified hindrance to free trade,' will be told to change their national annexes accordingly.

Member states have also been told by the Commission to promote instruction in the use of the Eurocodes, especially in engineering schools and as part of continuous professional development courses for engineers and technicians.

## Decisions on implementation

Six Eurocode parts – EN1990 *Eurocode – Basis for structural design* and five parts from EN1991 *Eurocode 1 – Actions on structures* are already completed and the remaining 50 are expected to be finalised by 2005. Following a period that allows for production of national annexes—which needs to be within two years for each part—and co-existence with national codes, national codes will be withdrawn between 2008 to 2010 and Eurocodes will become the *de facto* standard.

The single, most important decision that civil engineering and construction businesses have to make is when to implement the Eurocodes: as soon as national annexes are available or to wait until national codes are withdrawn? This is a purely commercial decision, which will require the consideration of the following factors.

- **Timing**, which needs to consider the dates when the Eurocodes will be available, the timetable for implementation, the dates for withdrawal of national codes (e.g. BSI) and when governments will require their use. Product manufacturers and those organisations involved in public works will be the first to use the Eurocodes under the Construction Products and Procurement Directives.
- **Office procedures**, that will require the consideration of the technical differences between the Eurocodes and national codes, availability of designers' guides, the



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training needs for all levels of staff and any differences in quality assurance procedures.

- **IT implications**, where the availability of good quality software will be essential before implementation can be considered.
- **Competition** – although the Eurocodes will provide opportunities in Europe and overseas, any company must be conscious of threats. Where there is an opportunity there is a threat.

## Monitoring developments

Decisions on implementation will be different for the larger international organisations where market forces will be a key factor, compared to smaller companies only working nationally.

The best way to monitor Eurocode developments and the availability of associated training events and resources is through the UK Government-backed Eurocodes Expert website at [www.eurocodes.co.uk](http://www.eurocodes.co.uk).

Launched by the ICE just over a year ago, the initiative is directed by a pan-industry advisory group including the Office of the Deputy Prime Minister, BSI and the Institution of Structural Engineers.

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