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THE EUROCODES: SUPPORTING EU POLICIES & INCREASING COMPETITIVENESS



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regarding support to the implementation, harmonization and further development
of the Eurocodes

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1. THE EUROCODES

1.1. Time line

In 1975 the European Commission decided on an action programme in the field of construction aiming at the elimination of technical obstacles to trade and the harmonisation of technical specifications. Within this action programme, the Commission took the initiative to establish a set of harmonised technical rules for the design of construction works which would ultimately replace the differing rules in the Member States.

The Eurocodes are a set of European Standards (EN) for the design of buildings and other civil engineering works and construction products, produced by the Comité Européen de Normalisation (CEN). They embody National experience and research output together with the expertise of CEN Technical Committee 250 (CEN/TC250) and of International Technical and Scientific Organisations and represent a world-class set of standards for structural design.

The complete Eurocodes suite was made available in 2007. According to Guidance Paper L of the Commission and CEN rules, there can be a period of co-existence between the Eurocodes and National rules until 2010, after which all conflicting National Standards will be withdrawn.

1.2. Field of application

The Eurocodes provide common structural design rules for everyday use for the design of whole structures and component products of both a traditional and an innovative nature.

The Eurocodes cover in a comprehensive manner all principal construction materials (concrete, steel, timber, masonry and aluminium), all major fields of structural engineering (basis of structural design, loading, fire, geotechnics, earthquake, etc.) and a wide range of types of structures and products (buildings, bridges, towers and masts, silos, etc.).

EN 1990	Eurocode: Basis of structural design
EN 1991	Eurocode 1: Actions on structures
EN 1992	Eurocode 2: Design of concrete structures
EN 1993	Eurocode 3: Design of steel structures
EN 1994	Eurocode 4: Design of composite steel and concrete structures
EN 1995	Eurocode 5: Design of timber structures
EN 1996	Eurocode 6: Design of masonry structures
EN 1997	Eurocode 7: Geotechnical design
EN 1998	Eurocode 8: Design of structures for earthquake resistance
EN 1999	Eurocode 9: Design of aluminium structures

The EN Eurocodes

"The Council shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament and the Economic and Social Committee, issue directives for the approximation of such laws, regulations or administrative provisions of the Member States as directly affect the establishment or functioning of the common market."
Treaty Establishing the European Community, Article 94.

"Member States should adopt the Eurocodes as a suitable tool for designing construction works, checking the mechanical resistance of components, or checking the stability of structures."
Commission Recommendation 2003/887/EC.

1.3. Formal framework

The following key directives and documents form the official link of the Eurocodes with EU legislation:

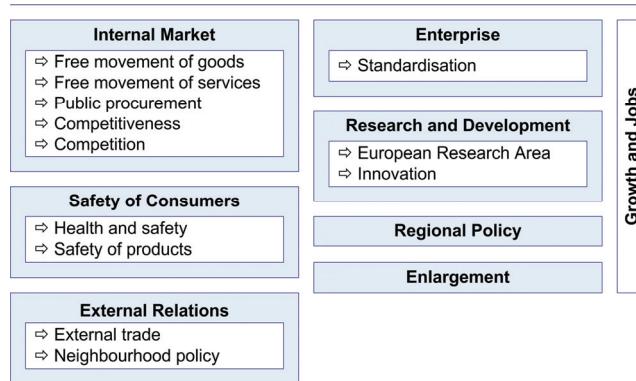
- Council Directive 89/106/EEC on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products (Construction Products Directive)
- Directive 98/34/EC of the European Parliament and of the Council laying down a procedure for the provision of information in the field of technical standards and regulations
- Directive 2004/18/EC of the European Parliament and of the Council on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts
- Commission Recommendation 2003/887/EC on the implementation and use of Eurocodes for construction works and structural construction products
- Guidance Paper L – Application and use of Eurocodes

1.4. EU policies relating to the Eurocodes

The Eurocodes are a major and necessary tool for the successful implementation of the Internal Market for construction products and services and contribute to the protection of safety of the European citizens in the built environment.

By providing a common basis for construction, the Eurocodes sustain several other EU policies, e.g. Research and Development, Enterprise, Competition, Enlargement and Regional policy, in support of the objectives of the renewed Lisbon strategy for Growth and Jobs.

Furthermore, the Eurocodes assist the External Trade and the European Neighbourhood policies in the field of standardisation in construction.



2. NEW OPPORTUNITIES IN THE GLOBAL MARKET

2.1. Internal Market, Safety of Consumers and Competition

Free movement of goods and services

The Single European Market, launched in 1992, concerns the free movement of people, goods, services and capital.

It offers better values to consumers and a wider choice of goods and services. Firms selling in the Single Market know they have unrestricted access to the 500 million consumers in the European Union – enabling them to achieve economies and efficiencies of scale, which translate in turn into lower prices. The Single Market also provides a vital springboard for European firms to expand into today's globalised markets.

Safety of consumers

The fundamental rights of consumers include the right to protection of health and safety, based on the best possible scientific advice, with legislation being adapted in such a way as to guarantee safer products and services. The policy aims at consumers being confident enough to play an active role in the Single Market, while enjoying an appropriate level of protection.

Consumer policy is part of the more general policy of completing the Single Market. The policy has a transversal aspect, i.e. the objectives mentioned are being integrated into specific policies which affect consumers.

Consumers need simpler and more uniform rules and a similar degree of application throughout the Union. In this respect, the development of European standards in construction is a way of helping to protect the health and safety of European citizens in the built environment.

The Eurocodes provide methods to fulfil the requirements for mechanical resistance, stability, resistance to fire and safety in use specified in the Construction Products Directive. Furthermore, the Eurocodes will lead to more uniform safety levels of constructions in the different European regions.

In a recent survey (Flash Eurobarometer 180, June 2006) a majority of business leaders mentioned that in the future they expect the Single Market to ensure that companies can do business on the basis of one set of rules, i.e. the Eurocodes in the construction sector.

"The internal market shall comprise an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured."

Treaty establishing the European Community, Article 14.

The Commission, in its proposals concerning safety and consumer protection, "will take as a base a high level of protection, taking account in particular of any new development based on scientific facts".

Treaty establishing the European Community, Article 95.

Public procurement

Public procurement contracts cover supplies, services and works purchased by the public sector. European legislation (e.g., Directive 2004/18/EC on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts) ensures fair treatment for businesses.

The Eurocodes are to be used by contracting public authorities as a reference in technical specifications for their call for tenders for public service and public works contracts. This ensures that all tenderers have access to the same information and that high quality products and services are supplied.

Competitiveness

The common aim is to put in place the framework conditions which will enable European companies to grow and compete successfully with strong existing and new competitors in the global market.

Effective competition cuts prices, raises quality and allows technological innovation to flourish. A clear regulatory environment, supported by harmonised technical rules, is a major driver of competitiveness.

By creating the conditions for a harmonised system of rules, the Eurocodes will strengthen the competitiveness of European civil engineering firms, contractors, designers and product manufacturers in their world-wide activities.

Competition

Competition policy is essential for the completion of the Internal Market. The *raison d'être* of the internal market is to allow firms to compete on a level playing field in all the Member States; the competition policy sets out to encourage economic efficiency by creating a climate favourable to innovation and technical progress.

European competition policy makes it possible to ensure that healthy competition is not hindered. In a market economy, competition promotes economic success, safeguarding the interests of European consumers and ensuring that European undertakings, goods and services are competitive on the world market.

The Eurocodes serve as a common and transparent basis for fair competition in the construction industry.

A recent survey (Flash Eurobarometer 180, June 2006) shows that European public procurement rules have had the most positive impact on companies in construction.

Within the Lisbon Strategy, competitiveness has become one of the political priorities of the Union.

The activities of the Community shall include "a system ensuring that competition in the internal market is not distorted".

Treaty establishing the European Community, Article 3(g).

2.2. Enterprise

The objective of Enterprise policy is to produce an environment that is more conducive to the creation and development of businesses, especially small and medium-sized enterprises. This is a key factor of their competitiveness, growth and employment performance, necessary to achieve the objectives of the Lisbon Strategy.

The main focus of this policy is on:

- o promoting European competitiveness
- o promoting innovation
- o simplification of the regulatory and administrative environment
- o completion of the internal market for goods

Standardisation

European standardisation supports important European policies:

- o the Lisbon Strategy
- o the Single Market
- o competitiveness of European enterprises
- o better regulation
- o research and innovation
- o public procurement

In addition, European Standards:

- o enhance the safety of products
- o encourage economies of scale
- o enable manufacturers to comply with European legislation
- o encourage greater competition
- o promote common understanding

Trade within the European Economic Area (EEA) is allowed, provided that goods and services conform to any relevant directive. Once a manufacturer has affixed a declaration of conformity, the products can be traded throughout the EEA without hindrance.

The Eurocodes are European Standards developed in the context of Council Directive 89/106/EEC, which is the European legislation related to the attestation of conformity of construction products.



*Member States
should "recognise
that the use of those
Eurocodes raises a
presumption of
conformity with the
essential
requirements referred
to in Directive
89/ 106/ EEC."
Commission
Recommendation
2003/887/EC.*

2.3. Research and Development

Research and development policy is one of the European Union's priorities, fundamental to the Lisbon Strategy to boost employment and growth in Europe. Research with education and innovation form the "knowledge triangle", which will allow Europe to maintain its economic dynamism and social model.

The initiatives covered by a research and innovation action plan launched in 2005 aim to place research and innovation at the heart of EU policies, at the heart of EU funding, and at the heart of business.

The European Research Area

The European Research Area brings together all of the Community's resources to better co-ordinate research and innovation activities at the level of both the Member States and the European Union. The European Research Area is designed to make European research more efficient by replacing loose cooperation between researchers and research organisations with research programmes integrated across borders and across disciplines.

Innovation

Innovation plays a key role for the EU to remain competitive and sustain its model of society. A high level of R&D spending and a good innovation performance contribute to more and better jobs.

The Commission points the way forward to accompany industry-led innovation with public policies, by creating conditions for a successful market uptake of innovative products and services, as a core element of the renewed Lisbon strategy for growth and jobs. By instituting a common design framework, the Eurocodes will be a common basis for research and development in civil engineering.

2.4. Regional Policy

Regional Policy aims to strengthen economic, social and territorial cohesion by reducing disparities in the level of development among regions and Member States. This means investing in regions' indigenous potential to promote the competitiveness of regional economies and the permanent catch-up of those lagging behind the more prosperous areas.

The GDP of the ten most dynamic regions is almost three times higher than that of the ten least developed regions. The EU's regional policy is still needed to encourage harmonious development of the Community's territory. It must enable all the regions in the Union to benefit fully from the opportunities offered by the Single Market and contribute to the success of economic and monetary union.

The Eurocodes ease the cross-border movement of construction products as well as engineering, architectural and other construction related services and consequently boost the competitiveness of the construction industry in the least developed regions.

"The Eurocodes should facilitate the development of common research efforts undertaken by various actors in the Community and dissemination of the results of that research, in particular through professional training. This will result in safer building and civil engineering works in the Community."
Commission Recommendation 2003/887/EC.



One of the Community tasks is to promote a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, [...] the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States". Treaty establishing the European Community, Article 2.

2.5. A shared agenda

To ensure advantages to the European citizen the European institutions and the Member States, each have important roles to play. Member States must transpose legislation, implement it promptly and correctly, inform their citizens and businesses of their rights and resolve problems as and when they occur. This calls for close cooperation between them and the Commission, aiming at the completion of the Single Market.

2.6. Enlargement

Enlargement is one of the European Union's most powerful policy tools. It is a carefully managed process which helps the transformation of the countries involved, extending peace, stability, prosperity, democracy, human rights and the rule of law across Europe.

The economic impact of enlargement can be significant, as a bigger and more integrated market boosts economic growth for the new and old members alike. The newcomers benefit from investments from firms based in western Europe and from access to European Union funding for their regional and social development. Companies in the old Member States have greater opportunities for exports in the bigger market.

Among the criteria of accession is the adoption of the *acquis communautaire*, i.e. the corpus of European legislation, and its effective implementation through appropriate administrative and judicial structures.

2.7. Growth and Jobs: relaunch of the Lisbon strategy

In the Lisbon European Council in March 2000 the European Union set a strategic goal for the next decade “*of becoming the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion*”. The strategy rests on the economic, social and environmental pillars.

Key areas of the Lisbon Strategy include:

- o effective Internal Market
- o free and fair trade
- o better regulation
- o improving European infrastructure
- o investing in research and development
- o boosting innovation
- o creating a strong industrial base
- o more and better jobs



“At present, the economies of the countries which have become members since 2004 are growing more strongly than those of the others. This is bringing more prosperity to the newcomers [...] The gap between living standards across the Union is narrowing [...]”*

The Lisbon Strategy is a cross-cutting policy with a number of other policies contributing to its objectives.

* http://europa.eu/pol/enlarg/overview_en.htm

3. EXTERNAL RELATIONS

External Trade

The EU is committed to helping world trade and development, thereby boosting competitiveness, jobs and growth, further to securing prosperity, solidarity and security in Europe and around the globe.

The EU External Trade policy is to develop the external dimension of the Single Market, i.e., to remove trade barriers, for example by promoting EU approaches to technical regulation and conformity assessment.

Increased trade boosts world growth to everybody's advantage. It brings consumers a wider range of products to choose from.

Competition between imports and local products lowers prices and raises quality. Liberalised trade enables the most efficient producers to compete fairly with rivals in other countries. Transparent, effective and respected common rules are essential to achieve these benefits.

The EU has established bilateral trade relations with Albania, Belarus, Chile, India, Mexico, Serbia, South Africa, Switzerland and Vietnam and is negotiating with Azerbaijan, Bosnia and Herzegovina, Canada, China, Iran, Iraq, Kazakhstan, Montenegro, Russia and Ukraine.

The EU also develops bi-regional relations with:

- ACP countries (African, Caribbean and Pacific)
- Andean Community (Bolivia, Colombia, Ecuador, Peru and Venezuela)
- countries participating in the European Economic Area Agreement (Iceland, Liechtenstein and Norway)
- Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates)
- Mercosur (Argentina, Brazil, Paraguay and Uruguay)
- Mediterranean Partners (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestinian Authority, Syria, Tunisia and Turkey)

European Neighbourhood Policy

The European Neighbourhood Policy was developed with the objective of avoiding the emergence of new dividing lines between the enlarged EU and the "new neighbours" (e.g. Russia, Ukraine and Moldova) and the Southern Mediterranean countries.

As far as the policies of the Internal Market are concerned, the aim is to align the regulatory systems, e.g. services and public procurement. The importance of conformity assessment and standardisation is explicitly highlighted in this context. This will make trading between the EU and these countries significantly easier, benefiting both sides.

Within the European standardisation and conformity assessment system, the Eurocodes are the reference documents for construction products. They will provide for the free movement of goods and services, help the progress of industrial, scientific and technical cooperation and encourage the alignment of technical regulation and attestation procedures between the EU and its trade partners.

"By establishing a customs union between themselves Member States aim to contribute, in the common interest, to the harmonious development of world trade, the progressive abolition of restrictions on international trade and the lowering of customs barriers."
Treaty establishing the European Community, Article 131.

The European Union is the world's leading exporter of goods and services.

The establishment of the Euro-Mediterranean Free Trade area by 2010 is a priority action of the Barcelona Declaration.

4. KEY FIGURES

Standardisation

- 39% of company executives recognise the positive impact of European product standards on their business activities¹.
- Poor quality regulation costs European business at least €50 billion per year².
- 87% of companies say that the most important priority is to have one set of rules, instead of 25².

Internal Market

- In its first ten years of existence the Single Market created 2.5 million jobs and €877 billion of extra prosperity³.
- During the same period, EU exports to third countries have increased from 6.9% of EU GDP to 11.2%³.
- An efficiently functioning internal market in services could increase trade between 15 to 30%, as well as foreign direct investment between 20 to 35%⁴.
- EU citizens are, in general, satisfied with the possibilities that the Single Market offers and perceive the effect on competition (67 %), range (73 %) and quality (58 %) of products as positive⁵.

Public Procurement

- The EU's public procurement market represents more than 16% of the EU's GDP⁶.
- Public authorities that made purchases using procurement rules paid prices approximately 34% less than authorities who did not use the rules⁶.

The Construction Sector

- 11.8 million people are directly employed in the sector⁷.
- The construction sector covers 7% of total employment and 28% of industrial employment in the EU⁷.

¹ Flash Eurobarometer 190

² Commission Communication COM/2003/0238 final

³ http://ec.europa.eu/internal_market/top_layer/benefits_en.htm

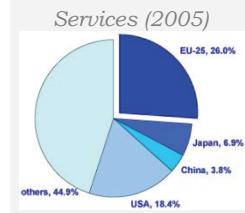
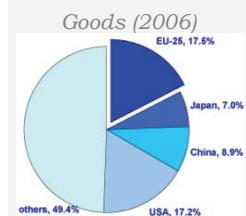
⁴ Commission Communication COM/2005/0011

⁵ Special Eurobarometer 254

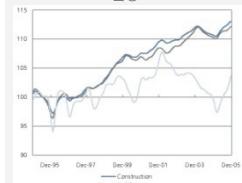
⁶ Commission's report on the economic effects of public procurement (03/02/2004)

⁷ http://ec.europa.eu/enterprise/construction/index_en.htm

Share of world trade



Construction production index, EU-25



source: Eurostat

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