EUROCODES
Building the Future

Building the Future in the Euro-Mediterranean Area

The Eurocodes, history and present

Jean-Armand CALGARO
Ingénieur Général des Ponts et Chaussées
Conseil Général des Ponts et Chaussées
Ecole nationale des Ponts et Chaussées, France

A short story of the Eurocodes

1971-1976	Public procurement Directive (1971) – Appointment of a steering committee to examine the feasibility of developing a common European set of technical documents covering the design of a wide range of construction works.
1976 –1990	Drafting of the first set of technical documents under the Commission's authority : the Eurocodes – International inquiry (1980) – Unique Act and New Approach (12/07/1986) – Construction product directive (CPD - 1989) – Transfer to CEN.
1990 - 1998	Conversion, by CEN, of the first Eurocodes into provisional European standards (ENVs)
1998 – 2006	Conversion of the provisional European standards ENV into European standards EN
2007 - ∞	Maintenance and evolution of the Eurocodes

Objectives of the Eurocodes

The Member States of the EU and EFTA(1) recognise that 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 Council Directive 89/106/EEC, particularly Essential Requirement N°1 – Mechanical resistance and stability – and Essential Requirement N°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)**

(1) EFTA : European Free Trade Association (Iceland, Norway, Switzerland, Liechtenstein)

Objectives of Eurocodes (cont.)

In addition, the Eurocodes are foreseen to :

- **improve the functioning of the single market for products and engineering services by removing obstacles arising from different nationally codified practices for the assessment of structural reliability ;**

- **improve the competitiveness of the European construction industry and the professionals and industries connected to it, in countries outside the European Union.**

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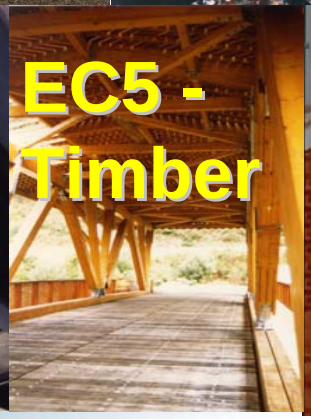
THE EUROCODES



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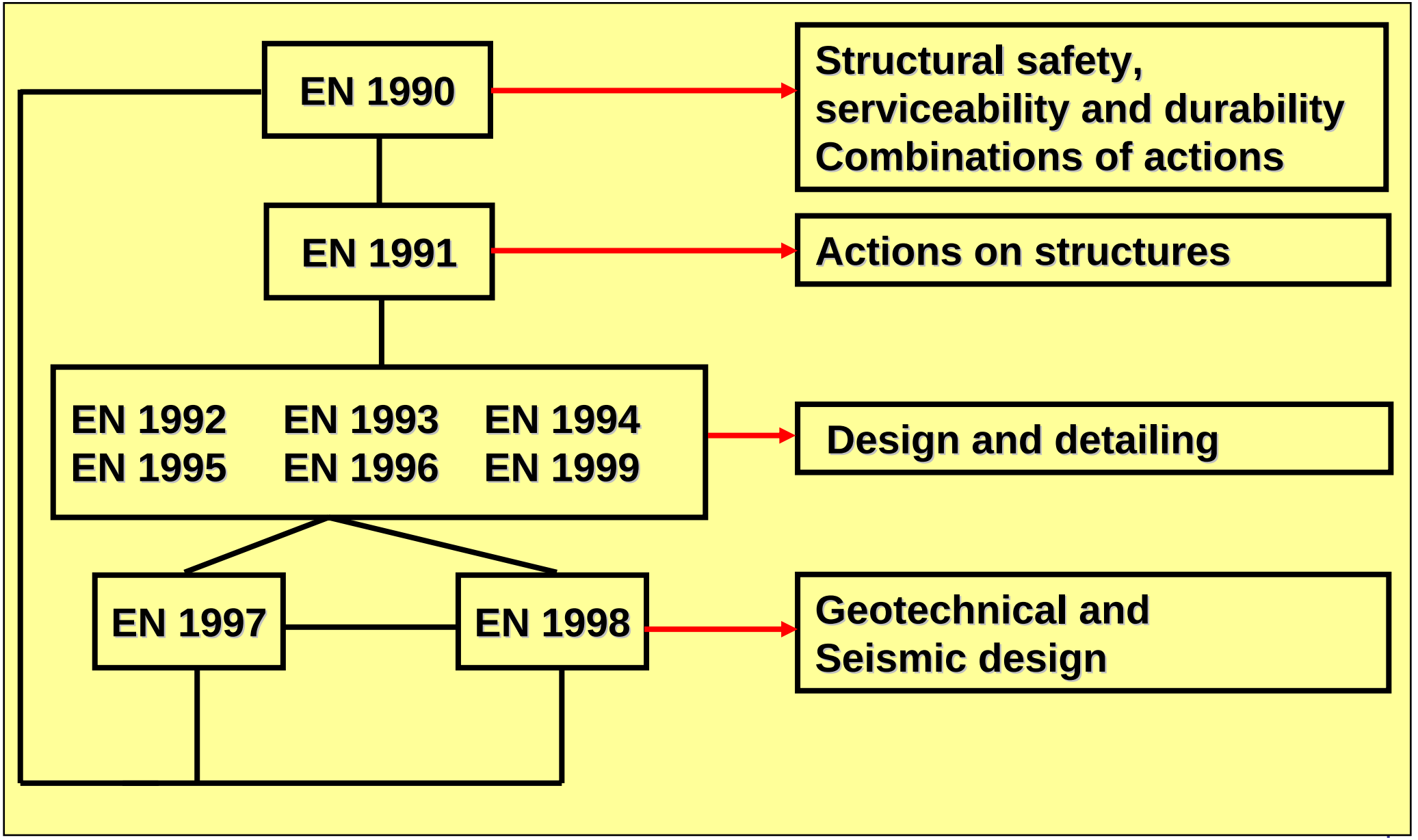
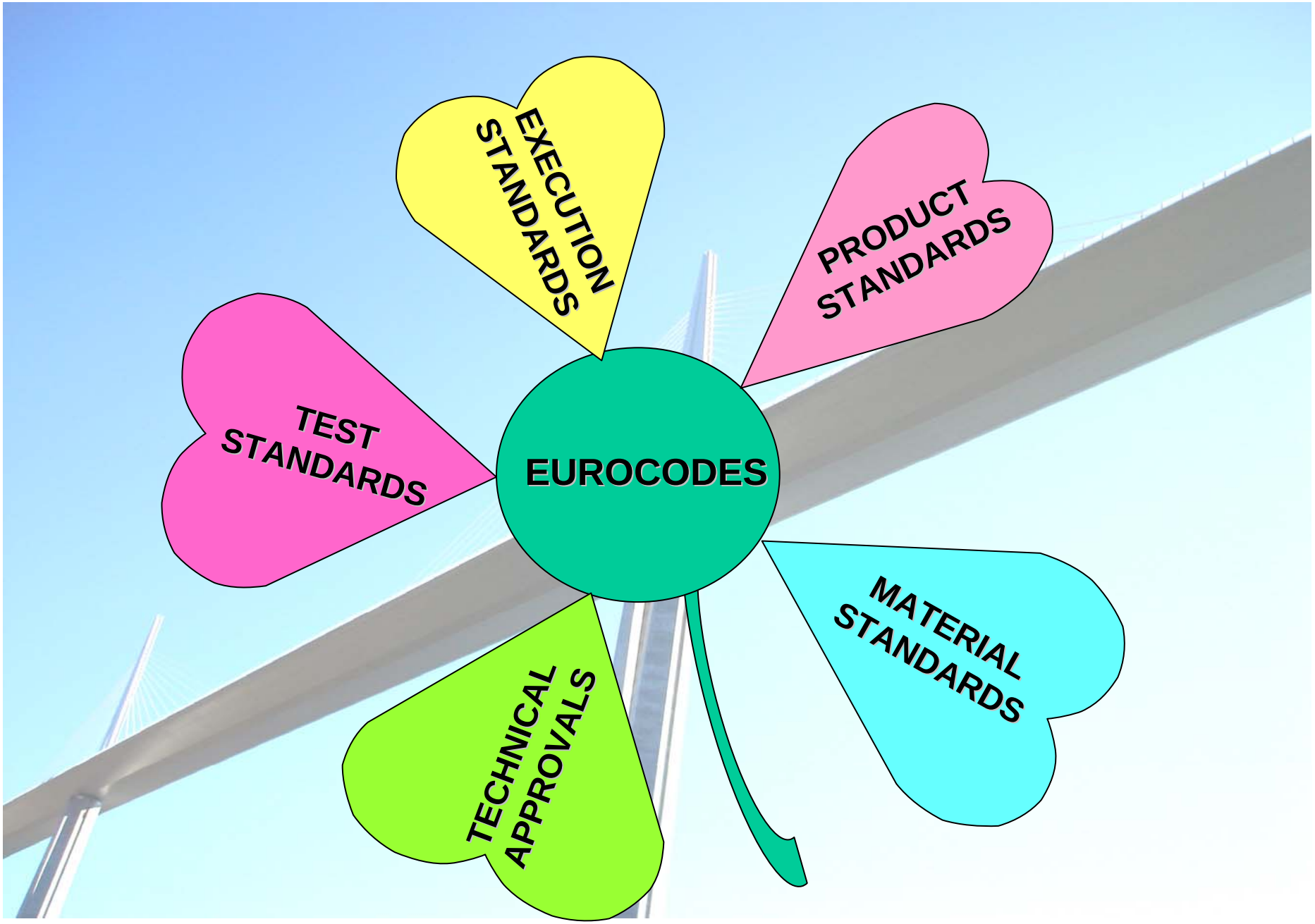
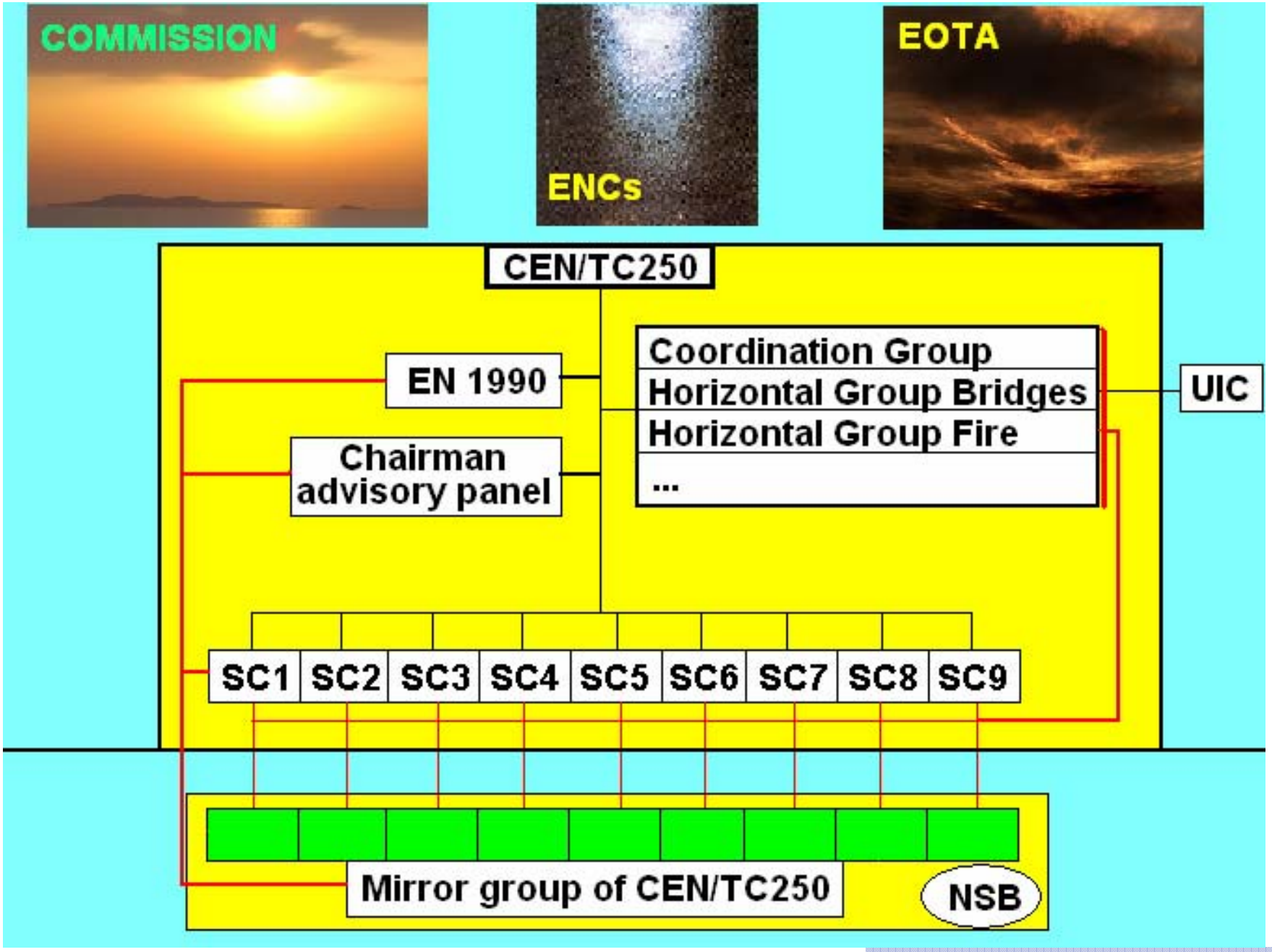
LINKS BETWEEN THE EUROCODES



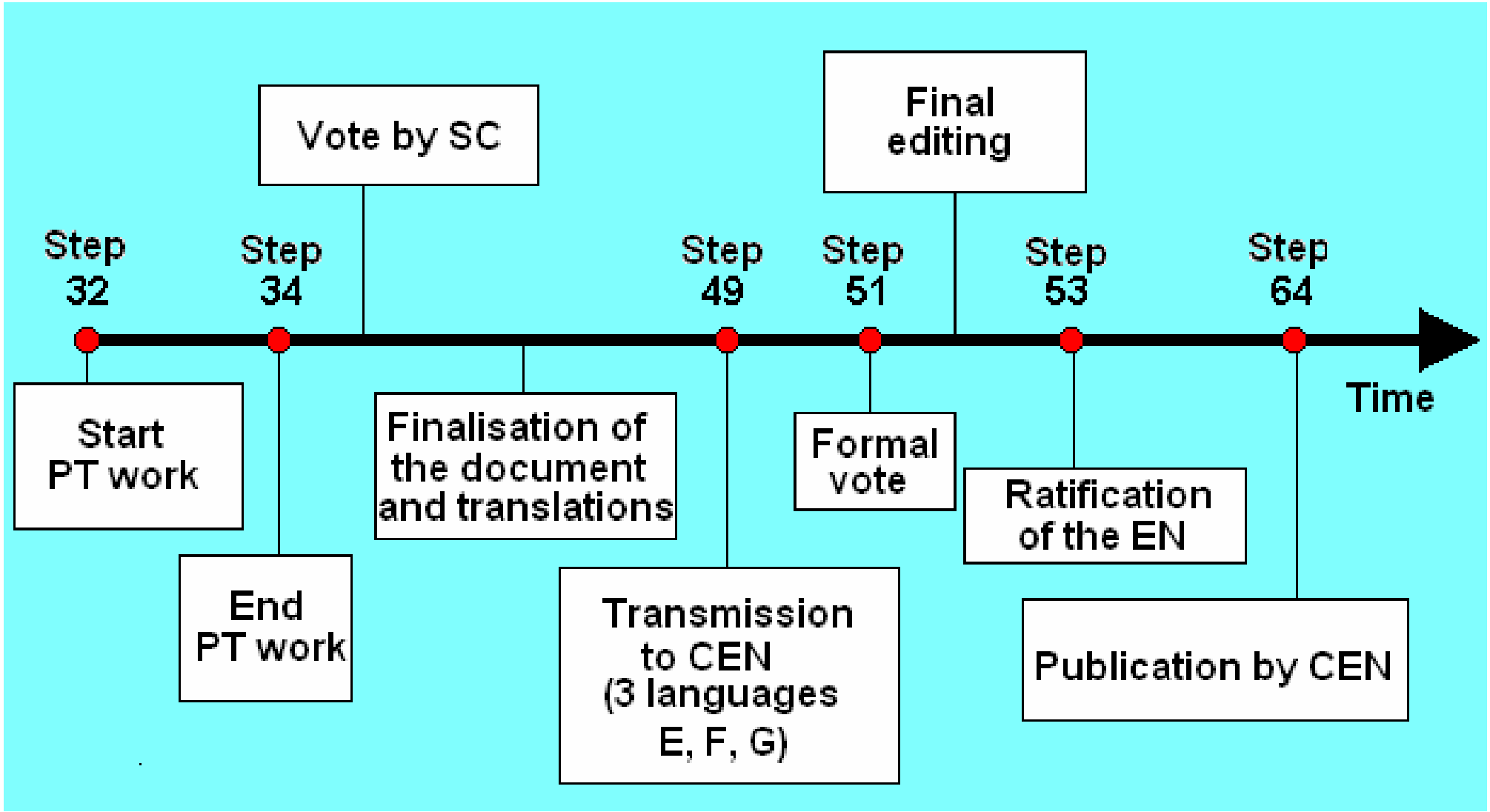
The environment of the Eurocodes



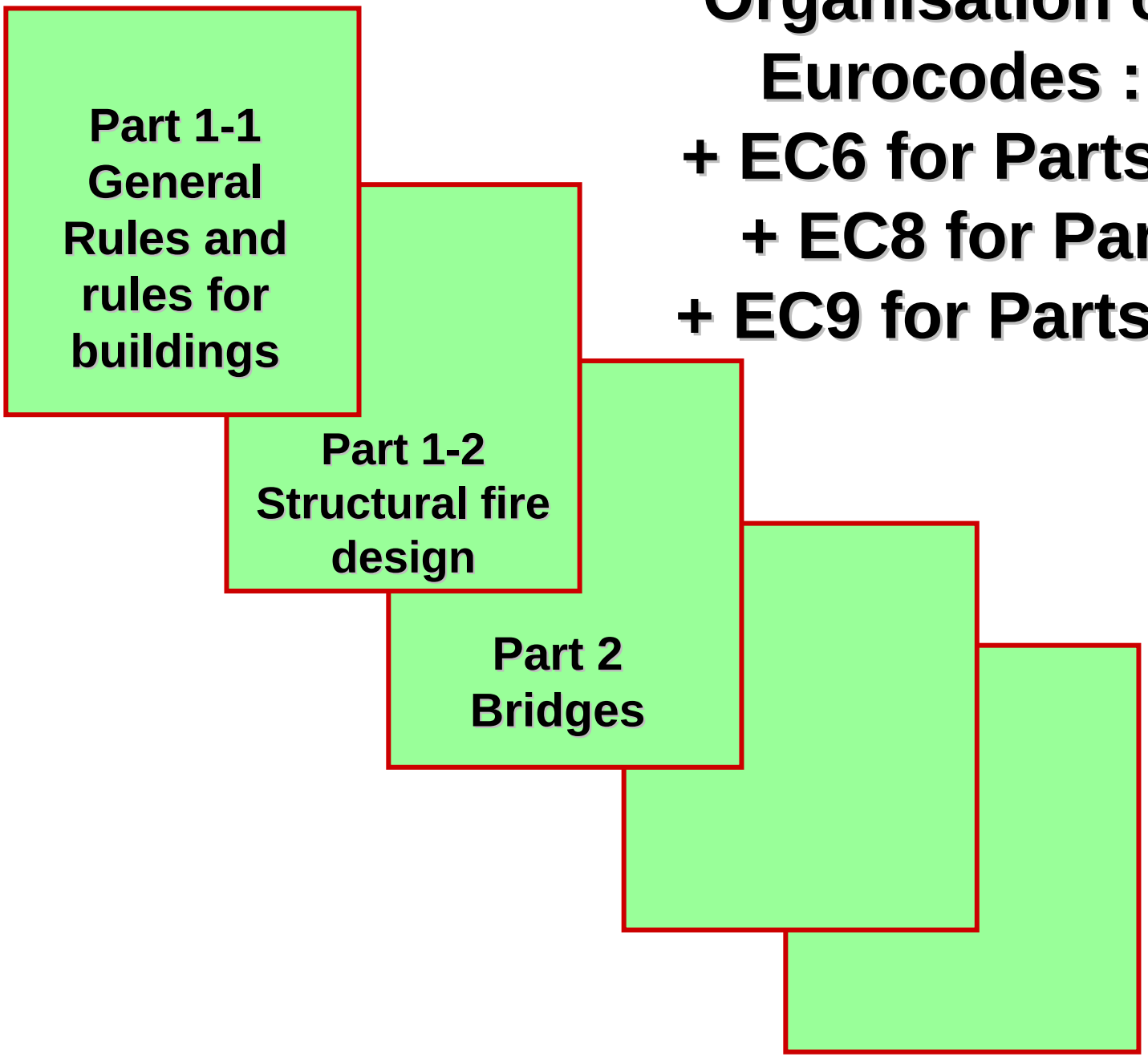
The Environment of CEN/TC250



From birth to publication of an EN Eurocode Part

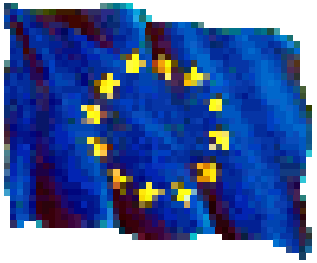


Organisation of Design Eurocodes : 2-3-4-5 + EC6 for Parts 1-1 & 1-2 + EC8 for Parts 1 & 2 + EC9 for Parts 1-1 et 1-2



IMPLEMENTATION OF EUROCODES (1)

Eurocode EN 199n-p



Normative Part (no choice)	Part open to choices
Transformation into National standard	Choices made in the National Annex

(National) EN 199n-p

Choices for the individual project, national guidance, etc.

IMPLEMENTATION OF EUROCODES (2)

The National annex may only contain information on those parameters which are left open in the Eurocode for national choice, known as Nationally Determined Parameters, to be used for the design of buildings and 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,**
- **the 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.**

COMMISSION RECOMMENDATION (2003/887/EC) OF 11/12/2003 on the implementation and use of the Eurocodes for construction works and structural construction products

Abridgement of the recommendation

1.- The Eurocodes are a suitable tool :
- to check mechanical resistance and stability
- to give a presumption of conformity with Essential Requirements 1, 4, 2 of the Directive 89/106/EEC

2.- NDPs should be laid down

3.- The use of recommended values is encouraged as far as possible and NDPs should be notified to the Commission

4.- The Commission may request changes of NDP values to reduce divergence from recommended values

COMMISSION RECOMMENDATION (2003/887/EC) OF 11/12/2003 on the implementation and use of the Eurocodes for construction works and structural construction products

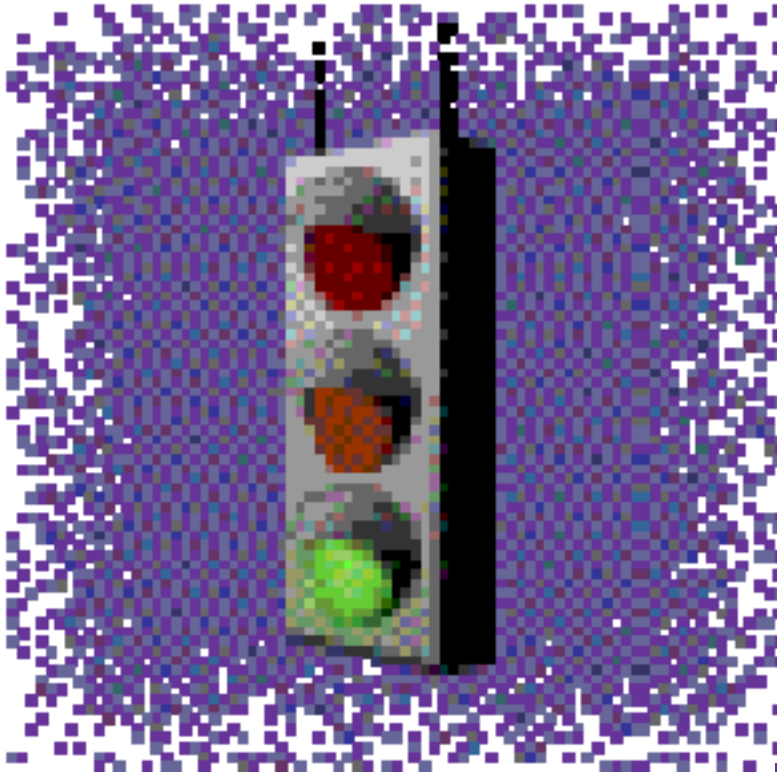
Abridgement of the recommendation (cont.)

5.- Reference to Eurocodes in the national provisions on structural construction products (in the absence of technical specifications) is encouraged.

6.- Research is encouraged in cooperation with JRC for the evolution of Eurocodes, in particular in the fields of fire and earthquake resistance.

7.- Promotion of instruction in the use of the Eurocodes is encouraged.

The present situation : we are ready !



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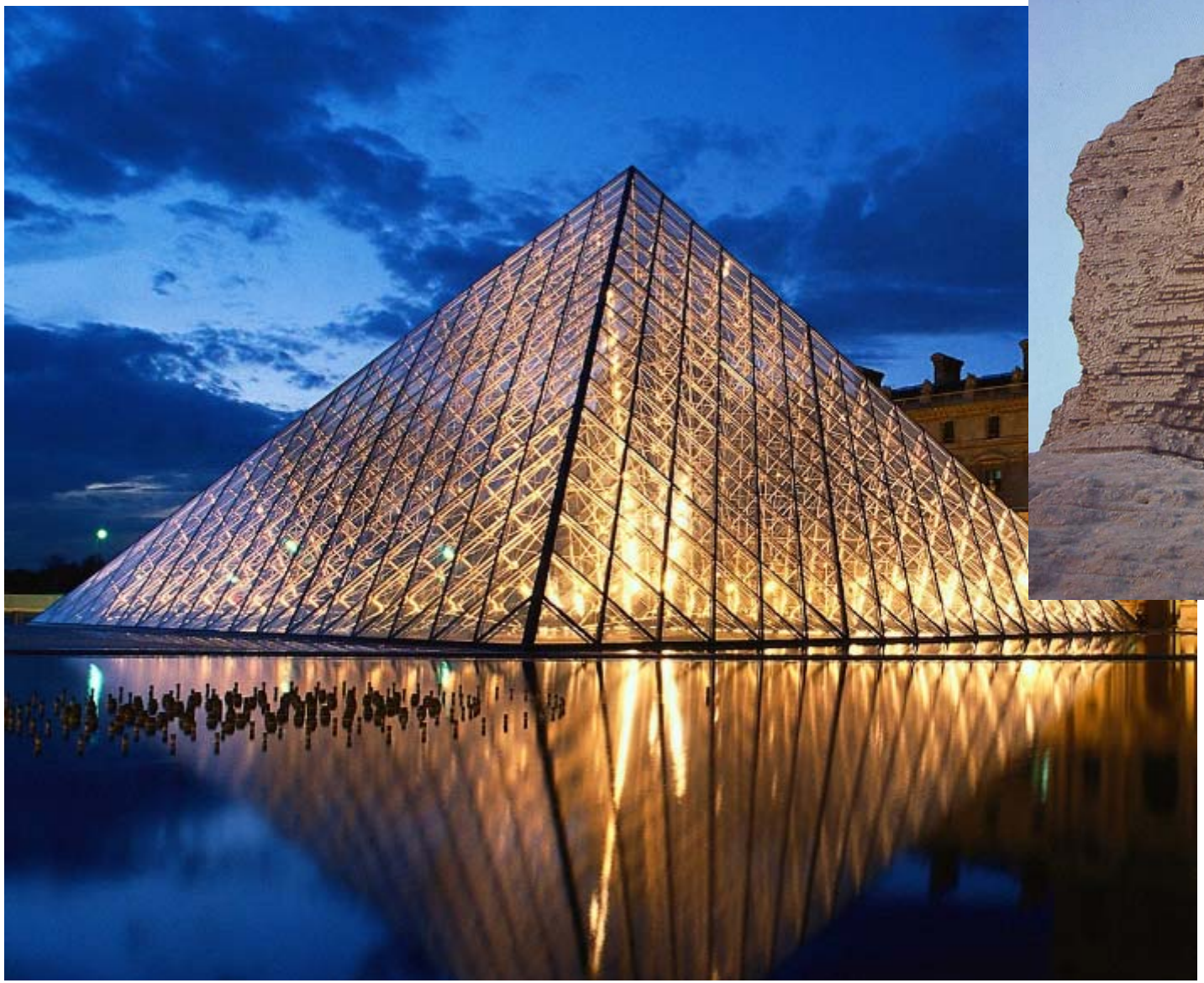
The main qualities of the Eurocodes …



… their technical soundness and their transparency

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Thank you for your attention