## Harmonized European standards for construction in Egypt

**Introduction to Eurocodes** 

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Organised with the support of the Egyptian Organization for Standardization and Quality





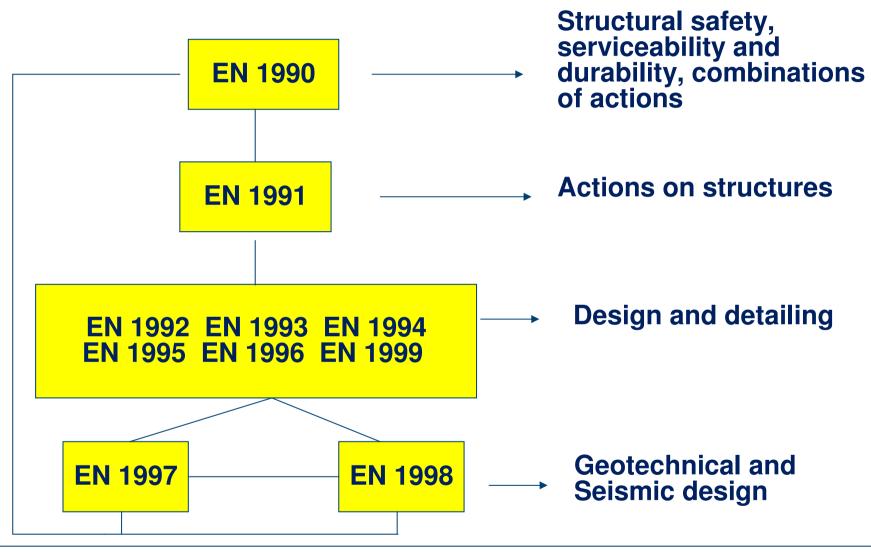


THE EUROCODE FAMILY





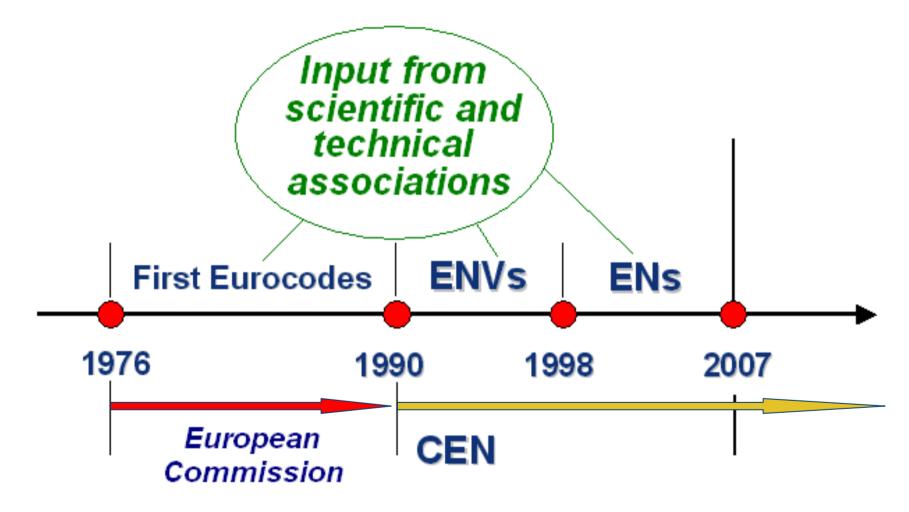






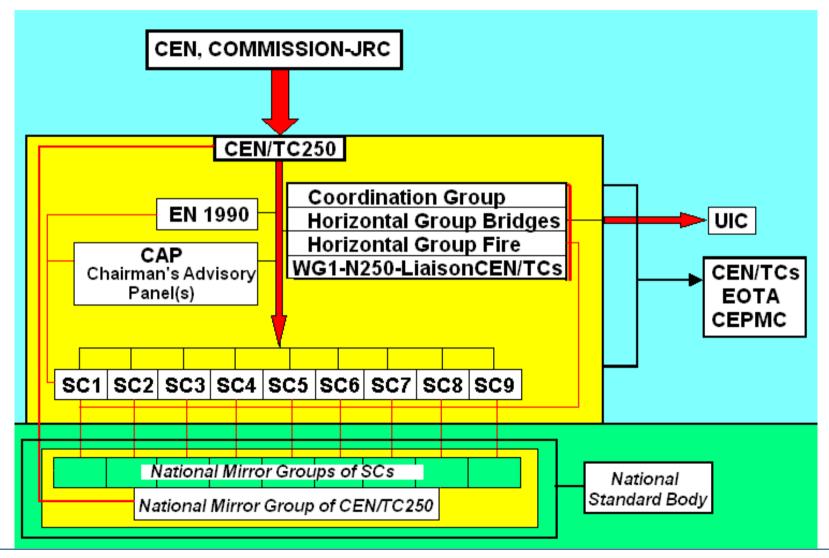


#### Development of the present generation of Eurocodes













#### 10 Eurocodes – 58 Parts – 5320 pages







#### **Execution, material, product, test Standards**







#### Introduction to Eurocodes **IMPLEMENTATION** EN 199n-p OF THE EN EUROCODES **EUROPEAN LEVEL** Choices Main text **Nationally** Determined Normative Parameters (NDPs) Annexes Informative **Decisions** Annexes STATE **Transformation** into a National Project specification National Annex Standard MEMBER (National Standard) (« NS » EN 199n-p)





## The Eurocodes in 2010 and beyond : the main strands

PROMOTION / EDUCATION		
MAINTENANCE		
HARMONIZATION (NDPs)		
FURTHER DEVELOPMENT	Evolution of the Eurocodes :  Preparation of the new generat of Eurocodes	ion
	Preparation of :  - New Eurocode Parts,  - New Eurocodes ENs	





#### FURTHER DEVELOPMENTS OF EUROCODES

- New materials
- New concepts and/or requirements
- New societal needs















2009 2010 2011 2012 2013 2014 2015 2016 2017







### THE FUTURE CONSTRUCTION PRODUCTS REGULATION

#### **ANNEX I**

#### **Basic works requirements**

Construction works as a whole and in their separate parts must be fit for their intended use.

Subject to normal maintenance, basic works requirements must be satisfied for an economically reasonable working life.





#### **Basic works requirements**

- 1. Mechanical resistance and stability
- 2. Safety in case of fire
- 3. Hygiene, health and the environment
- 4. Safety in use
- 5. Protection against noise
- 6. Energy economy and heat retention
- 7. Sustainable use of natural resources





#### 7. Sustainable use of natural resources

The construction works must be designed, built and demolished in such a way that the use of natural resources is sustainable and ensure the following:

- (a) recyclability of the construction works, their materials and parts after demolition;
- (b) durability of the construction works;
- (c) use of environmentally compatible raw and secondary materials in the construction works.





# Our objectives in a few words





- Extension of the use of the Eurocodes to:
   Give better answers to societal needs, in particular safety, security, comfort and sustainability;
- Simplify the dialogue between actors of the construction industry
- Evolution of the existing Eurocodes
  - more performance-based codes
  - even more transparency to reach or to differentiate the desired reliablity levels
  - tightened links with research.
- Tools to stimulate innovation
- Towards a « harmonized » European regulatory system







## Thank you for your attention



