

# Technical assistance for Reforming the Construction Development Legislation Framework

*Final Report*

3<sup>rd</sup> Mission, 20-22 June 2017

Nicosia

# Activities Performed

- Missions

- November 2016 – *fact finding*
- April 2017 – *discussion of findings and recommendations*
- June 2017 – *presentation of final report*



# Activities Performed

- Involvement of Stakeholders
  - Planning and Building Local Authorities
  - Planning Governmental Authorities
  - Building Governmental Authorities
  - Water Development Department
  - Department of Environment
  - Cyprus Architects Association
  - Cyprus Association of Civil Engineers
  - Cyprus Land and Building Developers Association

# Activities Performed

- Involvement of Stakeholders (cont'd)
  - Cyprus Tourism Association
  - Meeting with Ministry of Interior Permanent Secretary
  - Director of the Town Planning and Housing Department
  - Ministry of Energy, Commerce, Industry and Tourism
  - Sewerage Boards
  - Director of Department of Land and Surveys
  - Cyprus Fire Service
  - Water Boards

# Activities Performed

- Involvement of Stakeholders (cont'd)
  - Department of Labour Inspection
  - Cyprus Energy Agency
  - Federation of Associations of Building Contractors Cyprus (OSEOK)
  - Cyprus Employers and Industrialists Federation (OEB)
  - Cyprus Chamber of Commerce & Industry (KEBE)
  - Association of Town Planners
  - Association of Topographers
  - Association of Electrical Engineers
  - Association of Mechanical Engineers

# Permitting and Building Control Procedures

- Relevance of Building Control
  - Why do we care for Building Control?
    - To ensure that buildings are safe and healthy to use.
    - To prevent building defects (appearing immediately or – in the case of hidden defects – after sometime).
    - To prevent liability claims, compensations or administrative problems, which may result from not conforming to technical requirements or zoning provisions.
    - Encourage innovation to produce energy efficient and sustainable buildings
    - Support local, regional and national businesses
    - Educate and inform building professionals, contractors and trades people

# Permitting and Building Control Procedures

- Relevance of Building Control (cont'd)
  - Defend vulnerable communities and householders
  - Drive out rogue traders
  - Safeguard the investments of individuals and companies
  - Enhance access for disabled, sick, young and old people
  - Protect the community from dangerous structures
  - Provide advice in support of the emergency services
  - Ensure sports grounds and public venues are safe for crowds

# Permitting and Building Control Procedures

- Relevance of Building Control (cont'd)
  - Building Control Systems in Europe
    - Fučić, L. (2007), Efficacy of building control systems: a comparative research
    - Koning, M., Errami, S., Saitua, R. (2017), Quality assurance in construction, Summary of a comparison between the English, German, Irish and Norwegian system, Economisch Instituut voor de Bouw, 2017.
    - Meijer, F., Visscher, H. (1998), The deregulation of building controls: a comparison of Dutch and other European systems. In: Environment and Planning B: Planning and Design 1998, 25, 617 – 629.
    - Mikulits, R. (2006), Building Control Systems in Europe. The Consortium of European Building Control, Ipswich, 2006
    - Moullier, T. (2009), Reforming Building Permits Why is it Important and What Can IFC Really Do?, International Finance Corporation, World Bank Group, February 2009,
    - Pedro, J.B., Meijer, F., Visscher, H. (2010), Building control systems of European Union countries: A comparison of tasks and responsibilities. International Journal of Law in the Built Environment 2010, 2(1), 45-59.



# Permitting and Building Control Procedures

- Relevance of Building Control (cont'd)
  - Building Control Systems in Europe
    - Studies do not deal explicitly with the issue of two-tier vs. comprehensive permit system
    - No information is to which extent there is a certain degree of discretion with regard to the fulfilment of the planning permissions
    - Unpublished study: out of 12 countries
      - 8 countries with comprehensive system (one permit)
      - 4 countries with two-tier system (two permits)

# Permitting and Building Control Procedures

- General Recommendation

*Fundamental revision of the Construction Development Legislation Framework*

- *Along the following lines:*
  - New structure of the legislation framework, taking into account best practice
  - Clear separation of parts of legislation dealing with
    - Zoning and planning requirements
    - Technical requirements to be fulfilled by buildings and construction works
    - Procedures for building control (permits, inspections, approvals etc.)

# Permitting and Building Control Procedures

- Specific Recommendations
  - Introduction of a one-stop shop permitting system
    - Keep the building control as a duty of an authority
    - One comprehensive permit for planning and technical issues of a construction project
    - Where other authorities need to give certain consents or approvals, this should also be managed by the building authority, so that the applicant does not need to approach these other authorities in parallel
  - Improvement of the planning system
    - Establishment of meaningful zoning maps and provisions in the whole country (see later)

# Permitting and Building Control Procedures

- Specific Recommendations (cont'd)
  - Only one type of competent authority for construction development
    - This Competent Authority should be able to act in an independent manner, and the decision making should be done by civil servants
    - The future Competent Authorities should be able to cover both aspects, planning and technical issues
    - The size of the Competent Authorities and the area of their jurisdiction should be well balanced
    - The Competent Authority should have the technical means, especially with regard to IT equipment, in order to apply new systems of e-application and e-permitting, and in future also BIM

# Permitting and Building Control Procedures

- Specific Recommendations (cont'd)
  - Introduction of a logic structure for the new „Construction Development Framework“:
    - Construction Law: contains all legal requirements, especially the rules for the above mentioned procedures;
    - Construction Regulation: contains the functional requirements as explained in chapter 2.1 (i.e. requirements expressed only using qualitative terms setting an objective which must be fulfilled);
    - Guidelines: not a piece of legislation itself, but a technical document (or several technical documents), which are referred to in the Construction Regulation; if the Guidelines are applied and fulfilled, the functional requirements of the Construction Regulation are deemed to be satisfied.

# Permitting and Building Control Procedures

- Specific Recommendations (cont'd)
  - Phases of Building Control:
    - Procedure for issuing a **building permit**
      - *one comprehensive permit* (including the present planning permit and building permit),
      - *issued by one authority*
    - Control activities **during construction** (supervision, inspections etc.)
    - Certificate of approval and related control activities after **completion** of the building or construction works

# Permitting and Building Control Procedures

- Specific Recommendations (cont'd)
  - Comprehensive Building permit:
    - *Short term approach:*

As long as there is not a yet a sufficient coverage with zoning maps, in cases where there is no zoning map, the building permit will consists of two parts

      - Pre-permit (giving the basic parameters concerning the use of land)
      - Final building permit
    - *Final approach:*
      - No Pre-permit necessary, since all information about the basic parameters concerning the use of land is given in zoning maps
  - *The preparation of zoning maps should be prioritised!*

# Permitting and Building Control Procedures

- Specific Recommendations (cont'd)
  - **Risk-based approach** for building control procedures
    - Introduction of a categorization of buildings and construction works depending on the risk related with the specific object, depending on the size and the use of the building or construction works;
    - Different (stepped) procedures for the different categories of buildings and construction works



# Permitting and Building Control Procedures

Risk Class RC		Size Class SC			
		SC 1	SC 2	SC 3	SC 4
Use Category UC	UC 1	RC 1	RC 1	RC 2	RC 2
	UC 2	RC 1	RC 2	RC 2	RC 2
	UC 3	RC 2	RC 2	RC 2	RC 3
	UC 4	RC 2	RC 2	RC 3	RC 3

# Permitting and Building Control Procedures

- Specific Recommendations (cont'd)
  - Possible stepped procedures for issuing a **building permit**:
    - Notice:  
The competent authority can react within a certain deadline (e.g. four weeks); no reaction means consent;
    - Simplified permission procedure:  
The checking of the documentation is limited to a formal check and a plausibility check. There should be a deadline for the issuing of the permit (e.g. four weeks);
    - Full permission procedure: Checking of all plans and calculations (could be delegated to third parties), involvement of neighbours, longer deadline with the possibility of extension.

# Permitting and Building Control Procedures

- Specific Recommendations (cont'd)
  - Differentiated **control activities during construction** (supervision, inspections etc.):
    - Random checks:  
No control on the building site, no inspection on the building site, the competent authority may perform random checks;
    - Supervising Engineer only:  
All controls and inspections are performed by the supervising engineer,;
    - Independent third party control:  
The supervising engineer is performing controls and inspections, in addition an independent third party expert performs inspections at critical stages of the construction process and also at random.  
*The competent authority may always perform random checks.*

# Permitting and Building Control Procedures

- Specific Recommendations (cont'd)
  - Stepped approach for the certificate of approval and related control activities after **completion** of the building or construction works:
    - Declaration:  
The applicant (owner/investor) submits a declaration that all legal requirements have been respected and fulfilled;
    - Confirmation:  
The supervising engineer submits a formal confirmation that all legal requirements have been respected and fulfilled;
    - Certificate:  
The independent third party expert issues a certificate stating that the completed building or construction works complies with all legal requirements.

*The competent authority may always perform random checks.*

# Permitting and Building Control Procedures

- Specific Recommendations (cont'd)
  - Risk-based permitting and building control procedures – schematic outline

	Procedure		
Category	Building Permit	Controls and inspections on site	Completion
RC 1 - Low risk	Notice	No control or inspection	Declaration by the owner/investor
RC 2 - Medium risk	Simplified permission procedure	Controls and insp. by supervising engineer	Confirmation by supervising eng.
RC 3 - High risk	Full permission procedure	Supervising engineer + indep. third party	Certificate from indep. third party

# Qualification

- Specific Recommendations

- Economic operators and the supervising experts

In order to insure a satisfying level of safety and quality it is important that the economic operators and the supervising experts are qualified for their duties. Beside a reliable system of education one of the following systems should be applied:

- **Licencing system** run by the authority (formal authorisation by a governmental body responsible for the licencing of economic operators);
    - Enrolment of economic operators into a **list of experts by a professional association** (e.g. chamber);
    - Proof of qualification through **an accreditation system** (certificate issued by a certification body which is accredited for the certification for personal).

# Requirements

- Specific Recommendations (cont'd)
  - Implementation of a **performance-based concept** in the building regulations
    - The requirements should be split into the following two levels:
      - functional requirements
      - technical requirements

Type of Requirement	Definition	Example
<b>Functional requirement</b>	A requirement expressed only using qualitative terms, setting an objective which must be fulfilled.	"Buildings must be designed and constructed in such a way that, in the case of fire, users can leave the structure quickly and safely or can be rescued by other means."
<b>Technical Requirement</b>	<i>Performance requirement</i> A requirement expressed using quantitative terms (e.g. physical quantity, characteristic) for which the fulfilment can be verified by calculation, testing or simulation.	Threshold values for the CO-concentration, smoke layer interface, smoke density, temperature, heat flux etc. on the escape route.
	<i>Prescriptive requirement</i> A requirement expressed by reference to specific materials, constructions, classes, dimensions or specific design elements.	"From each point of every room of the building an exit to a safe place outside the building or a staircase must be reached within 40 m travelling distance."

# Requirements

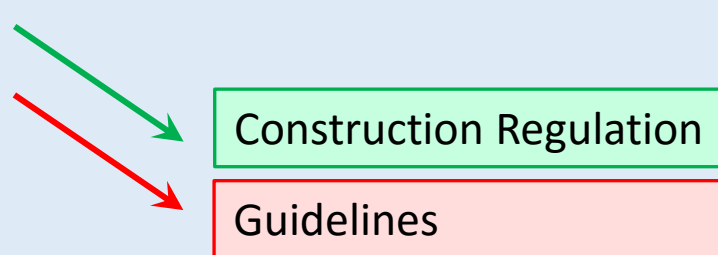
- Specific Recommendations (cont'd)
  - Structure of the requirements
    - The main structure should follow the “*Basic Requirements for Construction Works*” of the EU-Construction Products Regulation

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



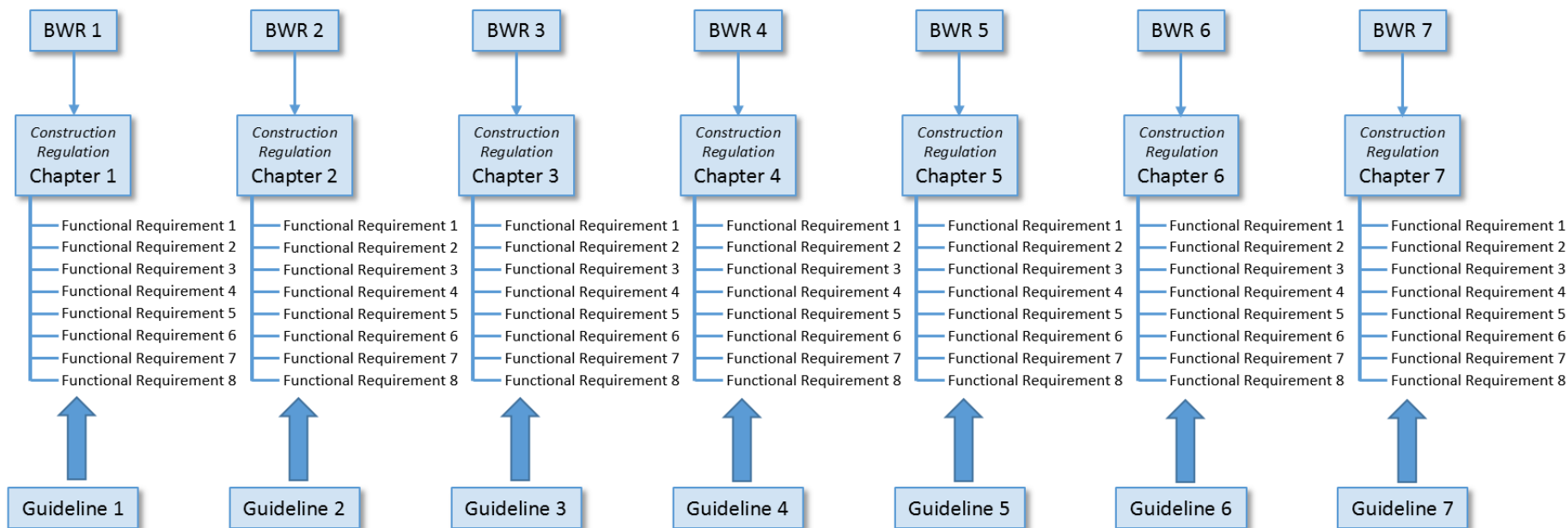
# Requirements

- Specific Recommendations (cont'd)
  - Structure of the requirements
    - For each „Basic Requirement for Construction Works” specific requirements should be established at the following two levels (as explained above):
      - Functional requirements
      - Technical requirements



# Requirements

- Specific Recommendations (cont'd)
  - Structure of legislation

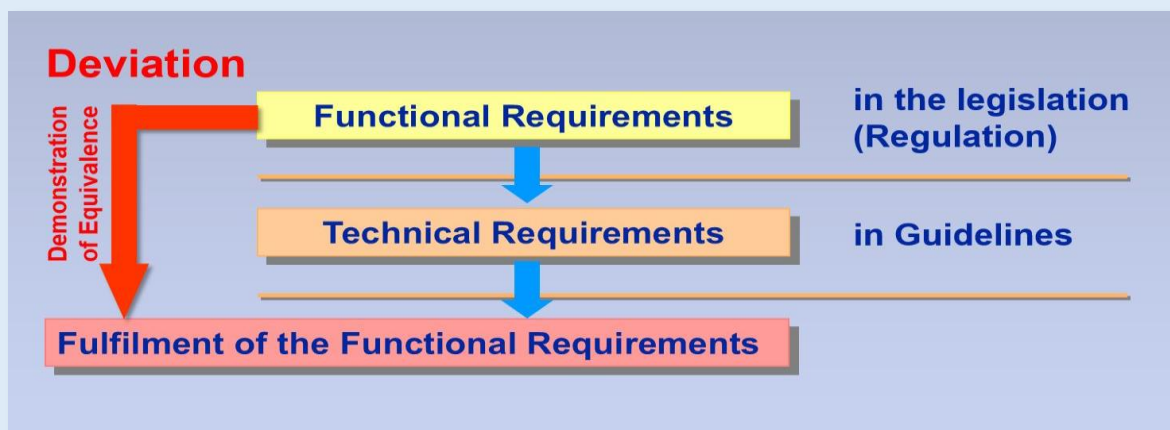


# Technical Requirements

- Specific Recommendations (cont'd)
  - Stakeholder involvement
    - When drafting Guidelines, it is important to involve stakeholders in an appropriate manner. The following sequence has proven to be advantageous:
      - Drafting process led by the responsible administrative unit (e.g. Ministry), involving experts with scientific or university background;
      - Presentation of the draft Guidelines in a hearing at which all stakeholders participate;
      - Adaptation of the draft Guidelines taking into account the results of the hearing;
      - Formal written consultation according to the legal necessities

# Requirements

- Specific Recommendations (cont'd)
  - **Flexibilisation** by allowing deviations
    - It should be possible to deviate from the technical requirements
    - In such a case the applicant has to demonstrate that the (different) solution ensures the fulfilment of the functional requirements at an equivalent level of safety (as if the technical requirements of the guidelines or approved documents had been fulfilled)



Thank you very much for your attention!