

# „Technical assistance for Reforming the Construction Development Legislation Framework“

Hygiene, health and environment

# Hygiene, health and environment

## Recognition

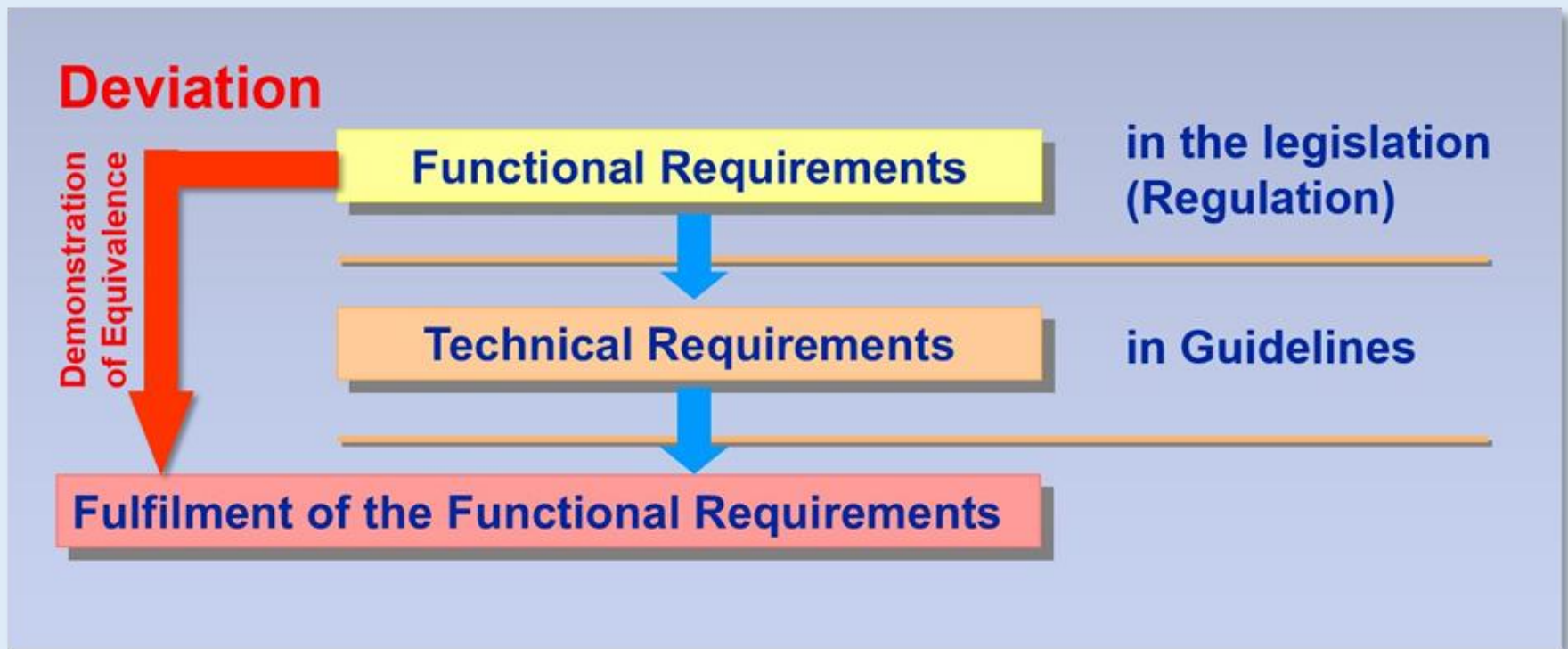
- technical requirements are scattered over many technical regulations/laws
- they are accumulated over the last decades.
- the same problem applies to the related permitting and building control procedures

This situation implies considerable unclearness about the technical contents and the requirements which have to be fulfilled in the planning / approval process.

In particular, there are no aggregated technical regulations for individual specific subject areas, in this case for hygiene, health and environmental protection (cf. Inception Report "Hygiene, Health and the Environment").

# Hygiene, health and environment

## The suggestions was



# Hygiene, health and environment

**Analysis of the comments of the 2nd mission, based on the interim report, the following issues were mainly agreed by the stakeholders: (for example)**

## **Comments of the Union of Cyprus Municipalities**

*The technical requirements could be **split in two levels**, as suggested in the interim Report whereby the **functional requirements are established in qualitative terms in the legislation** and the **technical details are outlined in approved documents**. The latter, however, should be of prescriptive nature which is easier to follow and check.*

*The technical requirements could be differentiated, based on the use and size of developments.*

# Hygiene, health and environment

**Analysis of the comments of the 2nd mission based on the interim report the following issues were mainly agreed by the stakeholders: (for example)**

## **Comments Cyprus Scientific and Technical Chamber (ETEK)**

*ETEK welcomes the concept of having only essential requirements in the law and set technical functional and or prescriptive detailed requirements in self standing technical documents.*

*The structure and the scope of the presented documents **is on the right track.** Balance between setting **performance requirements** (no frequent need for changes, don't hamper innovation) and **descriptive approach requirements** (**easier to understand and implement**).*

# Hygiene, health and environment

## Summery

As a result of the comments and the intern discussions,

- **Functional Requirements** and
- **Technical Requirements**

have been developed, based on the topics (headings) in cause 5.2.1. for **“Hygiene, health and the environment”**

# Hygiene, health and environment

The following topics (headings) build the content of the functional requirements:

Functional Requirements	
Sanitation	Protection from dangerous emissions
Waster water	Lighting and illumination
Other effluents	Ventilation and heating/cooling
Waste	Room levels and heights
Combustion gases from furnaces	Storage of hazardous substances
Protection against moisture	Water for industrial use
Drinking water	.....

# Hygiene, health and environment

## Functional Requirements (suggestion)

### **Section 1** **General requirements**

All parts of structures must be designed and constructed in such a way as to meet the requirements for hygiene, health and environmental protection, taking into account their intended use.

### **Section 2** **Sanitary facilities**

Structures with accommodation areas must be equipped with an adequate number of sanitation fittings, for example, toilets and water outlets. These must satisfy hygiene requirements in view of the size and purpose of the structure. Other structures must also satisfy these requirements if they are designed to accommodate gatherings of a larger number of people.



# Hygiene, health and environment

## Functional Requirements (suggestion)

### **Section 3** **Waste water**

- (1) The collection and disposal of waste water and precipitation must be provided for in structures under consideration of their intended purpose.
- (2) The systems for collecting and disposing of waste water and precipitation must be arranged, established and maintained in such a manner that they are safe for operation and that no risks or unreasonable nuisances arise.
- (3) The bearing capacity of the subgrade and the dryness of structures may not be impaired by systems for collecting and disposing of waste-water and precipitation.
- (4) Installations for the collection and disposal of sewage and rainwater must be able to be inspected and cleaned without great effort.

# Hygiene, health and environment

## Functional Requirements (suggestion)

### **Section 4 Other drains**

Other drains, in particular those from agricultural installations such as stables, fertilizer collection systems or silos, must be collected in such a way that the hygiene and health of persons are not compromised.

### **Section 5 Waste**

Facilities must be provided for the hygienic, harmless and harmless collection and disposal of waste, taking into account their intended use.

### **Section 6 Combustion gases from furnaces**

- (1) Taking into account the type of furnace and fuel, combustion gases from furnaces must be drawn off to the outside in such a way that people's health and safety are not put at risk and that they are not disturbed to an unreasonable extent.
- (2) It must be possible to inspect and clean chimneys without difficulty.

# Hygiene, health and environment

## Functional Requirements (suggestion)

<b>Section 7</b>	<b>Protection against moisture</b>
<b>Section 8</b>	<b>Industrial water</b>
<b>Section 9</b>	<b>Drinking water</b>
<b>Section 10</b>	<b>Protection against dangerous emissions</b>
<b>Section 11</b>	<b>Lighting and illumination</b>
<b>Section 12</b>	<b>Ventilation and heating</b>
<b>Section 13</b>	<b>Level and height of the rooms</b>
<b>Section 14</b>	<b>Storage of hazardous substances</b>

# Hygiene, health and environment

Technical Requirements → guideline 3 (suggestion)

## 0 Preliminary remarks

The cited standards and other technical regulations shall apply in the version promulgated in the document “**Cyprus Guideline – Standards and other technical regulations**”.

## 1 Definitions

The definitions contained in the document “**Cyprus Guideline – Definitions**” shall apply.

# Hygiene, health and environment

Technical Requirements → guideline 3 (suggestion)

## **2 Sanitary facilities**

### **2.1 General requirements**

Floors and walls of sanitary rooms (toilets, bathrooms, and other wet rooms) must be easy to clean according to the various hygiene requirements. Toilets must normally be provided with water flushing systems.

### **2.2 Sanitary facilities in dwellings**

Each dwelling in housing facilities must at least have a toilet, sink, and shower or bathtub in at least one sanitary room.

### **2.3 Sanitary facilities in structures which are not used for residential purposes**

For structures which are not used for residential purposes, a sufficient number of toilets separated by gender must be installed depending on the intended purpose, the gender-based division of users, and the foreseeable concurrence of toilet usage. Toilet rooms in restaurants must not be directly accessible directly from guest rooms. Restaurants with no more than 8 serving places are not obliged to install toilets.

# Hygiene, health and environment

Technical Requirements → guideline 3 (suggestion)

## **3 Rainwater, wastewater, and other drains**

### **3.1 Collection and drainage of rainwater**

3.1.1 Rainwater which is not used as process water must seep away, drain away or be discharged in a technical correct manner.

3.1.2 Devices for the technically correct collection and drainage of rainwater in structures shall then be required if

- rainwater falling on the structure is able to reach vehicular and pedestrian areas or neighbouring properties, or
- collective drainage is required in order to prevent any impairments (e.g. penetration of masonry, landslides).

In this regard, small surfaces (e.g. cornices, projections, balconies) do not need to be taken into account.

# Hygiene, health and environment

Technical Requirements → guideline 3 (suggestion)

## **3 Rainwater, wastewater, and other drains**

### **3.2 Collection and disposal of wastewater and other effluent**

#### 3.2.1 All structures

- which have a drinking water or process water supply,
- which have grounds in which condensation forms, or
- which see other types of wastewater

must be provided with systems to collect wastewater. Any collected wastewater must be disposed of properly.

#### 3.2.2 Systems for collecting and disposing of wastewater must be planned and constructed so that neither the health of human beings nor the environment is being impaired, particularly by such things as:

- the backflow of wastewater into the structure,
- the escape of sewer gases into the structure, or
- the contamination of drinking water facility.

# Hygiene, health and environment

Technical Requirements → guideline 3 (suggestion)

## **3 Rainwater, wastewater, and other drains**

3.2.3 The floors and walls of septic tanks must be designed in a permanently liquid-tight, sulphate, and chloride-resistant manner. The tanks must be watertight all day long, ventilated, and provided with access openings located outside.

3.2.4 Manure collection systems, silos for wet silage, barn floors, and other components in which farmyard manure or sewage arises or is discharged must be liquid-tight. The effluent must be led into liquid-tight septic tanks which have no overflow.

3.2.5 Collection systems in accordance with Point 3.2.4 and septic tanks must be far enough away from drinking water wells and drinking water springs so that there is no risk of the drinking water being contaminated in accordance with the soil and groundwater conditions.



# Hygiene, health and environment

Technical Requirements → guideline 3 (suggestion)

<b>Section 7</b>	<b>Protection against moisture</b>
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# Hygiene, health and environment

Technical Requirements → guideline 3 (suggestion)

All the technical requirements are written for the building site and for the construction (building) on the building site.

## **Important:**

The interface for the guideline “Hygiene, health and environment” are the boundaries of the building site

# Hygiene, health and environment

- In order to speed up the permission process it is necessary to know the important things about the building site, the so called **“Suitability of the building site”**.
- The investor, developer or owner of the building plot should get the following information about the building plot which should provide and confirmed by authorities and infrastructure operators (Water Board, Energy, Sewerage board, Planning Department etc.)

**(within 4-6 weeks)**

# Hygiene, health and environment

## **What kind of information could that be?**

- a building with the right usage is permitted, according to the planning law,
- Sufficient supply of hygienically pure water supply for the purpose of the planned construction
- an energy supply and wastewater disposal corresponding to the intended purpose of the planned construction site is ensured,
- The subsoil is sustainable and the planned development does not jeopardize the stability of neighbouring construction sites,
- Dangers caused by floods, groundwater, muddles, rock fall, landslides are not to be expected and
- a suitable and secure access (for example a public road) is given for the purpose of use of the building plot.

Also the municipality can set a minimum or a maximum size for building plots for the municipal area or for parts of them. Always according to the area character, as well as for individual buildings.

# Hygiene, health and environment

**Thank you  
for your attention**