

Project “Technical assistance for Reforming the Construction Development Legislation Framework”

Interim Report

10 April 2017

1. Administrative Issues (Gesierich)

The purpose of the present project is to provide technical assistance for the establishment of a new legislative framework for construction activities in Cyprus by delivering concrete proposals for streamlining the town and country planning system and the building control system.

The project is managed by the Agency for European Integration and Economic Development (AEI) as project contractor, involving the following team of experts:

Rainer Mikulits (Project leader): “Permitting and building control processes”

Christine Schwabberger: “Planning issues”

Robert Jansche: “Hygiene, health and the environment”

Heinz Ferk: “Protection against noise”

Susanne Geissler: “Energy efficiency and heat protection”

Martin Taylor: “Building control” bringing in the viewpoint of a system with a different tradition

Beneficiary of the project is the Ministry of the Interior of the Republic of Cyprus.

The project started in 09/2016 and runs until 07/2017. During the project, three missions of the project team to Cyprus are scheduled, involving the counterparts and stakeholders in place. The first mission took place in November 2016 and further missions are planned for April and June 2017.

During the project three different reports will be transmitted:

- Inception Report (already delivered)
- Interim Report (this report)
- Final Report

From the perspective of the project contractor (AEI) there are no particular circumstances or obstacles to be expected, and the project should be finishing successfully within the scheduled timeframe.

2. Permitting and Building Control Procedures (Schwaberger/Mikulits/Taylor)

2.1. General Recommendations (Mikulits/Taylor)

The Construction Development Legislation Framework in Cyprus consists basically of the following two Laws and one document called “Regulations”:

- Streets and Buildings Regulation Law (preliminary draft of the consolidated version, April 2015)
- Town and Country Planning Law (consolidated version, 2015)
- Streets and Buildings Regulations (draft of the consolidated version, April 2015)

They are quite old, going back to 1959, 1954 and 1972, respectively. As a consequence, the structure of these laws and regulations are characterized by a multitude of amendments and editions which have been introduced over the decades, partly also with the character of ad hoc measures.

Since these laws and regulations have been developed incrementally over decades, the structure is very complicated, as can be shown by the following examples:

- Definitions are not only given at the beginning of the documents, but partly also somewhere in the middle, probably caused by amendments for which these additional definitions were necessary to be introduced (e.g. Streets and Buildings Regulation Law, Articles 9, 9A, 10C, 10D, 15A, 17, 26, Streets and Buildings Regulations, Articles 6, 6A, 18, 61 and Town and Country Planning Law, Articles 20, 28, 40 45A, 60);
- There are many references and back references which make it difficult to read and understand the text easily;
- Similarly, the structure of Articles is often confusing, extending over several pages with several levels of sub-points (Article – paragraph – sub-points with letters – sub-points with roman numerals);
- Sometimes provisions appear in places where they would not be expected, e.g. provisions concerning zoning and planning in art. 14 of the Streets and Buildings Regulation Law or parts IV and VI in the Streets and Buildings Regulations;
- A similar problem is the explicit enumeration of points which should be examined by the competent authority during the grant of the permit (Art. 9 of the Streets and Buildings Regulation Law) which could also be considered as implicit technical requirements which, however, are for the rest in the Streets and Buildings Regulations and not in the Law;
- Furthermore, such explicit enumerations could be understood in a way, that other issues concerning the technical requirements as given in the Streets and Buildings Regulations would not need to be examined by the competent authority in detail;
- Elements of Buildings Control Procedures, e.g. provisions concerning the supervision and the supervising engineer, are also scattered over both, the Streets and Buildings Regulation Law, and the Streets and Buildings Regulations.

Against this background, the following general recommendations should be taken into account in case of a revision of the Construction Development Legislation Framework:

In order to ensure legal certainty it is important that the legislative framework is well structured, precise in the requirements and understandable. In the construction sector the following basic structure has proven to be appropriate, whereby each of the following subjects are dealt with in a separate piece of legislation or in a clear separated part of the legislation:

- Zoning and planning requirements
- Technical requirements to be fulfilled by buildings and construction works
- Procedures for building control (permits, inspections, approvals etc.)

It is recommended that this principle should also be followed in Cyprus.

Concerning building control, the following issue needs some further discussion: In simplified terms there are two principle types of systems in Europe:

- separate procedures and permits for planning on the one hand and the fulfilment of the technical requirements (Building Regulations) on the other hand (e.g. England and Wales)
- one comprehensive building permit, covering also the aspect of planning (e.g. Germany, Austria)

Generally speaking, a system with one permit covering both, planning and technical issues, has the advantage that the applicant has only to approach *one* authority which issues only *one* comprehensive permit. Ideally this is also a one-stop shop (sometimes also called single-window approach), which means that where other authorities need to give certain consents or approvals, this will be managed by the leading building authority, so that the applicant does not need to approach these other authorities in parallel.

The reason why for example in England and Wales there is a planning permission on the one hand and another separate permit covering the technical requirements is that the building permit (technical permit) can also be issued by private organisations (so-called “approved inspectors”). Since the issuing of the planning permit will always remain a duty of a local authority, such a separation of permits was necessary in order to allow for a privatisation of the technical part (building control).

That means for Cyprus that a decision needs to be taken whether the involvement of private organisations for the performance (of technical building control) should be envisaged or not. Since the complete outsourcing of technical control to private organisation is applied only in a minority of countries in Europe, the suggestion of the current project for “technical assistance for reforming the construction development legislation framework” for Cyprus is:

1. to keep the building control as a duty of an authority and
2. to have one comprehensive permit for planning and technical issues of a construction project.

In this context it should also be considered that the reason for having a separate planning permit is often that there are not yet sufficiently detailed planning provisions available for major parts of a country. Therefore, together with the above recommendation goes the further recommendation that it is of high priority to establish meaningful zoning and planning maps and provisions in the whole country.

With regard to the technical requirements for buildings and construction works it is recommended to adopt a “performance-based concept” which is essentially split into the following two levels:

- functional requirements
- technical requirements

The following table explains this concept in more detail:

Figure 1 – Performance-based concept of building regulations

Type of Requirement		Definition	Example
Functional requirement		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."
Technical Requirement	Performance requirement	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.
	Prescriptive requirement	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."

Usually, the functional requirements of level one are established directly in the law or in another piece of legislation (e.g. regulations). Since these functional requirements are not very detailed, this piece of legislation can be kept quite slim. The technical requirements, however, which are more comprehensive, can easily be established outside the legislation itself, for example as guidelines or approved documents issued also by a governmental institution or drafted by a private technical institution and adopted by the government. In this case there is only a reference to these guidelines or approved documents in the legislation itself, and it is also stated that the functional requirements are deemed to be satisfied if these guidelines or approved documents have been applied.

It should, however, be possible to deviate from these guidelines or approved documents, in which case the applicant has to demonstrate that the (different) solution ensures an equivalent level of safety as if the technical requirements of the guidelines or approved documents had been fulfilled.

These recommendations will be elaborated in more detail in chapter 3 of this report.

As regards the procedures of building control the following two principles should be applied:

- The procedures should be different depending on the size and the use of the building or construction works, taking into account the specific risk. It would be disproportionate to apply the same procedure for a one family house on the one hand and a high-rise building or a large factory building on the other hand. Therefore, an appropriate differentiation should be introduced into legislation, possibly using different categories of buildings and construction works or separate guidance (Approved Documents) for residential and commercial building works as in England and Wales.
- Not all activities of building control need to be performed by the authority itself. Specific tasks like inspections or checking of calculations could be outsourced to private experts which are acting as an independent third party. For buildings or construction works which present only a low risk it could also be envisaged to introduce schemes of self-certification.

A proposal for this structure and the differentiation of procedures will be given in chapter 2.3.

2.2. Zoning and Planning (Schwabberger/Taylor)

For the interim report the Town and Country planning law from Cyprus, from 1972 and all amendments and connected regulations were reviewed. This review was gathered already in the interception report from October 2016. At the first mission in Cyprus in November 2016 we met different stakeholder groups who are involved in spatial planning in Cyprus. A lot of inputs, ideas also came during the sessions from these experts concerning a change of the law. These inputs were also sent to the experts in Austria afterwards.

The results of the zoning and planning advices below are a mixture of experiences from working with the Styrian planning law but also from the indications that we received from the stakeholders we met in Cyprus.

2.2.1 General settings of the structure of the law.

Review

- Analysing the existing Town and Country planning law of Cyprus with all the regulations (13) and mandates (19) till 2014 it is very easy to lose the survey. The law is overloaded and this also came out from the reviews of the stakeholders. All the amendments are established in specific documents separated from the law itself, and no consolidated version is available. It is also not really comprehensible which amendment is the newest one.
- Further on you can find detailed building regulations, the obliged fees to pay also in the planning law although there is a separate Street and Building regulation. On the other hand you find regulations about the zoning maps in the Street and Building regulations which you miss totally in the Town and Country planning law.
- The structure of the law, reviewing from the table of content is divided into 10 parts. These parts are sometimes very long and also a little disarranged and showing a mixture of the planning instruments, the procedures, concerned areas (regional, local, districts), fees which have to be paid and so on.
- If you look for the meaning of words and determinations you find the definitions in the whole document, which makes it often difficult to find them.
- Looking more carefully to the content of the general law you miss very important inputs concerning environmental and climate issues and sustainable planning. These new topics, like uses of sustainable energy by windpark, photovoltaic, determinations about percentage of green public spaces were added lately in the mandates.
- From the stakeholders we got to know that all environmental assessment proofs are also checked by the environmental department too, this causes big delays as it's not made at the same time.
- In the law there are determinations concerning the spatial planning instruments for example the island plan and the local plan. They are described and to each instrument you get the information about the planning procedure. This procedure and the notification are repeated in all details, although they are very often the same. This makes the law overloaded and confusing.
- The stakeholders are missing planning tools in the law

Suggestions, proposals

- Considering the above considerations, it is therefore recommended to find a new easy, readable, not overloaded structure. This means that all the existing mandates, regulations and amendments are put into one Town and Country planning law together, including always the last updates. A law is very often read by people who are not legal experts, by private people, technical experts and politicians, that's why it should be structured and written in a very simple way. The invited stakeholders at the first mission in Cyprus also stated that they are partly heading for a "radical change" of the law and/or a new law. Due to the Turkish occupation the planning legislation has a delay as planning started in 1990. In 26 years there were no big changes in law. That's why the stakeholders have a big interest in changes of the law and specially also of the planning structure.
- As there is also a determined separate Street and building regulation, it would be also comprehensible to delete too detailed building regulations from the planning law and put it there.
- On the other hand the regulations concerning spatial planning, like for example determinations to the zoning maps should be placed in the Town and Country planning law.
- If there is a hierarchical planning system (a top down structure) like in Austria, the planning instruments should be structured in that way. A building permit could for example only be given when the area is dedicated as building land or changed into building land. The building permit has to take into account the provisions of the zoning map (if there is one), of the land-use map and of the development concept (bottom up).
- To find the definition of the used terms in the law it would be helpful to set them at the beginning of the law.
- If there is a need to mention building regulations in the spatial planning law, then it would be helpful to set a link to the building regulations or put also at the beginning necessary definitions about building issues.
- With the climate change and the awareness raising of the concerned people, during the last decades, new topics concerning sustainability were put through the mandates in form of determinations in the planning law. It is very difficult to find them in the "main" law itself and you could think this is not covered in Cyprus. These topics are mainly concerning environmental issues and could be set in the law after the table of content, and the definition of terms as a kind of general basic principles at the beginning. Connected with these necessary determinations there are also important issues for planning like keeping up the characteristic landscape, avoiding of using conflicts and matching of different urban or rural subspaces. Looking to different spatial planning laws in other European countries you find them very often in a similar way.
- The environmental assessment proof: According to the European guidelines certain plans or projects which give an impact to the environment need the procedure of an assessment proof. To have the "doublecheck" with the planning and the environmental department it will deliver a good quality. But to avoid postponing the planning process could be made at the same time.
- During the first mission we got to know that the planning department is on the way to install working groups for the content. This is a very much appreciated idea and should be done within a certain time again and again, including of course evaluations from the experiences.
- Adding planning tools to the law could make the law additionally overloaded. But there could be made some separate guidelines which are also determined. In Styria, for example, we are delivering the spatial planning department guidelines for sustainable energy spatial planning, guidelines for a green planning, guidelines for the strategic environmental planning, a determination for how to produce the land use maps (a so called standard for map symbols) where it is also set in which electronic way it has to be delivered to add it to the Styrian GIS system. So if there are some changes in these guidelines you don't have to change the whole law. Guidelines could be made with planners!
- Health and safety regulations have nothing to do with spatial planning. They should be implemented separately or with in the building regulations.

2.2.2 Planning instruments

The Island Plan

The purpose of making the so called Island Plan for Cyprus was that the plan should indicate the general policy in promoting and controlling development and may indicate the governmental intention of immovable property. It is including the location of population, industry and commerce, tourism, the patter of transport and public services. It should define areas of special social, historic and architectural or cultural interest or natural beauty and other matters of more than local importance. The plan should be reviewed by the Minister who is in charge and reported every year. After the evaluation of the plan, there should have been made detailed amendments.

During the first mission it came out, that this Island plan was never finished, due to the historical development.

Review

- The meaning of this plan was in a way to have a kind of national plan for the Island with general settings.
- Putting in the plan the determinations that the plan should be reviewed and evaluated every year is for sure a big task, but will help to make the system robust.

Suggestions, proposals

- Having a kind of national plan is very common in different European countries. It gives a useful basis for the other planning instruments which are more on a regional and local level. In Austria we don't have a national plan. Austria has itself 9 federal states with 9 different laws dealing with spatial planning. In Styria we have excellent regional plans with strict determinations especially concerning protected areas (natural protected, priority areas for raw materials, green zones, priority areas for industrial zones, priority areas for settlements and for agriculture. These regional plans are above the local land use plans in order of hierarchical ranking. The local plans in Styria are very much influenced by political decisions. So the regional plans help significantly to get a sufficient planning without political or economic influence as they can really exclude building up areas in some places.
- So in a way for Cyprus a national plan with a kind of general settings which are applicable for the whole Island can make the spatial planning quality better. After a couple of years they could be evaluated.
- In Austria there is a so called benching of spatial and regional planning – a top down planning system: Regional plan (for a district of the province of Styria) – a development concept (shows a long term development of around 15 years for the municipality with further development building up areas) – the local plan of the municipality – the zoning map (for certain bigger real estate areas mainly bigger than 3,000 m²) – finally the building permit for single houses. This means you just get an approval for your building when the planning fits to the above mentioned instruments.

The local plan

The survey of any area in coordination with a plan, according to the law, is the so called Local Plan. Such areas should be defined by the reference to a map.

The purpose of a local plan in Cyprus is

- To secure orderly development in interests of health, amenities, convenience and general welfare of community,
- To indicate general principles of development, to define sites of particular purposes, to protect features or areas of social, historical or architectural importance and
- To safeguard routes of highways, pipelines and other services.

The content of the local plan:

- A local plan should include a map and descriptive matter
- specifying the population for the area
- indicate the proposed general use zone for land and buildings
- define the roads, public and other buildings and works, airfields, parks, pleasure grounds, nature reserves and other open spaces
- allocate areas for use for residential, agricultural, industrial, touristic, commercial and other purposes of any class specified in plan

Further provisions can be made:

- Distances between buildings, distance between buildings and boundaries and distance between buildings and centre of the road
- The proportion or ratio of land in respect to building sites
- The minimum size of building sites
- The height of buildings, the floor area of buildings
- The extent of immovable property to be laid out and exclusively reserved for the parking of vehicles and for the creation of public parking places
- Population density in any area and the allocation of public open spaces

The Minister is here also responsible for the elaboration or amendment of the local plan.

Review

- So in a way the local plans in Cyprus are quiet similar to local plans (land-use map) in other European countries. But with the possibility of putting in the “further provisions” it gets a mixture of a local plan already including zoning map contents. This makes the plan overloaded and if there are some changes in these provisions, which are very much concerning the real estate and the building itself, the whole plan has to be changed and postpone the planning process and the permits.
- Due to the stakeholders there is also a poor database for planning, the cataster is not often updated

Suggestions, proposals

- The purpose and the main content is set up in a very high quality way as it also contains open space issues which are very important in the Mediterranean area to cool down heat islands specially in cities.
- The so called “further provisions” which are very much concerning the real estate and the building itself, are too detailed for this planning instrument. They should be all set in the zoning plans. The reason is, if a building needs to be changed (in size, heights for example the whole plan has to be changed and postpone the planning process and the permits. So in a way the planning permit and building permit are separated too. They have to fit to the land-use map.

- It is not very clear for me if the very strict detailed building regulations are needed in a local plan. Due to the stakeholder discussions it came out that that because of strict regulations in the planning law it there are big delays for the final permits and there are always changes needed because of deviations. In the Styrian spatial planning law it is since 2010 possible for the municipalities within the development concept (which is a long term planning instrument for the municipalities) to create so called area guidelines. They should be an area wide preparation for the separate zoning maps with already set very rough regulations for different parts of the municipality for buildings. This guideline is done very generally, regulating for example the amount of floors, the kind of roof and green areas. according to the existing buildings in the surrounding.
- The data base for the cataster should be updated more often.
- The plans should be delivered in an electronic way.

The zoning map

Review:

- In the Street and building regulation you find some issues of zoning. This is very much confusing as it is not completed and is not written down in a chapter where you expect it.
- The different regulations of heights of buildings, distances to borders and roads or similar, type, design of houses, number of floors, building degrees, determinations for open spaces and fences are all spread across different paragraphs and separated additionally due to the purpose of the building (residential, commercial, industrial etc).

Suggestions, proposals

As already mentioned all these regulations are concerning the content of a zoning map. This is another separate planning instrument and should be set into the Town and Country planning law.

The area scheme

Review:

- In the Town and Country law there is also mention of a so called area scheme. It is not really clear what is meant with it. It is for sure concerning just a part of a local map. It seems that these schemes also have to follow the same procedures like the local map. And that you can change also just separate area schemes, without changing the whole local map.

Suggestions, proposals

- Stakeholders suggested to disclaim area schemes because when you change a part of local map you finally have to adapt the whole map
- In Austria it is possible to have these so called intermediate changes of a land-use map, but of course the whole map has to be updated continuously. But in Styria, for example,. the land use-maps are renewed completely after 10 years. So a change in between is sometimes necessary, especially concerning economical needed changes.

2.2.3 Who is the planning – who is the checking authority?

Reviews:

- Engineers are in charge for planning with just one year experience
- There is a lack of a sufficient knowledge of consulting people concerning AutoCad and planning
- being allowed by law to be a designer/planner and a supervision engineer for same project is not good for the quality of planning.
- According to the stakeholders input there are too many authorities involved
- 46 planning and building authorities all over Cyprus are too much
- There is no time limit for the checking authority
- District officer: competent authority for planning for example for Nicosia and villages (is this a third additionally planning authority besides the planning and building authority?), brings also time delays.

Suggestions, proposals

- The chamber should give guidelines for the minimum time of practise for planners. As one year practise it is far too less. In Austria, for example, it is 3-5 years and you need a certificate which you get after a very intensive training and test. Updating knowledge by trainings afterwards should be mandated also.
- Also the experts in the authorities (in the planning departments) need regular training on their issues and topics.
- To involve several authorities or departments in the checking process is normally a good way for ensuring high quality. But there should be a certain time period set where the different departments check the plans, projects etc. at the same time. This keeps up the quality but saves a lot of time. In Austria there is for the big changes (so called revision of a plan of a municipality) and intermediate changes of local maps and zoning plans for a certain time (etc.. 8 weeks) where the drafts of plans are officially published and all departments can give their statements at this certain period.
- Reducing the amount of planning authorities in the country is needed. Maybe it is good to have for some planning issues more a regional authority and for detailed planning the municipality as a local authority.
- Stakeholders mentioned that there should be a penalty if a planner delivers his work incorrectly.
- There should be set time limits for the checking authority

2.2.4 Procedures, Planning permissions

Review:

- As already mentioned before in the law the procedure of the planning is very often the same and repeated in many parts of the law, but seems to be very complicated and lasting too long.
- In local plans there might be also detailed information about the building and the real estate itself. This causes big delays in getting a planning permit, as a planning permit is always needed.
- Additionally to the authority (planning department) also the environmental department is checking the environmental assessment proof.
- The stakeholder stated that very often the documents which are coming to the planning department for a check are not complete. Photographs, plans etc. can be missing from the outset.
- Planning permissions for touristic projects takes too long
- It takes too long for getting a title deed

Suggestions, proposals

- Separating local plans from zoning maps
- The environmental assessment proof: According to the European guidelines certain plans or projects which give an impact to the environment need the procedure of an assessment proof. To have a “double-check” with the planning and the environmental department means that there is a good quality delivered at the end. But to avoid postponing the planning process this could be made at the same time.
- To avoid that with the delivered documents there are missing necessary photographs, plans etc. the department who is in charge should deliver a list for the necessary papers and documents and send them from time to time updates to the planners.
- It needs to be discussed if it is necessary to get a building permit when the building was planned according to a zoning map. In many countries for the so called small projects there is no planning permit needed, the applicants just have to send the papers to the building authority and announce the planning there.
- Also for touristic project there should be a co-ordination between the planning and touristic department to shorten the procedures
- It seems that not just the Town and Country planning law should be changed or improved, but also the procedures itself.
- Getting a title deed should not be connected with planning and building permits as it delays the process.

2.3. Technical Control (Mikulits/Taylor)

2.3.1. Competent Authorities

There are different authorities which act as “Competent Authority” for issuing building permits, depending on the location. In the area of a Municipality, the Competent Authority is the Municipal Council, whereas in any other area it is the “District Officer”. While the District Officer reports to the Minister of Interior, the Municipal Council consists of elected members with no direct reporting line to the Ministry.

This situation creates different categories of jurisdiction with regard to building permits and the technical building control. Furthermore, there were also complaints reported, mainly with regard to the following two problems:

- Long delays in the procedures for issuing building permits, and also for issuing “certificates of approval” at the stage of the completion of works; this might be due to a shortage of staff, but also due to incompleteness of the applications. With regard to the latter it could however be implied that also the problems with incomplete applications might be a secondary effect of the shortage of staff, since a lack of staff leads certainly to a lower service quality and less effective assistance and advice given to the prospective applicants.
- Inconsistencies in the enforcement due to different interpretations of the legislation, differences in the implementation of circulars or instructions etc.; this should obviously be avoided for the sake of equal treatment.

For this reason a reform of the system of Competent Authorities for issuing building permits and certificates of approval should be considered when reforming the construction development legislation framework, along the following lines of thought:

- The Competent Authority should be able to act in an independent manner, and the decision making should be done by civil servants;

- The size of the Competent Authorities and the area of their jurisdiction should be well balanced; on the one hand they should be large enough to allow for economies of scale and for the establishment of an efficient administration and technical infrastructure (see next bullet point), but on the other hand they should not be so large that they lose contact with their constituency;
- 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.
- Finally it should also be taken into account that, according to the recommendation of this report, the planning permit and the building permit should be merged into one comprehensive permit; the future Competent Authorities should be able to cover both aspects.

2.3.2. Procedures

The building control procedures relate to the following three phases:

- Procedure for issuing a building permit
- Control activities during construction (supervision, inspections etc.)
- Certificate of approval and related control activities after completion of the building or construction works

At present the procedures for these building control activities are scattered over the Streets and Buildings Law as well as the Streets and Buildings Regulations, and they are also mixed up with the (technical) requirements which need to be fulfilled.

As mentioned above (see chapter 2.1), the procedural rules on the one hand and the (technical) requirements which need to be fulfilled by the buildings and construction works on the other hand, should be dealt with in separate legal documents. This chapter deals with the procedural rules, while the following chapter 3 will deal with the technical requirements.

2.3.2.1. Building Permit

The Streets and Buildings Law requires that a building permit is being issued for nearly every building or construction works, with only very few exceptions. No differentiation is made whether the project in question is just a one-family house or a high-rise building. Also the use of the building is not taken into account, for a residential building or an office building applies the same procedure as for a warehouse, a multi-storey car park, a shopping center or a meeting place.

Not only is this lack of differentiation in the procedures not taking into account the actual risk related with the particular building, it means also that the Competent Authority is overloaded with many applications which need to be dealt with, even if a significant part of the projects would not need such a level of scrutiny. Therefore, a differentiation of the procedures for issuing a building permit would also be a possibility to reduce burden from the Competent Authorities and in exchange to speed up the delivery of permits for the remaining part of projects which still need a fully-fledged building permit.

Before this background it is recommended to restructure the permitting procedures taking into account the following principles:

- One comprehensive permit, including the present planning permit and building permit (see above);

- 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.

In the building regulations of other European Member States the following criteria are applied for such categorizations of buildings and construction works. Of course, this list is just example, and these criteria can be combined in different ways.

- Height of a building (ridge height or height of the highest floor level);
- Gross floor area or footprint area of a building;
- Number of storeys
- Use of the building (e.g. residential buildings, office buildings, lodging establishments, sales outlets, workshops, production plants, storage buildings, schools, meeting places, car parks, agricultural buildings, etc.)

Since the categorization should be simple, the number of categories should be limited, for example to three categories, to which all the different types of buildings (combinations of uses and size of buildings) should be assigned. The criterion for the categorization should be the risk for life and safety of occupants in case of structural failures, fire or other particular threats, taking into account the probability of such events for the particular type of buildings.

An example for a risk-based categorization of buildings and construction works can be found in the Eurocodes, EN 1990, Annex B 3.1, Table B1, where the following consequence classes are defined:

- CC 1:
Low consequence for loss of human life, and economic, social or environmental consequences small or negligible;
- CC 2:
Medium consequence for loss of human life, economic, social or environmental consequences considerable
- CC 3:
High consequence for loss of human life, or economic, social or environmental consequences very great

The Eurocode gives also examples of buildings and construction works for each of these three consequence classes:

- CC 1:
Agricultural buildings where people do not normally enter (e.g. storage buildings), greenhouses
- CC 2:
Residential and office buildings, public buildings where consequences of failure are medium (e.g. an office building)
- CC 3:
Grandstands, public buildings where consequences of failure are high (e.g. a concert hall)

The consequence classes of the Eurocodes apply only for the structural design. For a more systematic approach, which can be applied generally in building regulations, the two criteria “size” and “use” could also be combined in a matrix in order to assign different buildings and construction works to the three categories. An example for such a matrix is given in figure 2.

Figure 2: Schematic example for the assignment of buildings and construction works to risk classes

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

For the case of a system with three categories, a stepped approach for the procedure for issuing a building permit could for example be conceived as follows:

A) Notice:

In case of small and low-risk buildings and construction works it could be sufficient that the owner or investor is just informing the Competent Authority by a notice which type of building he is intending to construct on a particular plot. This notice would need to be accompanied by all necessary plans in order to provide significant information about the geometry of the building and the fulfillment of the technical requirements. The Competent Authority can react within a deadline which should be established in the Law, e.g. within four weeks. No reaction of the Competent Authority within this deadline would mean consent.

B) Simplified permission procedure: The application needs again to be accompanied by all necessary plans and documents, and the Competent Authority issues a building permit after checking of the submitted documentation. The checking of the documentation can be limited to a formal check and a plausibility check. There should be a deadline for the issuing of the permit (e.g. four weeks), and if the Competent Authority is not able to keep this deadline, the applicant needs to be informed about the reasons for not keeping the deadline.

C) Full permission procedure: The plans and documentation to be submitted might be more comprehensive in this case, depending on the type and use of the building. All neighbours of the plot on which the building or construction works is intended to be constructed need to be given the possibility to intervene before issuing the building permit. Depending on the complexity of works, the authority can delegate checks (e.g. for structural safety, building physics, energy efficiency etc.) to independent third party experts; due to the possible complexity of such projects an extension of the deadline for the issuing of a building permit should be possible.

The consultation of other authorities should be organized in the way of a one-stop shop (single window approach). Where other authorities need to give certain consents or approvals, this should be managed by the Competent Authority, in order to ensure that the applicant does not need to approach these other authorities in parallel.

2.3.2.2. Control procedures and inspections

Presently the duty of controlling the fulfilment of the technical requirements is shared between the competent authority on the one hand and the supervising engineer on the other hand. While the distribution of tasks and an involvement of a third party control is a good approach and reflects best practice, there is room for improvement, since the approach taken in the Streets and Buildings Law shows the following deficiencies:

- The tasks of control are not clearly specified; for inspections, as an example, there are only very general provisions for the supervising engineer in the Streets and Buildings Regulation Law, whereas the Streets and Buildings Regulations mention inspection only at one place, and this is the case of the inspection of excavations which is performed by the Competent Authority;
- The supervising engineer is actually no third party, but a second party, since he may be (and is in most cases) the designer of the project;
- The same provisions apply for very small projects as well as for very large buildings, which is not proportionate. Like for the permitting procedure, there is also for the control procedures no differentiation depending on the risk which is connected with the building or construction works, taking into account its size and use.

In order to simplify the control regime without reducing the level of safety and quality achieved, the following approach is recommended:

Ideally, the same categorization as for the building permit should also be applied for the control procedures and inspections. The differentiation of the procedures could be envisaged as shown below:

- A) No control on the building site, no inspection on the building site.
- B) All controls and inspections are performed by the supervising engineer. This supervising engineer could follow the present concept, i.e. it is not required that the supervising engineer be independent. It would therefore be possible that the designer of the project acts also as the supervising engineer, as it is the practice also at present.
- C) The supervising engineer is performing controls and inspections like for category B. In addition, an independent third party expert is performs inspections at critical stages of the construction process and also at random. The independent third party expert can either be chosen by the Competent Authority and paid by the owner/investor, or he can be chosen by the owner/investor himself (to be decided and defined in the Law).

The Competent Authority should, however, perform spot checks for a random selection of a statistically significant percentage in all three categories.

2.3.2.3. Certificate of approval

At present, after completion of the construction works a "Certificate of Approval" is required in order to be able to occupy or use the given building or construction works. This "Certificate of Approval" is issued by the competent authority. It applies to any construction works, independent of its size or use

which means that, as for the building permit and control procedures, there is again no differentiation made according to the risk linked to the particular construction works or buildings.

Furthermore, the respective provisions are quite complicated. The supervising engineer shall always issue a “Certificate of Completion” as an input to the Competent Authority, which however may also ask the supervising engineer to hand out a “complete report on the performance of the work”, without mentioning criteria in which cases this should be the case. The final “Certificate of Approval” may only be issued by the Competent Authority. The whole process is quite complicated, involving altogether up to three different documents which are required:

- Certificate of Completion
- Complete report on the performance of the work
- Certificate of Approval

Astonishingly, it is also possible to issue the “Certificate of Approval” in cases where the completed building or construction works does not fulfil all technical requirements, or even if there is no planning permission or construction permit in force (Art. 10B, paragraph 3). In such a case also a “Certificate of Approval with notes” can be issued.

It should also be considered that there is a connection between the “Certificate of Approval” and the procedures for entry into the land register (title deed), which makes the whole issue of the completion of the building a sensitive topic.

Carrying on the concept which has already been used above for the building permit and for the control procedures and inspections, it is recommended to apply the approach as shown below, again referring to the threefold categorization as with the other stages:

- A) Declaration: Since this lowest category applies only to buildings and construction works of a small size and with low risk, it should be sufficient that the applicant (owner/investor) submits to the Competent Authority a declaration that all legal requirements have been respected and fulfilled.
- B) Confirmation: The supervising engineer (who was also involved in the controls and inspections during construction) submits to the Competent Authority a formal confirmation that all legal requirements have been respected and fulfilled.
- C) Certificate: The independent third party expert who performs additional inspections at critical stages and at random during the construction process issues after completion of the construction works a certificate stating that the completed building or construction works complies with all legal requirements.

2.3.3. Qualification

A very important aspect for the concept of building control in order to insure a satisfying level of safety and quality is that the economic operators and the supervising experts are qualified for their duties. For that purpose it is necessary to apply a reliable system of education and quality assurance. In most European Member States one of a following systems is 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).

3. Technical Requirements (Jansche/Ferk/Geissler/Mikulits)

3.1. General Recommendations (Mikulits)

As explained in chapter 2.1, it is recommended to deal with the procedural rules and with the (technical) requirements which need to be fulfilled in different pieces of legislation. The procedural rules are in this context procedures for the issuing of the building permit, procedures for control and inspection activities during construction and procedures for the approval after completion of the construction. Following this approach, and also taking into account the two tier approach of functional requirements and technical requirements (cf. chapter 2.1), the ideal structure for the establishment of a new “Construction Development Legislation Framework” would be as follows:

- 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.

The structure of the requirements established in the Construction Regulation should follow the seven “Basic Requirements for Construction Works” as established in Annex I of the Construction Products Regulation (EU) No 305/2011 (cf. figure 3). Consequently, the Construction Regulation would break down these basic works requirements into a set of more detailed qualitative requirements, according to the technical needs in Cyprus.

Figure 3: Basic Requirements for Construction Works

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

The functional requirements being only qualitative, the Construction Regulation should further on refer to the Guidelines (approved documents) as concerns more detailed technical requirements.

The Guidelines should be take over the structure of the functional requirements stated in the Construction Regulation, specifying them by means of concrete technical requirements. An example

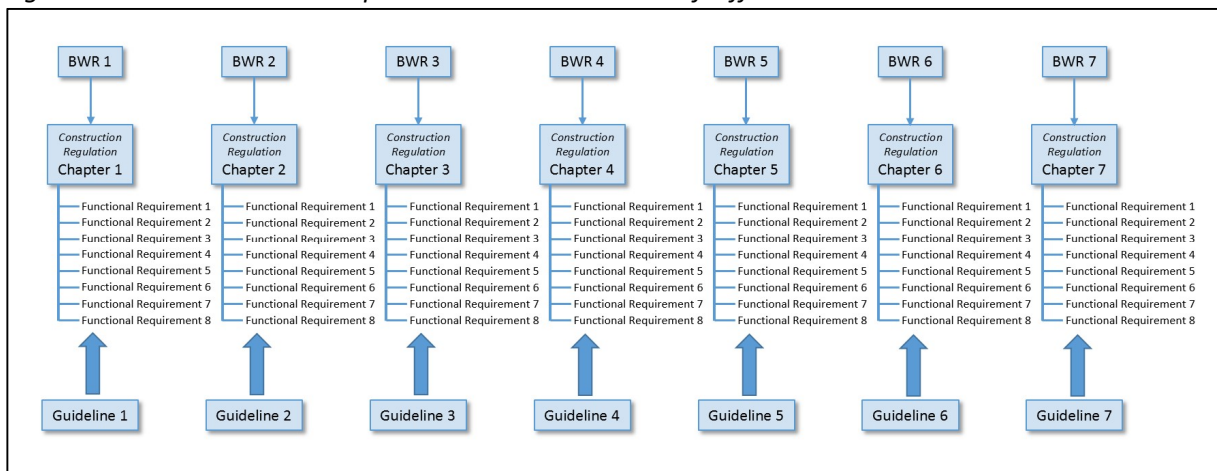
has been given in chapter 2.1, figure 1 with the functional requirement for the “escape in case of fire”. In the Guidelines this functional requirement needs to be reflected by a set of technical requirements which ensure that this function requirement can be fulfilled. For the given example of the “escape in case of fire” there could be the following chapters of technical requirements:

- Means of escape
- Corridors and doors
- Stairs and staircases
- Emergency escape road lighting
- Fire detection and fire alarm systems
- Smoke and heat control systems

It is also possible, to distinguish within the Guidelines or even with separate Sub-Guidelines particular types of buildings or construction works (production plants, storehouses, park decks, shopping centres, meeting places etc.).

Ideally, the structure of the different levels of documents (Construction Regulation, Guidelines and possibly Sub-Guidelines) should relate to each other in order to ensure consistency. This could be achieved by applying the principal shown in figure 4:

Figure 4: Structural relationship between the documents of different levels

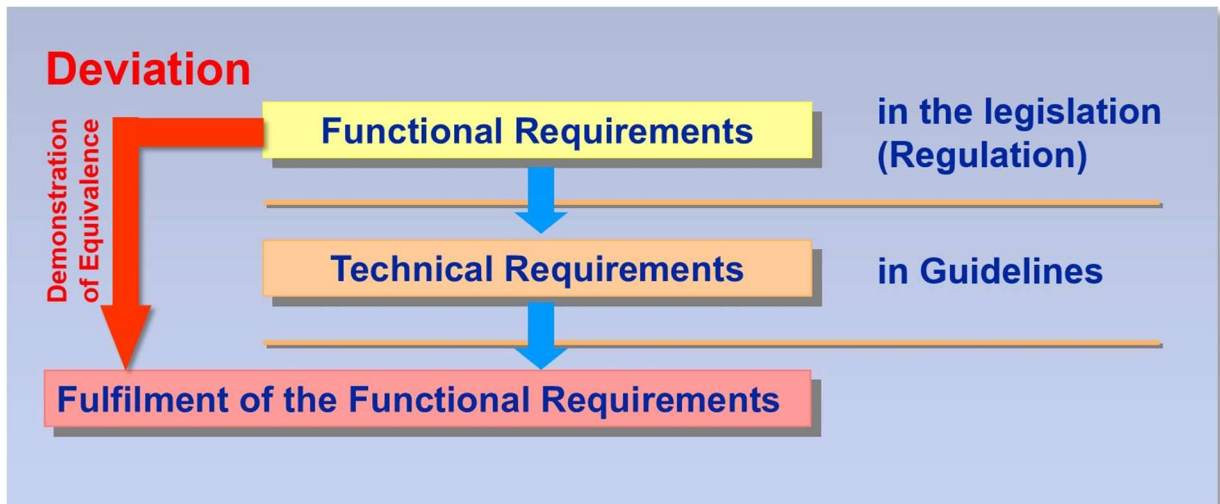


There are two possibilities how the Construction Regulation could refer to the Guidelines, depending on the legislative tradition:

- The Construction Regulation provides that the functional requirements are deemed to be satisfied if the technical requirements of the Guidelines are fulfilled. This would mean that the Guidelines are not compulsory, and in case the Guidelines are not applied, the fulfilment of the functional requirements must be demonstrated otherwise;
- The Construction Regulation states that the Guidelines are compulsory, however, a deviation from the Guidelines is possible under the condition that the applicant demonstrates that an equivalent level of safety is achieved.

This possibility to deviate from the Guidelines and to demonstrate the fulfilment of the functional requirements at an equivalent level is important in order to ensure sufficient flexibility for the application of innovative architectural concepts and new construction methods (cf. figure 5).

Figure 5: Deviations from Guidelines



When drafting Guidelines as explained above, it is important to involve stakeholders in an appropriate manner. The following sequence has proven to be advantageous:

- 1) Drafting process led by the responsible administrative unit (e.g. Ministry), involving experts with scientific or university background;
- 2) Presentation of the draft Guidelines in a hearing at which all stakeholders participate;
- 3) Adaptation of the draft Guidelines taking into account the results of the hearing;
- 4) Formal written consultation of the final draft Guidelines according to the legal necessities;
- 5) Amendment of the Construction Regulation in order to introduce a reference to the new edition of the Guidelines with a dated reference (e.g. "Guideline xy, edition April 2017").

According to the experiences in Austria, it has also proven to be useful to provide an online tool in the internet in which the community of designers and other stakeholders applying the Guidelines can pose questions and propose improvements related to specific provisions of the Guidelines. The questions can be answered individually or by establishing FAQs. Such a tool facilitates also the regular revision of the Guidelines which are usually revised in intervals of 3 to 5 years.

3.2. Hygiene, health and the environment (Jansche)

The requirements concerning "Hygiene, health and the environment" are scattered over many technical regulations which have accumulated over the last decades. The same applies to the related permitting and building control procedures. This situation implies considerable unclarity 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").

Relevant provisions for "Hygiene, Health and Environmental Protection" can be found in the following documents:

StrBLaw Apr15_EN	Consolidated version of the Streets and Buildings Law 2006-2015	note
StrBReg Apr15_EN	Consolidated version of the Streets and Buildings Regulations 2006-2015	
R.A.A. 759_2003	The Town and Country Planning (Accident Hazards Related to Dangerous Substances) Regulations of 2003	
R.A.A. 334_2009 & R.A.A. 27_2014	(a) The Town and Country Planning (Government Industrial Areas) Special Development Order of 2009 (b) The Town and Country Planning (Government Industrial Areas) (Amending) Special Development Order of 2014	
Mandate1 _2003	The Town and Country Planning Mandate 1 of 2003	Student Dorms
Mandate1 _2005	The Town and Country Planning Mandate 1 of 2005	Prefabricated and wooden prefabricated buildings
Mandate 1_2014	The Town and Country Planning Mandate 1 of 2014	Use of renewable sources of energy (Document still pending)
	The Safety and Health at work Laws of 1996 to 2015	

An analysis of these documents shows the following issues:

- The above-mentioned regulations are very detailed in some areas, whereas in other areas the provisions are very indeterminate;
- In particular, sanitary facilities and water supply are examples of areas which have not yet been developed in the same way as other topics;
- Environmental protection and sustainability, which play a more and more important role at European level, have not yet the same significance in these provisions.

3.2.1. Suggestions

According to the recommendation in chapter 3.1, *functional requirements* for buildings and construction works should be established in the Regulation, whereas the *technical requirements* should be developed in separate Guidelines. The suggestions in this section shall serve as a layout for the establishment of functional requirements for “Hygiene, Health and the Environment” and a respective Guideline in line with the above mentioned recommendation (cf. Figure 1 – Performance-based concept of building regulations).

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

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

Below examples are given for selected topics, how the functional requirements in the Regulation could be conceived:

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.

Combustion gases from furnaces

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.

It must be possible to inspect and clean chimneys without difficulty.

Lighting and illumination

Accommodation areas must have as much natural light as experience has shown is necessary with regard to health and wellbeing, unless the purpose of the structure means that artificial lighting alone is sufficient. The shape of the room and the lighting ratios shall especially be taken into account in this regard.

It should be possible to light all rooms and generally accessible areas in structures in accordance with their purpose.

Level and height of the rooms

The floor level of the rooms in relation to the terrain must be designed and constructed in such a way that, in accordance with their purpose, the health and wellbeing of users is not adversely affected.

The height of the room must be appropriate to its purpose and ensure a sufficient volume of air with regard to the health and wellbeing of users.

The Guideline shall break down these functional requirements into more detailed technical requirements. The following example shows how this could be done for the functional requirement “Level and height of the rooms”:

Floor levels in rooms

For accommodation areas in dwellings, along at least one side containing windows, the floor levels must be above the ground situated adjacent to the accommodation area after completion.

Room height

Accommodation areas must have a clearance of at least 2.50 m, except single- and two-family dwellings and terraced houses, which must have a clearance of at least 2.40 m. If this height is not achieved at all points within the room, the air space must nevertheless be at least the same as it is in case of a horizontal ceiling. As regards accommodation areas in attic storeys, this minimum room height must at least be observed over half of the floor area, in which connection, when calculating this area, floor areas where the room height is below 1.50 m are not taken into consideration.

The clearance of rooms other than accommodation areas where people only stay on a temporary basis must be laid down in accordance with their intended purpose, while the room area and the number of persons to be accommodated shall be stipulated such that a sufficiently large volume of air is guaranteed. However, the clearance may not fall below 2.10 m under any circumstances.

3.3. Protection against noise (Ferk)

During the two-days lasting first Mission also aspects concerning noise protection were part of the questions.

While Energy performance of buildings is included in the documents for the planning permit, sound insulation is not explicitly stated. Also, characteristic values of airborne or impact sound insulation of building components, the building envelope or interior parts of the building are not stated in the planning documents in the past. Therefore, just the drawings and the description of the building components and construction details can be seen also as a statement for the expected sound insulation. As there are typical construction systems used in Cyprus, one can conclude, that the level of sound insulation is extensively known for common constructions.

During the Meeting with the Union of Municipalities it was stated, that there are no requirements in terms of sound insulation at the moment in Cyprus.

Also during the Meeting with the Ministry of Interior it was mentioned, that sound insulation is a problem.

Also the Cyprus Tourism Association answered, that there are no special requirements concerning sound insulation in Cyprus.

The inquiry of the Department of Land and Surveys-Director showed, that that there is no connection between Roads, Infrastructure and building site dedication and planning permit, also environmental noise is not connected.

Only for the Labour Inspection occupational noise (machinery noise) is a theme.

It seems that for environmental noise only the table in Mandate 2_2006 exists, which is connected to wind farms building.

On the other hand, different sources convey the impression, that in a lot of cases the sound insulation is perceived as to low, as we found during the recherche for the inception report.

The StrBLaw_Apr15_EN it is stated in 4 of 115/86 that “No permit will be issued by the competent authority concerning a projectunless the competent authority...is fully content, that the following prerequisites are met with regards to the intended building construction:....(ii) it will be used in such a manner as not to have unfavourable effects on public health or the comfortable way of living of the residents of the area.

The European CPR states as the 5th basic requirement for construction works

“Protection against noise: The construction works must be designed and built in such a way that noise perceived by the occupants or people nearby is kept to a level that will not threaten their health and will allow them to sleep, rest and work in satisfactory conditions.”

Thus, interpreting the above statement in the StrBLaw includes “protection against noise” as a health matter, protection against noise is included in the framework of this law, but it seems there are no further specific requirements existing concerning this matter, except the following:

In page 15/99 it is stated, that during construction works the public and neighbours have to be protected from nuisance.

Mandate 2_2006 states for wind farms: “the level of noise pollution must be within the specified limits..”

Zone Type	Noise level during the day (DB (A))	Noise level during the night (DB (A))
Industrial Zone or Area	70	70
Craft Zone or Area	65	50
Residential or Tourist Zone (excluding areas with recreational and entertainment use prevailing)	50	35
Resting homes, sanatoria and hospitals	45	35

During the two days of the first mission the project team could not get any further information about specific requirements or numbers concerning sound protection for building constructions, neither for exterior walls nor for dividing walls or separating ceilings.

It was discussed that there are typical constructions in use, e.g.

Internal Walls

- 2 cm of plaster
- 10 cm hollow brick wall ca. 200 – 220 kg/m²
- 2 cm of plaster

Dividing walls – masonry cavity walls

- 2 cm of plaster
- 10 cm hollow brick wall 200 – 220 kg/m²
- 5 cm cavity or insulation (optional)
- 10 cm hollow brick wall 200 – 220 kg/m²
- 2 cm plaster

Exterior walls

Same as interior walls, in special cases masonry cavity walls, sometimes combined with an inner structural leaf of concrete block

Separating floor

- 3 cm Tiles on mortar
- 10 cm lightweight concrete, pumice gravel, curuf or similar

15 – 20 cm concrete
Roof
Roofing membrane
4-6 cm Site cast levelling concrete topping
15 cm concrete slab
2 cm Plaster
Windows
aluminium frames with double glazing
The structure sometimes is combined with concrete frame construction

If we use that constructions to calculate the sound insulation between dwellings, we get the following sound insulation levels:

Exterior wall ca. 40 – 50 dB (estimated, depending on weight and type of brick)

Partition wall ca. 40 – 50 dB (estimated, depending on weight and type of brick)

Floor $R_w \approx 55$ dB, $L_{nw} \geq 80$ dB

Roof $R_w \approx 55$ dB

Windows $\approx 15 - 33$ dB, depending on the quality of sealing

The values for airborne sound insulation are common for moderate noisy areas, the impact sound protection seems to be very poor.

Further there are some other construction systems in use, e.g. wood frame constructions, steel and panel constructions etc.

As there are no official requirements for sound insulation in Cyprus, it is not ensured, that constructions comply with any minimum requirements for sound insulation, as well as some constructions above may provide a satisfying airborne sound insulation in some not too noisy areas. The impact sound insulation seems to be very poor in every case.

Therefore, we recommend introducing requirements concerning airborne sound and impact sound insulation, based on e.g. EN 10140, EN 717 and EN 12354 series, for external noise based on ambient noise classes. In best case this classes are connected to zoning maps.

A statement concerning recommended noise levels is given in <http://www.agpaphitis.com/Noise-Pollution-and-Regulations-in-Cyprus/pageid-828/>,

but it is not clear if this correlates to official recommendations:

“The recommended noise levels as provided by the World Health Organization serve as guidelines for the governments for the implementation of their own regulations”

It could be a way to use this guidelines as a basis for further works to comply with the basic requirements of the European Construction Products Regulation (CPR).

Furthermore, there are no requirements stated for noise reduction in rooms e.g. restaurants, workshops and there are no requirements included for room acoustic in schools, lecture room etc.

Especially noise reduction in rooms is also an essential item in health protection, so such specifications should be stated as minimal requirements.

The above-mentioned findings are based on the information during the two days of the first mission and some research. Other than these available documents may lead to changes, amendments or withdrawal of parts of this report statements.

3.4. Energy efficiency and heat retention (Geissler)

3.4.1 Introduction

Two batches of legal documents were received for review. All documents of the first batch from October 2016 were scanned in order to identify possible synergies with the field of energy efficiency. The following pieces of legislation identified as relevant regarding energy aspects have been reviewed with regard to elements linked with “energy efficiency and heat retention” and renewable energy:

- StrBLaw_Apr15_EN
- (2)StrBReg_Apr2015_EN
- (3)EnergyPerfLaw_2009
- (4)Energy PerfReg_2014
- (5)-R.A.A. 163_2009
- (6)-R.A.A. 164_2009
- (7)-R.A.A. 446_2009
- (39)-Mandate 1_2014
- (30)-Mandate 2_2006

The Town Planning Law 2015 contains two relevant sections with regard to checking and enforcing the compliance with energy minimum requirements, namely:

- (8)TownPlanningLaw_2015
 - Part V.—DEVELOPMENT —PLANNING CONTROL Planning permission
 - Part VI.—ENFORCEMENT OF PLANNING CONTROL Enforcement when planning permission required

Other relevant documents with regard to synergies are the following ones:

- (28)-Mandate 2_2005: Dossier for applications
- (34)-Mandate 1_2008: Handling applications
- (38)-Mandate 1_2011: Simplified control

Utilisation of renewable energy sources (RES) is mentioned in more than one document and is specifically emphasised in document (39)-Mandate 1_2014. Attention must be paid to the fact that local plans dealt with in (8)-TownPlanningLaw_2015 and other documents influence the actually exploitable RES potential on building level which is regarded as an element of energy efficiency.

The second batch consisting of updated versions of legal documents was received in January 2017 and documents were scanned in order to identify possible synergies with the field of energy efficiency. The following documents were identified as relevant regarding energy aspects and reviewed in detail:

- (3)-R.A.A.281_2013-Regulation of Streets and Buildings General Exemption Decree
- (4)-L.210(1)_2012-The Regulation of Energy Performance of Buildings (Amending) Law of 2012
- (5)-R.A.A.119_201-Minimum Energy Performance Requirements_Decree of 2016R.A.A. 119/2016

In addition, other information was used, such as the MURE II database. The report about Cyprus shows that energy-related aspects in buildings are regulated by the following legislation¹:

- N. 142(I)/2006, N. 30(I)/2009, N. 210(I)/2012
Laws for the Regulation of the Energy Performance of Buildings
- Κ.Δ.Π. 432/2013, Κ.Δ.Π. 433/2013, Κ.Δ.Π. 446/2009, Κ.Δ.Π. 412/2009, Κ.Δ.Π. 414/2009, Κ.Δ.Π. 160/2013, Κ.Δ.Π. 343/2013, Κ.Δ.Π. 386/2013, **Κ.Δ.Π. 119/2016**
Decrees for the minimum efficiency requirements for new buildings and the EPC issuing.
- Κ.Δ.Π. 429/2006, **Κ.Δ.Π. 281/2013**
The Streets and Buildings Regulation (for the energy performance of buildings)
- Κ.Δ.Π. 163/2009, Κ.Δ.Π. 413/2009
Air-conditioning systems inspections (regulation and decree)
- Κ.Δ.Π. 119/2011, Κ.Δ.Π. 148/2013, Κ.Δ.Π. 149/2013, Κ.Δ.Π. 150/2013, Κ.Δ.Π. 151/2013
Heating systems (boilers) inspections (regulation and decree)

3.4.2 Presentation of the facts

“Energy” in the current legislation under the Streets and Buildings Regulation Law (Ministry of Interior)

The competent Authority (Minister of Interior, delegating specific tasks to subsidiary bodies) sets the Terms and Conditions for the building permit, among others also the Terms and Conditions for energy efficiency.

Through setting the Terms and Conditions, the obligation to present the Energy Performance Certificate (EPC) and meeting the energy efficiency minimum requirements have been made part of the building permit procedure. The EPC proves that the building meets energy-related requirements according to EPBD.

“Energy” in the current legislation under the Law for the Regulation of the Energy Performance of Buildings (Ministry of Energy, Commerce, Industry and Tourism)

The legislation under the Law for the Regulation of the Energy Performance of Buildings is the transposition of the EPBD in Cyprus.

“Energy” in the current legislation under The Town and Country Planning Law (Ministry of Interior)

Local plans influence the actually exploitable renewable energy potential on building level which is regarded as an element of energy efficiency. Therefore, the legislation under The Town and Country Planning Law can hinder or support achieving requirements regarding minimum shares of renewable energy and nearly zero energy requirements specified in the legislation under the Law for the Regulation of the Energy Performance of Building.

¹ Compilation according to Cyprus Institute of Energy, CY1 Law for the Energy Performance of Buildings - Dwellings, MURE II, Last update: 14 January 2014, completed with recent information received from the Ministry of Interior (bold). CY1 document available at: http://www.measures-odyssey-mure.eu/topics_out.asp?tipo=All&Cod_mr=CY13/CY14/CY11/CY1/CY9/CY3&Cod_te=CY7/CY9/CY10/CY1/CY2&Cod_in=&Cod_tr=&Cod_gc=&stato=completed

Review of received documents

The following presentation is structured as follows:

- “Energy” in the current legislation under the Streets and Buildings Law (Ministry of Interior)
- “Energy” in the current legislation under the Law for the Regulation of the Energy Performance of Buildings (Ministry of Energy, Commerce, Industry and Tourism)
- “Energy” in the current legislation under The Town and Country Planning Law (Ministry of Interior)

“Number/batch” serves to identify the documents received for analysis.

The analysis of the **Preliminary Draft on the Consolidation of the Streets And Buildings Regulation Law** shows that energy efficiency is addressed explicitly in the definitions and in 8.-(1). Other parts of the law include energy related aspects even though they are not explicitly addressed. The analysis of the **Draft of the Consolidation of the Streets and Buildings Regulations** shows that energy efficiency is not explicitly addressed, even though some parts of the document include energy related aspects.

Table 1: “Energy” in the current legislation under the Streets and Buildings Law (Ministry of Interior)

Number/ batch	Name of file and title of document, relevant content	Comments regarding energy related aspects
(1)/1	(1)StrBLaw_Apr15_EN PRELIMINARY DRAFT ON THE CONSOLIDATION OF THE STREETS AND BUILDINGS REGULATION LAW	
	Includes definition of “energy efficiency of a building”, “building”, “existing building” .	Definitions
	Deals with planning permissions, exemptions.	Exemptions possibly relevant also for EE
	8.-(1) Prior to granting the permit in virtue of article 3, the competent authority may request the submission of such designs, sketches and calculations or it may request the provision of such a description of the intended project, as for it to be convinced of the necessity and it may require the alteration of such designs, sketches and calculations submitted in this manner, particularly- ... (g) in order to ensure the energy efficiency of the building.	Submission of Energy Performance Certificate (EPC), checking the compliance with minimum requirements
	(2) Apart from the ones contained in this Law, all the designs, sketches, writings, studies, calculations and any other document concerning the above that are carried out, which concern any construction, alteration, addition, repair of a building or opening of a street and which are being submitted to the competent authority for the purpose of a permit issuance, are being submitted and signed by the following persons: (a) Whatever is being carried out with regards to an architectural work, by an architect designer; (b) whatever is carried out with regards to work of a civil engineer, by a designer civil engineer.	Qualification requirements for experts calculating and issuing EPC included
	10. (1) Notwithstanding that a permit has been granted for a building under article 3 of this Law, no person shall occupy or use, or cause, permit, or suffer any other person to occupy or use, any building unless and until a certificate of approval has been issued in respect thereof by the competent authority.	Checking EE minimum requirements and compliance with as-built situation

(4) The competent authority, if deemed necessary, within a reasonable period of time from the completion of the work, may request from the supervising engineer to submit a complete report on the performance of the work for which a permit has been issued, on what stage the performance of the work is at, as well as on any aspects of the performed work which do not comply with the permit.	Checking EE minimum requirements and compliance with as-built situation
(7) The competent authority always sends to the District Land Officer a copy of each certificate of approval issued in accordance with this Law.	Checking EE minimum requirements and compliance with as-built situation
Deals with completion of the works, procedures and consequences in case of non-compliance.	Checking EE minimum requirements and compliance with as-built situation
25. No provision in this Law applies for the Government of the Republic or for any Department of the Government of the Republic.	Contradicts the exemplary role of government
(2)/1	(2)StrBReg_Apr2015_EN DRAFT OF THE CONSOLIDATION OF THE STREETS AND BUILDINGS REGULATIONS
More detailed definitions of building types	
PART III. – BUILDING PERMITS	Relevant for checking EE minimum requirements for compliance with building design
PART IV. – HEIGHTS AND SPACE AROUND BUILDINGS	Parameters influence RES exploitation
PART V. VENTILATION OF BUILDINGS	Mechanical ventilation should be energy efficient
14.-(1) Sunblinds, including any support, frame or other construction attached thereto and forming part thereof shall be placed at such height and shall open to such maximum projection as the competent authority may approve.	Important element to achieve EE
Part VIII and following address building components and define requirements, however not regarding energy efficiency.	Contradictions with energy efficiency requirements must be avoided
PART XII. – PUBLIC BUILDINGS	Specific requirements, but not regarding EE (ensure quality of the works and compliance of as-built situation)
PART XIID – PROJECT SUPERVISION	
PART XIIE – PROJECT EXECUTION – SITES	

The energy related content of the **Law for the Regulation of the Energy Performance of Buildings and its Regulations** is shown in the table below.

Table 2: “Energy” in the current legislation under the Law for the Regulation of the Energy Performance of Buildings (MECIT)

Number/ batch	Name of file and title of document, relevant content	Comments
(3)/1	(3)EnergyPerfLaw_2009 142 (I) of 2006 LAW FOR THE REGULATION OF THE ENERGY PERFORMANCE OF BUILDINGS	
	Covers all EPBD requirements except plan for NZEB	Framework
(4)/1	(4)Energy PerfReg_2014 THE REGULATION OF STREETS AND BUILDINGS LAW The Streets and Buildings (Energy Performance of Buildings) Regulations of 2006 R.A.A 429/2006	

Contains more specifications, e.g. regarding the application of energy minimum requirements		Framework
(5)/1	(5)-R.A.A. 163_2009 THE REGULATION OF ENERGY PERFORMANCE OF BUILDINGS LAW The Regulation of Energy Performance of Buildings (Inspection of air conditioning systems) R.A.A. 163/2009	
Contains specifications regarding inspection		Data collection is unclear
(6)/1	(6)-R.A.A. 164_2009 The Regulation of the Energy Performance of Buildings (Energy Certification of Buildings) Regulations of 2009 THE REGULATION OF ENERGY PERFORMANCE OF BUILDINGS LAW K.D.P 164/2009	
Contains specific information of qualified experts entitled to calculate and issue Energy Performance Certificates		See also requirements in Streets and Buildings Regulation Law 2015
Accuracy of the energy performance of building certificate 18.- (1) In all cases, the information contained in the energy performance of building certificate and the recommendations which are registered in the energy performance of buildings certificates' register shall be considered correct until proven otherwise.		Competent authority has implemented control system
(7)/1	(7)-R.A.A. 446_2009 THE REGULATION OF ENERGY PERFORMANCE OF BUILDINGS LAW Regulatory Administrative Act 446/2009 Decree under section 15(1) Regulation of Energy Performance of Buildings (minimum requirements for the energy performance of buildings) Decree of 2009	
Refers to the "Guide to Thermal Insulation of Buildings" and to the "Technical guide to solar systems"		Guides are part of the legislation
3. The minimum requirements for the energy performance of buildings for every new building, as well as for every building with total useful floor area of more than one thousand square meters that undergoes deep renovation are set out in the Table.		Deep renovation is not a term used in the EPBD ("major" renovation)
4. (1) In addition to the requirements of paragraph 3, for every new building that is used as a residence a solar system shall be installed in order to satisfy the hot water requirements, in accordance with the Technical Guide to Solar Systems and in accordance with the terms of the competent planning authority.		Solar system: solar thermal system and photovoltaic system; specification needed
1) Class of energy performance of a building on the energy performance certificate 2) - 5) Maximum thermal transmittance coefficient "U-value" 6) Maximum thermal transmittance coefficient U_{mean} 7) Provision for the use of systems generating electricity from renewable energy sources (RES)		
Provision shall be made in consultation with the electricity supplier (EAC or other) and it shall include: (a) placing in the building a larger electricity measuring box, so as to allow for additional available space to install the RES meter, and (b) placing the suitable piping, which shall start from the meter box and end to the future potential position of installation of the RES system.		No provision for metering of electricity consumption?
(3)/2	(3)-R.A.A.281_2013-Regulation of Streets and Buildings General Exemption Decree THE LAW REGULATING STREETS AND BUILDINGS R.A.A. 281/2013 Decree on the basis of section 4B Regulation of Streets and Buildings General Exemption Decree	

Contains the definition of PV system and exemption of building permit under specific conditions		Relevant for renewable energy share
(4)/2	(4)-L.210(1)_2012-The Regulation of Energy Performance of Buildings (Amending) Law of 2012 Number 210 (I) 2012 LAW AMENDING THE REGULATION OF ENERGY PERFORMANCE OF BUILDINGS LAW	
Update of scope and requirements: for example, addresses cost-optimal levels, nearly zero energy requirements Minimum energy requirements apply to all buildings undergoing major renovations		Threshold 500 m ² must be lowered to 250 m ² (9 th July 2015)
(5)/2	(5)-R.A.A.119_201-Minimum Energy Performance Requirements_Decree of 2016R.A.A. 119/2016 THE REGULATION OF ENERGY PERFORMANCE OF BUILDINGS LAW R.A.A. 119/2016 Decree under section 15/1 Regulation of Energy Performance of Buildings (Minimum Energy Performance Requirements) Decree of 2016	
4.- (1) The minimum energy performance requirements for any new building and any new building unit undergoing large scale renovation are set out in Table		Renovations refers to new buildings?
6. The provisions of this Decree shall apply also to buildings that are exempted from the obligation to obtain a planning and / or building permit.		Difficult to control; no exemptions for building permit?

The analysis of the following **Documents in relation with the Town and Country Planning Law** show that renewable energy and the Energy Performance Certificate (EPC) is addressed.

Table 3: "Energy" in the current legislation under The Town and Country Planning Law (Ministry of Interior)

Number/ batch	Name of file and title of document, relevant content	Comments
(39)/1	(39)-Mandate 1_2014 THE TOWN AND COUNTRY PLANNING LAW MANDATE 1 of 2014 Use of renewable energy sources with regard to developments	
Mandate is to establish incentives (or and conditions) to encourage the use of renewable energy sources in various types of development.		
2. a. The relevant installations for the utilisation of renewable energy sources with regard to the developments, are limited to solar power plants (photovoltaic) and solar thermal installations only. b. In the event of use of a photovoltaic system for the generation of electricity, the entire installation shall be connected to the electricity distribution network of the Electricity Authority Cyprus (EAC).		Grid management?
e. For all developments covered by this Mandate, the submission of the "Energy Performance Certificate" (as well as of the relevant documents/ calculations) to the Building Authority in accordance with the Regulation of Energy Performance of Buildings Law L.142(I)/2006 (and of its subsequent amendments) is mandatory, and includes all the existing developments regardless of size as well.		Not mandatory for other developments?
f. The building coefficient (%) established as an incentive with this Mandate cannot constitute a building coefficient for transfer to another property from the one for which the relevant permits shall be granted/ issued		Explanation of the building coefficient (%) – calculation method?
5. During the examination of the planning permission, the Planning Authority shall confirm, following a relevant consultation with the Energy Service, that		Energy Service MECIT is the competent authority under

<p>the recommended RES technology, the required mechanical installations, surfaces, places and methods of installations (e.g. for solar panels etc.) shall be able to satisfy the minimum requirements for energy generation (in conjunction with the respective requirements of the development's energy performance) in accordance with the content of the Table below.</p>	<p>the Law for the Regulation of the Energy Performance of Buildings</p>
<p>6.1 In submitting the application for the obtainment of the Construction Permit, the applicant must accompany his/her application with the "Certificate of Energy Performance", all of the remaining documents and calculations emanating from the implementation of the Regulation of Energy Performance of Buildings Law L.142(I)/2006 and an accompanying Letter which shall also be granted by the Energy Service and in which the contribution of the forms of RES determined in paragraph 2a of this Mandate shall be certified, to all the energy needs of the development. For this letter the Energy Service shall be based on the one hand on the Certificate of Energy Performance and on the relevant calculations of energy performance of a building and on the other hand on the written intention of the applicant to the Energy Service where he/she shall state the intention to utilize/ implement the incentives/ conditions of this Mandate for a specific type of development.</p> <p>It shall be understood that in the event where these are not submitted, then the relevant conditions of the respective Planning Permit shall not be in force (for granting the incentive for an increased building coefficient or for authorisation of another development for which the use of RES is a condition.</p>	<p>Not a procedure applicable in general, only to achieve incentives for RES?</p>
<p>TABLE OF INCENTIVES AND CONDITIONS REGARDING THE USE OF RES</p>	<p>Checking procedure?</p>
<p>(30)/1</p>	<p>(30)-Mandate 2_2006 THE TOWN AND COUNTRY PLANNING LAW Order no. 2 of 2006 in accordance with Article 6 of the Law</p>
<p>5. PHOTOVOLTAIC SYSTEMS (5.1 – 5.4) 5.1 PV systems installed in the shell of buildings with a purpose to partially or completely cover the energy needs for the uses of the construction, may be allowed if they are specifically provided for in the plans accompanying the application for the grant of a planning permit. A planning permit is required in order to add such facilities in existing buildings, unless the Planning Authority deems that the installation of PV systems is a subtask in buildings that have already obtained approval under the Town and Country Planning General Development Order. Applications in relation to such installations will be considered favourably, provided that they are harmoniously incorporated into the building and do not harm the microclimate in their surroundings and neighbouring facilities and developments (reflection and glare, local temperature rise, etc.). Additionally, guidelines will also apply for the aesthetic improvement of the built environment.</p>	<p>How is it checked? Which guidelines?</p>

Review of EPBD report Implementation of the EPBD in Cyprus Status in December 2014

The report developed during the Concerted Action 3 EPBD² shows that the EPBD is well on the way being implemented, including provisions for nearly zero energy buildings and setting up an independent control system based on an EPC registry, checking EPC on building permit level, carrying out on-site controls, and enforcing EPC compliance with defined measures.

MECIT is responsible and transposes the EPBD with the legislation under the Law for the Regulation of the Energy Performance of Buildings.

² <http://www.epbd-ca.eu/countries/country-information>

Identified problems in the field of energy efficiency and renewable energy during inception meeting

The following problems were compiled during the inception meeting and the discussions held with stakeholders.

Fragmented responsibility

- Two ministries are responsible for people building a house, making it complicated for them.

Lengthy procedures

- EPC is required as part of “terms and conditions” which have to be met in order to achieve the building permit.
- Minimum requirements are fixed during the consultation process.
- Energy Services MECIT receives the EPC with the building permit (consultation procedure) and can react on non-compliance.
- In case of non-compliance, the EPC is cancelled and a new EPC has to be presented.
- During construction: in case of non-compliance, inspector notifies on site: first warning, then court procedure in case of non-compliance.
- Procedures should be simplified in accordance with the simplification of general procedures.

Checking the EPC and ensuring EPC quality

- EPC required when selling or renting: EPC is not checked at all, quality control is missing.

Definition of energy minimum requirements

- Currently, focus is on insulation; there is no minimum requirement on cooling energy demand. Minimum requirements in terms of kWh exist only for heating and are available in the NZEB study. Cooling energy demand must be addressed.
- Currently, not much attention is paid to technical building systems; however, they will become important in future because of importance of nearly zero energy (NZEB) requirements.
- The requirement should include that energy minimum requirements must be revisited and adapted after a defined period.

How to ensure EPC compliance

- The law is too vague and there are mandatory technical guidelines to specify the law. There is a lack of transparency and clarity regarding the rules, and therefore it is difficult to ensure compliance.
- EPC is submitted electronically including input data, but input data are not checked. A mechanism is needed to check input data and release pressure from inspectors because the random sample can be selected more systematically.
- Energy Services MECIT checks EPCs which are part of the building permit on a random basis (small board of 6 inspectors visiting the buildings during construction, in collaboration with municipalities); however, the sample is too small, the number of 6 inspectors is not sufficient, and therefore there is no clear picture about the real situation regarding EPC quality.
 - A Code of Practice for checking is needed.
 - Checking of technical systems is necessary. Supervision of mechanical is necessary. Attention has to be paid to the qualification of installers.
 - Inspectors are very important because they “train” the staff on the construction site about changes in legislation. However, there are not sufficient inspectors.

- Example: Thermal insulation is new and there is resistance to implement it. Inspectors have an important informative role until thermal insulation becomes the norm.

Major renovations

- Problems to enforce the law for building renovations because of fragmentation: major renovation is defined in the building law, minimum requirements are defined in the energy performance law.
- Consider of harmonizing legal provisions; or issue a technical guidance document containing all provisions related with major renovations.
- Problems to enforce the law for building renovations because of step-wise implementation of energy efficiency measures: difficult to control.
- Issue with existing buildings: there is no awareness that minimum requirements have to be met; windows are changed without being aware of energy efficiency.

Renewable energy technologies

- Qualification of installers is essential.
- Developments with RE are treated like all other developments. However, they should be treated differently depending on the size of RE.
- There are restrictions regarding use of PV and other RES by Ministerial Decree. There could be a contradiction between energy minimum requirement related with RES and limitation of RES use by Decree.

Written comments provided by stakeholders: suggestion of solutions and additional information

With regard to energy efficiency and renewable energy, the following institutions provided comments after the inception workshop:

- Cyprus Federation of Employers and Industrialists
- Ministry of Energy, Commerce, Industry and Tourism (MECIT)
- Union of Cyprus Municipalities

MECIT and Cyprus Federation of Employers and Industrialists present suggestions to improve the content of the existing legislation regarding energy-related aspects.

The Union of Cyprus Municipalities presents suggestions regarding streamlining of procedures which are also relevant for energy-related aspects.

MECIT describes another relevant regulation, namely **K.Δ.Π. 111/2006 under the Streets and Buildings Regulations Law, requiring that for each new installation of central heating system and air conditioning system a study is provided.**

Technical building systems are playing an increasingly important role in energy efficiency of buildings, and therefore a revision is recommended, taking into account EPBD requirements.

3.4.3 Analysis of the facts

Two responsible Ministries

Two ministries are in charge of “Energy efficiency and heat retention”: Some aspects of “Energy efficiency and heat retention” are addressed by the current legislation under the Roads and Buildings Law (Ministry of Interior), while the implementation of the Energy Performance of Buildings Directive 2010/31/EU (EPBD) is the overall responsibility of the Ministry of Energy, Commerce, Industry and

Tourism (MECIT). Renewable energy utilisation which is under the EPBD but also under the Renewable Energy Directive 2009/28/EC (RED) is addressed by a Mandate and an Order of the Town and Country planning Law (Ministry of Interior).

This situation requires a clear definition of interfaces.

Complex situation regarding legislation

Energy efficiency and renewable energy aspects are mainly addressed by the legislation under the Law for the Regulation of the Energy Performance of Buildings. Legal documents have been updated and have replaced previous versions. Several documents have to be compared and analysed to be able to understand the changes and follow the rules accordingly.

An example is provided below:

- Requirements from 2013 onwards according to Κ.Δ.Π. 432/2013:
 - Walls and bearing construction elements $U_{max} = 0.72 \text{ W/m}^2\text{K}$
 - Horizontal shell elements and roofs in direct contact with the external environment $U_{max} = 0.63 \text{ W/m}^2\text{K}$
 - Floors over closed non heated spaces $U_{max} = 2.0 \text{ W/m}^2\text{K}$
 - Openings $U_{max} = 3.23 \text{ W/m}^2\text{K}$
 - In addition:
 - U_{mean} of building shell elements excluding floors, terraces and roof is $1.8 \text{ W/m}^2\text{K}$ for non-residential and $1.3 \text{ W/m}^2\text{K}$ for residential buildings
 - All new buildings are at least Energy Class B
 - Installation of solar panels for covering hot water consumption
 - Provision for future use of systems of electricity production
 - Maximum shading factor for openings = 0.63
- New requirements entered into force on 1st of January 2017 according to Regulation of Energy Performance of Buildings (Minimum Energy Performance Requirements) Decree of 2016 (Κ.Δ.Π. 119/2016):
 - Energy efficiency class in the EPC for a building: Equal or better than B
 - Walls and bearing construction elements $U_{max} = 0.4 \text{ W/m}^2\text{K}$ (exemptions allowed)
 - Horizontal elements and roofs $U_{max} = 0.4 \text{ W/m}^2\text{K}$
 - Windows and doors $U_{max} = 2.9 \text{ W/m}^2\text{K}$ (exemptions allowed)
 - Maximum shading co-efficient = 0.63
 - Maximum installed lighting power (offices): 10 W/m^2
 - Dwellings: At least 25% of total primary energy consumption from renewables (exemptions allowed)
 - Non-residential: At least 7% of total primary energy consumption from renewables (exemptions allowed)

In addition, there is an overlap with the legislation under the Town and Country Planning Law and with the legislation under the Streets and Buildings Regulation Law as they also regulate energy-related aspects for buildings.

Thus, the status quo is complex, and there is room for improvement concerning user friendliness and transparency of legislation.

Problems and solutions identified in the field of energy efficiency and renewable energy

Problems compiled during the inception meeting and suggestions for solutions provided by stakeholders can be allocated to the following categories:

- Problems and solutions related with fragmented responsibilities and lengthy procedures.
- Problems and solutions related with room for improvement as regards content of the legislation currently under the Law for the Regulation of the Energy Performance of Buildings and the legislation currently under the Town and Country Planning Law.

The first part needs to be addressed together with general simplification of procedures, and the second part can be addressed together with the re-structuring of the legislation as regards content.

Implementation of the EPBD in Cyprus

The report developed during the Concerted Action 3 EPBD² shows that the EPBD is well on the way being implemented. However, **further development will be necessary due to changing EU Directives³**, and this will affect the legislation under the Law for the Regulation of the Energy Performance of Buildings.

3.4.4 Recommendations

Increasing transparency and user friendliness of legislation

Energy related requirements have been changing depending on EU policies. The recent review of EPBD and RED³ shows that emphasis is put on actual building performance and contributions from renewable energy sources. Revision of requirements has taken place and will continue to take place in future, in order to comply with the European Directives mentioned above.

In the course of this process, the main legislation under the Law for the Regulation of the Energy Performance of Buildings could be compiled in one single document structured as follows (example):

- Minimum energy efficiency requirements, taking nearly zero energy requirements and cost optimal requirements into account; requirements regarding renewable energy shares
- Calculation methods and tools, EPC registry
- Building energy label, publication of energy indicators, presentation and handing over of EPC
- Qualification of experts
- Control and enforcement
- Energy related incentives

Updated versions should be published in track changes mode and as clean version. This will improve transparency and increase user friendliness of legislation.

Comprehensive technical documents should be referenced in the main text of the legislation but could be issued separately, such as:

- Guide to Thermal Insulation of Building
- Technical Guide to Solar Systems
- Description of calculation method and approved software tool
- Etc.

³ <http://ec.europa.eu/energy/en/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition>

Documentation of changes should be available at the beginning of the document, at least. Also here, it could be useful to have the updated versions published in track changes mode and as clean version, in order to improve transparency and increase user friendliness of legislation.

Possible approaches to address the identified problems related with fragmented responsibilities and procedures

There is clearly an overlap between legislation under the Town and Country Planning Law and the legislation under the Streets and Buildings Regulation Law with the legislation under the Law for the Regulation of the Energy Performance of Buildings. However, this overlap should be limited to procedural aspects, e.g. planning/building permit approval and approval of permit of use.

With regard to transparency and user friendliness of legislation, building specific energy-related aspects addressed in the legislation under the Town and Country Planning Law (see Table 3), in the legislation under the Streets and Buildings Regulation Law (Κ.Δ.Π. 111/2006 requiring that for each new installation of central heating system and air conditioning system a study is provided) and in the legislation under the Law for the Regulation of the Energy Performance of Buildings should be consolidated.

In order to achieve this objective, responsibilities of the Ministry of Interior and MECIT have to be clarified and interfaces have to be well specified.

While aspects related with the buildings as such could be under the Ministry of Interior, horizontal aspects related with energy could remain under MECIT, in order to ensure synergies with other energy related European Directives and to benefit from well established equipment and procedures (e.g. EPC database, independent control system).

Possible approaches to address the identified problems related with room for improving the current legislation as regards content

See written comments provided by Ministry of Energy, Commerce, Industry and Tourism (MECIT) and Cyprus Federation of Employers and Industrialists.

Additional suggestions could refer to the problems addressed in chapter 3.4.2. Presentation of the facts.