



**Danish Energy Management A/S**

*A part of Danish Management Group*



## **Review of Legislation**

**UNDP - 00058178/  
Removal of Barriers to Energy Efficiency and  
Energy Conservation in Buildings – PS/MAR2010/002**

**Preparation of Building  
Control Bill, Building Regulation and Code  
for Energy Efficiency and Compliance Mechanisms.**

**Prepared by**



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# 1 Executive Summary

The Regulatory Framework for Energy Efficiency in Buildings in Mauritius is incomplete. There are no regulations defining minimum technical requirements and applicable standards and code, and the legal basis, which should be defined in the Building Act, is outdated. This has been recognized and steps have begun to be taken in the form of a new draft Building Act aiming at regulating the main basic requirements regarding safety, accessibility and functionality that all buildings must have. This draft Building Act represents a step forward but still suffers from some gaps. It notably fails to provide full protection for the user or occupier of the building by failing to provide with a system of guarantees for his safety, accessibility and well-being. This should be the priority issue to address in a new Building Control Bill. Compliance mechanisms also need to be reinforced in terms of severity of penalties and powers and capacities granted to the competent Authorities. The Bill by itself will not solve all the problems relating to enforcement, but it can contribute to their solution by providing a clear set of rules, provided the competent enforcement Authorities are at the same time dotted with all the necessary means in terms of staff.

The Building Control Bill will need to take into account of other related Bills. An added difficulty in this exercise will be that the two most relevant Bills: the Land Use Planning and Development Bill and the Energy Efficiency Bill, are at the time of writing in a draft stage. Nevertheless they are both important documents of great significance to the future Building Control Bill. There are also a number of other Bills that need to be taken into consideration in order to ensure that there is complementarity and no contradiction. Some provisions in these rules (such as the definition of offence is the Occupational Health and Safety Act) can serve as inspiration to tackle some of the outstanding issues in the draft Building Control Act.

We recommend that the Building Control Bills makes clear reference to civil and criminal liabilities as defined per the respective Mauritius Civil Code and Mauritius Criminal Code, and regulates the period during which these liabilities prevail.

The Building Control Bill should only contain the main framework. Technical aspects should be regulated separately through regulations, codes and standards. The document "review of best practices" will form the basis for our recommendations in this regard.

## 2 Introduction

UNDP has contracted Danish Management to assist in providing a new framework for furtherance of energy efficiency in building and enforcement of building codes through the Building Control Bill. The objectives of the assignment are:

- (i) Develop a new Building Control Bill which will provide the framework for the enforcement of measures relating to new Building Regulations and Codes in all sectors of economic activities: industrial, commercial, residential, health, education.
- (ii) Enable the implementation of energy efficiency measures and incorporate to the extent possible use of renewable energy in the design of building construction and the modernization of the existing building stock through a legislative framework.
- (iii) Develop compliance Mechanisms codes (including enforcement measures) and develop training materials for capacity building.
- (iv) Carry out a comprehensive analysis of compliance mechanisms in existing building permit system, assessing compliance level, enforcement approaches, gap analysis and necessary corrective actions for a sustainable compliance regime.

This report addresses the legislative and regulatory part of the desk review, focusing on the Building Act and relating it to other relevant Acts, Bills and Regulations, as well as to the overall Long-Term Energy Strategy (2009-2025) for Mauritius. Although the main objectives of the project relate to the setting-up of a regulatory framework for energy efficiency in buildings, the Building Control Bill must cover other technical aspects such as safety, health or accessibility for disable persons. We can therefore not isolate energy efficiency from the other aspects. The compliance mechanism for instance, will forcibly be common or at least contain many common elements.

There are differences on the regulatory approaches followed by different countries, but the majority, at least in the European Union, have a Building Act that provides the legal framework for legislation concerning the content and implementation of building regulations, and then separate regulations and standards for each of the technical aspects that can be changed frequently if the technological evolution allows.

In the case of Mauritius, as we shall see, the current framework is still incomplete, as there are not special provisions for energy efficiency and the current Building Act, which dates from 1919 (although it has gone through subsequent amendments) makes no mention of these aspects. There are however some guidelines on the approach that needs to be adopted contained in the Mauritius Long Term Energy Efficiency Strategy 2009-2025. This document stipulates:

*A new Building Control Act will be passed to improve Building design and choice of building plant and equipment to attain high efficiency in terms of energy use. Henceforth, new buildings, both public and private, will have to be energy efficient in terms of building design and plant and equipment to be used, as per the provisions of the new Act.*

*Issues of sustainable building designs and low energy consumption would be addressed in specific Planning Policy Guidelines, which would be prepared in consultation with stakeholders, including architects, engineers and environmentalists.*

We will now examine the current Building Act and the draft Building Control Bill and assess whether they can provide the main framework to ensure that new buildings are energy efficiency and comply with other technical requirements. We will mainly focus on the control and compliance mechanism. To strengthen some of the issues raised an arguments provided, some of the elements are being compared with other Acts or Bills in other countries.

### **3 Purposes and common elements in Building Control Acts/Bills**

The main purpose of having a Building Control Act/Bill is to regulate the Building process in order to:

- Guarantee safety;
- Provide functionality and comfort for the user;
- Respect the environment in a wide sense.

Building Acts usually include: main requirements for construction works; procedures for design, building and operation of construction works; competences for national and local authorities; and tasks and responsibilities of persons participating in the construction. Most Building Acts take the approach of defining the obligations of the different persons intervening in the building process, in order to determine their liabilities or penalties in case of non-compliance, and cover the guarantees to the users, on the basis of a number of basic requirements that new buildings need to meet. The definition of the different obligations provides clarity and protection to the different persons intervening in the construction process and to the users.

A general outline of a Building Control Act/Bill should contain at least the following:

- Definition of Purpose of the Act/Bill;
- Definition of the Scope of the Act/Bill;
- Basic requirements that all new buildings must comply with. In order to allow for frequent changes so as to keep in pace with evolution in technology, the Law should just contain a mention of the basic requirements and then give powers to the Minister to regulate the technical aspects. This is the place to mention minimum requirements regarding minimum energy performance, safety, accessibility, etc. However, they should just be mentioned and then refer to other regulations or codes;
- Administrative requirements. This is where the national or local authorities can exercise their control process. Usually at least two permits will be needed in the building process:
  - Permit to build on the basis of a presented "projectö to the competent authority to issue the permit. This permit is granted if the öprojectö complies with the minimum requirements defined in the Act/Bill;
  - Permit of occupancy, once it has been guaranteed that the building is finalized and complies with the requirements set in the Act/Bill and other requirements defined in the Permit;
- A description of the building process and of the obligations of the different persons involved in the process, including their minimum qualifications;
- A description of the liabilities or penalties (depending on the system adopted) of the different agents/persons involved in the construction, for non-compliance with their obligations;

- A description of the guarantees for the building owner/user;
- A definition of the powers of the competent authority in case of non-compliance (investigation, demolition, etc);
- Jurisdiction of Courts;
- Appeals;
- Powers of Minister to regulate.

## **4 Review of existing Act and Building Regulations and Codes in Mauritius**

The core Act in our analysis is the current Building Act, which dates from 1919 and has been amended several times. It is recognized that this Act is outdated and as a result a new draft Building Control Bill is being developed. We will analyze the content of both the existing Building Act and draft Building Control Bill and try to identify the gaps. We will put it in relation to other existing and draft legislation such as:

- Town and country planning Act;
- Local Government Act;
- Other Building Regulations;
- Utility Regulatory Authority Act;
- Environment Protection Act;
- Occupational Health and Safety Act;
- Related Commercial Laws (on import tariff for energy efficiency building materials and technical equipment);
- Long-term Energy Strategy 2009-2025;
- Energy Efficiency Bill;
- Electricity Act.

Further to demand from the Technical Committee, the following Acts have been also analyzed:

- Rivers and Canals Act;
- Forestry and Reserve Act;
- Professional Architect Council Act;
- Professional Engineer Council Act; and
- Business Facilitation Act.

We shall assess whether the Building Act and the draft Building Control Bill contain all the necessary elements to ensure compliance, by comparing it against the elements that Building Control Acts usually have and that have been described above.

### **4.1 The current Building Act**

As already pointed out, the current Building Act dates from 1919 and contains no mention to energy performance requirements for new buildings. The Act has been amended several times, notably concerning the Permit procedures, after the approval of the Business Facilitation Act (BFA) that entered into force in October 2006. It is recognized that the current Building Act is outdated, and as already mentioned there is already a new draft Bill being prepared. Nevertheless, this Act is still in

force and therefore the most relevant provisions for the matter that concerns this analysis are being summarized below.

### **Purpose**

The Act contains no mention of its purpose.

### **Scope**

The current building Act applies to new buildings and to extensive amendments to existing buildings, or demolition of a building/structure, except for buildings occupied by the government or a municipal council.

### **Basic (technical) requirements**

Basic technical requirements are not directly contemplated in the Act. Before the approval of the BFA, clearance from the Permanent Secretary of the Ministry of Health and from the Fire Services was needed, but this has now been abolished by the presumption of self-adherence to a series of criteria and design standards set in the *Planning Policy Guidance* developed under the 2004 Planning and Development Act (see below under administrative requirements). There are 5 different technical guidelines and prescribed application forms depending on the use to be given to the building: 1) residential, 2) commercial and service clusters, 3) small enterprise/handicraft, 4) industrial development/sui generis and 5) excision of land among heirs. In addition, the developer must comply with other Guidelines published by the Sanitary Authority, Fire Services, and Ministry of Environment.

As the Act, these Guidelines do not provide any reference to energy efficiency design criteria or standards, except for a very brief mention on the *Design Guidance for Commercial Development*, which gives consideration to micro-climate aspects and form and orientation of building plots.

### **Administrative requirements**

All new construction or significant alteration to an existing building requires a permit from the *Authority*. The fundamental principle is therefore no building without permit. Under Section 98 of Local Government Act of 2003, the competent Authority is the local Authority of the respective town or district where the relevant building structure is to be developed. The Building Act contained a procedure where the competent Authority had a maximum of 45 days to determine whether the building would be in strict conformity with the Act and the Guidelines. This procedure was repealed by the Business Facilitation Act (BFA) of 2006, which provided for a new simplified legal framework allowing businesses to start operations on the basis of self-adherence to the *Planning & Building Norms* defined under the *Planning Policy Guidance* mentioned above. BFA effectively amended the *Town and Country Planning Act* and the *Building Act* under which Development and Building permits were previously issued, by combining the two permits into a single one called 'Building Land Use Permit' and effectively consolidating two procedures into one. As of October 1, 2006 (date of entering into force of the BFA), every person intending to either start construction work or make extensive alterations, additions or repairs to an existing building or carry out land development activities must apply to the local authority for a building and land-use permit (BLP).

The Guide specifies a number of documents to be handed in along with the application, such as:

- Copy of the title deed.

- Copy of the lease and planning clearance from the Ministry of Housing and Lands (for state land).
- Consent of owner and copy of the owner's national identity card.
- Copy of the national identity card of the applicant.
- Three sets of plans, comprising site and location plans, layout, elevations, sections and structural plans and details as per the building Act.
- Public notification by way of plate display and notice in two daily newspapers (for commercial development within residential zones).
- Consent of neighbors (this depends on the use of the building and on the distance to neighboring constructions).
- Preliminary Environmental Report (PER)/Environmental Impact Assessment (EIA) LICENSE for SCHEDULED undertakings: the PER is for small projects, while the EIA is for bigger ones with a potential environmental impact.

All plans must be signed by the draughtsman for buildings of less than 250 m<sup>2</sup> in floor area and must include the name and address. The total floor area is to be indicated on the site plan, while the floor area for each level is to be indicated on the corresponding floor plans. - For buildings of 250 m<sup>2</sup> or more in floor area, all plans are to be signed by a registered professional architect, including the architect's name, address, VAT registration number, and registration number with the Professional Architects Council. The total floor area is to be indicated on the site plan, while the floor area for each level is to be indicated on the corresponding floor plans. In certain specified cases, the plans need to be signed also by a Registered Civil professional Engineer, indicating his name, address VAT Reg. And his RPEM number.

It is recommended that the new draft Building Control Bill to be developed under the project defines clearly the responsibilities attached to signing the drawings. It is also recommended to set up a system for certification and registration of draughtsmen.

When the application is in accordance with the Act and the Guidance, the development and building permits should, under the Chief Executive Authority, be issued within 2 weeks of the effective date of receipt of the application. The 2-week timeframe is adhered to if all these requirements have been met. If the applicant receives no decision on his application on day 13, the BLP will be deemed to have been automatically issued by the planning department after payment of the appropriate fee.

Other guidelines to be complied with are:

- The Guidelines issued under the Building Act, The Town and Country Planning Act of 1954 and the Planning and Development Act of 2004;
- The Guidelines issued under the Ministry of Health & Quality of Life, Fire Services and the Ministry of Environment.

Some constraints are being faced by the Local Authorities as a result of the new BFA:

- It was assumed that developers would self-adhere to Planning and Building Norms and to other guidelines published by the Sanitary Authority, Fire Services and Ministry of Environment and that only Ex-Post control would be carried out to check compliance. It

appears however that the self-adherence assumption is not always materializing and the local Authorities, which have limited staff, are facing additional pressure;

- There is a lack of proper enforcement mechanisms in the planning/building laws which renders the prosecution of illegal/development construction very difficult;
- The fines levied do not act as deterrent to illegal development. They are in contrast with those in the Environment Protection Act and in the draft Energy Efficiency. We will get back on this issue;
- Very often the accused does not comply with pulling down orders issued by Courts and because of lack of means and financial support, Local Councils are effectively not able to enforce even if they are required by Law to do so. In many cases the Local Authority does not have the legal witness as stipulated in the Law where a town architect is required. This shortcoming needs to be addressed in the New Building Control Bill.

### **Powers of control from the Authority**

- The Authority may enter all buildings being built to ascertain whether the provisions of the Act are being complied with.
- The Authority must make an inspection and give approval for any new building to be inhabited, used or occupied. No new building can be inhabited, used or occupied until the Authority has given approval. But the fine for non compliance is low (MRU 10 per day). The authority has the right to close the building in case of non compliance. On the basis of these provisions, the developer must: 1) inform the local Authority of the start of construction works within 24 months (as amended as per Section 6 of the Finance Act 2007 of the date of the permit; 2) inform the Local Authority of the completion of the construction of the Building; 3) obtain an occupation certificate from the Local Authority, prior to occupying the building.
- Regarding safety and ventilation, the Authority may also inspect existing buildings open to the public.

### **Issue of permit**

The permit holder shall have 2 years to commence the works. The Act also defined how much should have been constructed to consider that the works have commenced.

### **Obligations of persons involved in the building process**

This is not really contemplated except for the developer (who must ensure that the building is not constructed without the Permit). The only requirement mentioned is for plans for buildings having a floor area of more than 250 m<sup>2</sup>, which must be signed by a licensed or professional architect.

### **Liabilities/penalties for non compliance**

- Fines between MRU 15,000 and MRU 20,000 in case of non compliance with the obligation to obtain permit or with the conditions specified in the permit.
- MRU 500 for the owner who fails to comply with a written order to comply with safety and ventilation rules, plus MRU 50 for each day contravening the order;
- MRU 200 for any person who knowingly allows habitation of rooms not constructed in accordance with the Act.

It is specifically stated that these penalties do not exclude from any other liability on account of the commission of a crime or misdemeanor punishable under the criminal court.

### **Guarantees**

Not contemplated

### **Jurisdiction**

District Court where the building is located.

### **Appeals**

Appeals can be made to the Magistrate of the District where the building is to be located. The Procedure that must be used is the one under civil jurisdiction. In case of fines over MRU 200, or includes imprisonment, the Supreme Court is competent.

### **Powers of the Minister to regulate**

It is specified that the Minister may make such regulations as he deems fit for the purposes of this Act.

There are separate Chapters regulating special measures to be undertaken in case of dangerous building or structure, not necessarily limited to new buildings, and another one regulating the prohibition of building forges and furnaces unless specifically authorized by the Authority.

## **4.2 The draft Building Act**

As mentioned above, recognizing that the current Building Act is outdated, a draft Building Control Bill is being developed. This section analyses the most relevant provisions providing a critical analysis and identifies the main gaps by comparing with the Building Control Acts from other countries. It then relates the draft Building Act to other relevant Acts. It finalizes by making a number of recommendations on additional provisions that should, in our view, be included.

### **Purpose**

To guarantee people's safety, society's well-being and the protection of the environment.

### **Scope**

The Act applies to all BUILDING as defined in section 3. Section 3 defines "Building" as all construction works involving any permanent or temporary structure, including:

- The erection, extension or demolition of a building or part thereof;
- The alteration, addition or repair of a building or part thereof;
- The provision, extension or alteration of permanent services and equipment in or in connection with a building, such as air conditioning service, ventilating system, electrical, plumbing or telecommunications system;
- The alteration to the existing interior spaces and/or design of new interior spaces, including the demolition of any partitioning or interior feature within the interior space;
- Any site preparation works or excavation works carried out for the purpose of paragraph (a), (b), (c), or (d) as well as urban landscaping works. There is a problem in this paragraph, as it should mention to which section this paragraphs relate to, as they are not related to section 3.

This definition given under section 3 should be reconsidered, as there is a possible discrepancy with section 7, which defines the permit obligation by stating: " No person shall commence the construction of a building, or extensive alterations, additions or repairs to an existing building, without having obtained a Building and Land Use permit to do so from the Local Authority under section 98 of the Local Government Act 2003ö.

There is a need to define precisely when an alteration is considered "extensiveö, either in the Act, and either by further regulation or in the Guidance. The *Building and Land Use Permit Guide* states that öbuildingö includes: a) part of a building; b) a manufactured home or part of a manufactured home, a movable dwelling, or a movable structure, and c) a structure, part of a structure, or a temporary structure. Furthermore "building workö means: any physical activity involved in the erection of a building. One thing to reconsider is to harmonize the different definitions of "buildingö found in different documents.

It is also stated that the Act does not apply to any immovable property which belongs to, and is occupied solely by the Government or a local Authority. The Prime Minister may also exempt immovable property leased by the government or local authority. According to different stakeholders, this clause was introduced because for public buildings the control is being performed anyhow. It may be however advisable to clarify that what does not apply to public building is the obligation to obtain Permit and other administrative requirements, but they are not exempted from complying with the minimum technical requirements.

Concerning Energy Efficiency, the 2009-2025 Long Term Energy Strategy stipulates that the "Government is committed to the Public Sector leading the way in energy efficiency. This will be the fundamental sustainable energy principle for public sector institutions and will be reflected in highest standards of sustainable energy and energy efficiency being applied in all public sector activities, even if it is at the expense of higher investment. The aim of the Government is to maintain energy expenditure on the basis of life cycle costs at a reasonable levelö.

### **Basic (technical) requirements**

The draft Bill defines three types of requirements:

- Functional requirements:
  - o Utility, to ensure that the a building can be used for its intended purpose;
  - o Accessibility, to ensure that disable people can access the building comfortably;
  - o Access to telecommunications.
- Safety requirements:
  - o Structural safety;
  - o Fire safety;
  - o Safety of use.
- Habitability requirements:
  - o Safety, hygiene and environmental protection;
  - o Noise protection;
  - o To ensure energy savings and optimum energy consumption for the proper running of the building;
  - o Other functional aspects which allow the building to be used safely.

Some of the aspects defined under the different basic requirements, are repeated under other paragraphs (see below). It would be advisable to avoid this duplication by deleting those paragraphs and making a general reference to further regulations or guidelines issued for the different technical aspects contemplated under the basic requirements.

### **Administrative requirements**

The same principle as for the current Act applies: no person shall commence the construction of a building, or extensive alterations, additions to repairs to an existing building, without having obtained a building and land use permit from the Local Authority. As already pointed out, it would be advisable for the sake of clarity to specify what "extensive" alteration means.

The Local Authority as defined per section 98 of the Local government Act is "the local Authority of the respective town or district where the relevant building, structure or tenement is to be found or where the land is to be developed".

The requirements for the permit are defined in the Law as follows:

- All the proper documentation is submitted as required by the Authority for approval. The Business Facilitation Act standardized the procedure for the nine local authorities and the Ministry of Local Government published a Building and Land use Permit Guide based on the Planning Policy Guidance (PPG). It may be advisable to refer to the PPG for the sake of clarity.
- The applicant produces to the Authority, in respect of a Building having a minimum floor area as defined in the regulations or more inclusive existing floor area, plans for the proposed construction, alterations, additions or repairs drawn up and signed by a Registered Licensed Architect, a Professional Architect and/or a Registered Professional Engineer.

Perhaps specific reference should also be made to the Planning Policy Guidelines (PPG), where these conditions are more detailed.

There is a need to consider whether the distinction between "licensed" and "professional" architect should continue to be made or whether only "professional" architects will be contemplated.

- a) All basic building requirements are met as defined in section 2 of this Act;  
It is advisable to add "and any other regulations, codes or guidance develop thereof".
- b) Fire safety regulations are complied with as set within the Act;  
This is repeating the paragraph above as fire safety is included as a safety requirement.
- c) Accessibility and parking regulations are complied with;  
Accessibility for disabled people is already included as basic functional requirement.
- d) All applicable Acts are complied with;

For the sake of clarity, it would be better to mention what the main applicable Acts are (town and country planning Act, Planning and Development Act, Environment Act), pointing out that this list is not exhaustive.

e) Complies with sanitary requirements as per the regulations of the Ministry of Health.  
Again, sanitary requirements are covered under basic habitability requirements.

As already pointed out, it should be considered adding a general sentence to paragraph c) "and any other regulations, codes or guidance develop thereofö.

The procedure to follow is the one set by the BFA and described in the Land Use Permit Guide described above. If the Authority receives all the required documents, it submits them to the Permits and Monitoring Committee, who has 10 working days to make a decision. If there is no decision after day 10, the permit is considered as granted as long as the applicant pays the relevant fees. The Authority may refuse the permit or request for modification, in which case it must be specified in writing and be done within the 10 day period. This timeframe appears as rather short to allow the Authority to examine all the dossiers it receives in depth. It is in contrast with existing timeframes in other countries. In France, including Reunion Island, the deadline for the Authority to examine the dossier is of 2 months, and the initial deadline to examine whether the dossier is complete is of 2 weeks.

The second basic principle is that no new building shall be inhabited, used or occupied until a Certificate of Occupancy has been issued by the Authority. In order for the Authority to deliver this, a final inspection by the Authorized Agent at the end of the Construction works has to be effected and a clearance certificate delivered to the Authority. After delivery of clearance certificate the Authority has 21 days to deliver certificate of occupancy.

It needs to be clarified what happens when the initial plans have been signed by a draughtsman. Does the clearance certificate need an architect or engineer or a clearance certificate from a draughtsman is sufficient?

Another aspect to consider: given the conditions in Mauritius, one of the first aspects to regulate regarding energy efficiency requirements will be "roofsö. Currently many houses in Mauritius are inhabited without the roof being finished. When is the clearance certificate/certificate of occupancy delivered? If it is delivered before the roof is finished, it will not be compliant with minimum requirements. There is a need to take into account that many houses are constructed in phases and see how this can be tackled. Perhaps giving a maximum period to finalize it.

It has to be noted that at the time of writing there is a draft "Land Use Planning and Development Billö that will repeal the "Town and Country Planning Actö and the "Planning and Development Actö, and bring changes to the Building Act, in particular to the procedure to obtain Permit (although the basic principles defined under the BFA remain untouched). A summary of the most relevant aspects is contained below.

### **Powers of control from the Authority**

- Decide whether to grant the permit following the procedure described above;
- Article 13 authorizes the Authority to inspect the Building site for the purpose of ascertaining whether the provisions of the Act are being met;
- Right to close the building when it is being used, occupied or inhabited before obtaining a certificate of occupancy;

- Issue, at any stage of the construction, a stop order upon recommendation of the Authorized agent, of a building, where it is deemed necessary for public safety and/or construction works are not being carried out according to plans submitted for building and land use permit and approved by the authority and/or amended plans amended resubmitted and approved by the authority.

The Act does not specify what is the power of the Authority in case of illegal construction (building erected without permit). This is contemplated in section 109 of the Local Government Act, where it is stated that the Authority can issue a closing order pending judgment and it is also contemplated in the draft Land Use Planning and Development Bill (see below). In order to increase clarity, the Building Act should make reference to this clause.

### **Validity of the permit**

24 months from issue of Building and Land Use permit. During this period the permit holder needs to start the works. The Act specifies the minimum works that will have to be performed within the 24 months.

### **Obligations of agents involved in the building process**

There are three types of "agents" involved in the construction process as defined by the Act: authorized agents, project management team and quality control laboratories. The obligations for the first two are spelled out.

Authorized agent is described as the professional architect and/or professional engineer appointed by the promoter at the time of issuance of the building or land use permit. The Authorized Agent can also be the design architect and/or design engineer. Their duties as defined in the draft Act are:

- To follow the construction works at all stages of completion to ensure that they are carried out as per plans submitted for building and land use permit and/or amended plans resubmitted and approved by the Authority;
- To prepare a report that the building has been constructed in accordance with the provisions of the Act and all Laws and regulations pertaining to this Act;
- To deliver a clearance certificate prior to the issuance of Certificate of Occupancy by the Authority.

Obligations of the "project management team" include:

- Verifying the reception of building materials at the works site of works and ordering the test and trials as may be directed by the project Architect/Engineer.
- Directing the execution of the works and ensuring that the building is in conformity with drawings, materials and specifications.

The Quality Control Laboratories:

- Provide technical expertise in verifying the materials and the execution of the works and its services, pursuant to the project and in accordance with applicable legislation;
- Provide technical expertise through the performance of trials and test on materials, systems or services used in the works;
- Provide technical expertise and submit the results of their activities including test and findings to the agent who engages their services and to the site Agent/Architect/Engineer.

The draft Act represents a step forward in relation to the current Act, as it defines the obligations of the Authorized Agents and the Project Management Team. However, it does not go any further than that, not clarifying their liability and responsibility in case of non compliance with the Act and not determining any penalties. It therefore fails to provide a system of protection for the owner/occupier of the building, since it concentrates all the responsibility in the developer. However the developer might lack all the necessary technical skills to determine that all the provisions of the Act are complied with.

This is in contrast with other existing Building Acts. Without going into big details, here below are some examples of how this is regulated in Spain, France and Singapore:

The Spanish Act defines in detail the obligations and the civil liability of the different agents involved in the construction process. The different agents are liable to the building owner for damages in the building within an indicated timeframe. The specified timeframe is as follows:

- 10 years for the property damages caused to the building by faults or defects affecting the foundation, supports, beams, framework, load-bearing walls, or other structural elements and which directly jeopardize the building's mechanical resistance and stability.
- 3 years for the property damages caused to the building by faults or defects in the constructive elements or services which result in the building failing to meet the habitability requirements.
- Furthermore the builder is liable for the property damages due to construction faults or defects affecting elements of the finish works for a period of one year.

The French Building Code refers to liability of the different agents as defined per the French Civil Code. They are liable to the owner for damages compromising the building mechanical resistance or stability for a period of 10 years. The agent is presumed responsible unless he can prove that the damage has been caused for external factors for which he cannot be held liable.

Singapore has adopted a different approach by describing in great detail the obligations of each and every person involved in the construction process and by defining a penalty for each and every contravention. An example is provided here below:

Article 9 of the Singapore Building Control Act defines the duties of the "qualified persons" appointed to prepare plans of any building works. Some of the duties described for this person are:

- a) Take all the reasonable steps and exercise due diligence to ensure that the building works are designed in accordance with the provisions of the Building Control Act,
- b) Notify the Commissioner of Building Control of any contravention to this Act or to the Building Regulations
- c) Supply of every plan a copy of every plan of the Building Works approved by the Commissioner of Building Control to the site supervisor, the builder and the qualified person appointed to supervise the building works.

If the qualified person contravenes these obligations, he shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$20,000 or to imprisonment for a term not exceeding 12 months or both.

Whatever approach is adopted, there is a need to clarify the liability of the different agents involved in the construction process. Given the fact that Mauritius has a Civil Code and a Criminal Code it is advisable to refer to them more specifically.

It has to be pointed out, that these liabilities are explicitly not excluded but the draft Act, but it was recognized by the stakeholders that until now it has been difficult to apply:

- Art 43 states notwithstanding the liability of any person to any penalty under this Act or regulations made under this Act, he shall not be relieved from any other liability to which he may be subject on account of the commission of any crime and misdemeanor (delit) punishable under the criminal court.
- Article 45 (private rights not affected) states the provisions of this Act concerning any act or any proceeding, judgment or conviction, for any act hereby declared an offence, shall not take away, diminish or prejudicial affect any suit, process, proceedings, rights or remedy, to which any person aggrieved by such act or complaining of any prejudice may be entitled.

It has to be pointed out that other Acts, such as the Environment Act, do not refer specifically to the Civil or Criminal Code, although again, it is not excluded. The Environment Act does not mention liability for the Consultants signing the Environmental Impact Assessment (EIA) in case it provides false information for instance, but the Occupational Health and Safety Bill defines making a false statement as an Offence (see below for further details).

### **Liabilities/penalties for non compliance**

As pointed out, penalties and liabilities seem to be focused exclusively on the "developer". Penalties are contemplated for a person who:

- Begins the construction of a building, or extensive alterations, additions or repairs to an existing building without obtaining a permit;
- Obtains a permit but erects the building without following the specifications described in the permit.

In this case the penalty is a fine between MRU 15,000-20,000.

Other penalties foreseen are:

- A person who allows a building to be occupied, used or inhabited before obtaining the certificate of occupancy, shall be liable to a fine of MRU 10 per day.
- A person who knowingly suffers any room not constructed in accordance to this Act to be inhabited shall, in addition to other liabilities contemplated in the Act, be liable of a fine not exceeding MRU 200 per day.
- The penalty for obstruction to the closure order from the Authority is of MRU 50 per day.

The amount of the penalties strikes as very low and is in contrast to the amounts of penalties under other Acts such as the Environment Protection Bill and the draft Energy Efficiency Bill. Section 85 of the Environmental Protection Act imposes the following penalties:

- On a first conviction, the offender shall be liable to a fine not exceeding MRU 50,000 and to imprisonment for a term not exceeding 2 years;
- On a second or subsequent conviction to a fine not exceeding MRU 100,000 and to imprisonment for a term not exceeding 8 years.

On a number of specified cases, the penalty is even higher (up to MRU 500,000 and imprisonment of up to 12 years).

The draft Energy Efficiency Bill imposes penalties for offences committing under the Act ranging from MRU 50,000 to MRU 20,000.

It is advisable to harmonize the penalties contemplated under the draft Building Control Bill with those foreseen in other Acts such as the two Acts just mentioned. As pointed out above, there are no penalties foreseen in case the Authorized Agent or someone in the project management team contravenes the Act.

All fines prescribe after 24 months of the commission of the offence (art 44).

The draft Act opens the possibility of joint responsibility possible in case of several offenders.

### **Legal guarantees**

Except for the obligation to provide securities when the Authority has ordered the premises to be closed reproduced below, no other guarantees are foreseen in the Building Act.

Section 52 stipulates: "Where the premises have been ordered to be closed, they shall be closed until the owner or occupier has furnished 2 joint securities for the sum of MRU 50,000. The security shall be to the effect that the works or things required to be executed and done in respect of such premises shall be executed or done in strict compliance with any previous notice or order or with any new notice or order from the Authority or Magistrate. If after the reopening the owner/occupier neglects or refuses to comply, the premises shall be closed again and the MRU 50,000 become forfeited to the Authority and the owner or occupier shall be sued for damages, without prejudice to any penalty to which he may be liable for having contravened this Actö.

This is in contrast with the Spanish and French system, where insurance is mandatory to protect against certain risks of damage:

- The Spanish Building Act stipulates a mandatory insurance or surety policy for the builder for a period of one year to cover property damages, which may be replaced by the developer withholding 5 percent of the cost of the contract to cover the property damages caused by defective execution. It furthermore stipulates for buildings used as housing that developers must take out an insurance policy to cover the property damages caused to the building by the failure to comply with habitability conditions or which affect the building's structural safety, for three and ten year terms, respectively.
- French Law stipulates that every person who can be held liable for the 10 year liability period foreseen in the Law in virtue of the liability presumption described per the civil code (as it is the case of the agents involved in the construction process) must be covered by an

insurance for the whole period. The builder must also subscribe insurance for property damages.

The Planning Policy Guidance does not contain the obligation to subscribe any insurance either. The draft Land Use Planning and Development Bill, foresees the possibility for the Authority to demand "the payment of security for works to be undertaken under a Permitö as a condition to grant permit. It seems to be therefore at the discretion of the Authority.

There are a number of types of insurance business mentioned under the 2005 Insurance Act that could be relevant to the matter discussed under this section:

- öEngineering policyö defined as öa contract in terms of which a person, in return for a premium, undertakes to provide policy benefits where an event contemplated in the contract as a risk relating to (among others) the erection of buildings or other structures or the undertaking of other worksö.
- öLiability Policyö defined as öa contract in terms of which a person, in return of a premium, undertakes to provide policy benefits where an event, contemplated in the contract as a risk to the incurring of liability otherwise than as part of a policy relating to a risk more specifically contemplated in another definition of this section, occursö.
- öProperty Policyö means a contract in which a person, in return for a premium, undertakes to provide policy benefits where an event, contemplated in the contract as a risk other than a risk more specifically contemplated in another definition under this section relating to the use, ownership, loss of or damage to movable or immovable property occursö.

The relevant insurance policies are therefore contemplated under Mauritan Law. The issue will nevertheless need to be explored further, should the stakeholders decide to introduce clauses in the new Bill related to mandatory insurance.

### **Powers of the competent Authority in case of non compliance with the Bill**

- The Authority can at any stage of the construction, issue a stop order upon recommendation of the Authorized agent, of a building, where it is deemed necessary for public safety and/or construction works are not being carried out according to plans submitted for building and land use permit and approved by the authority and/or amended plans amended resubmitted and approved by the Authority.
- If the owner or occupier of a building fails to comply with a written order from the Authority imposing conditions with respect of safety and ventilation of the building, the authority may order the building to be closed or the erection to be stopped.

Two remarks can be made on this section:

- As pointed out above, minimum requirements for safety and ventilation are already mentioned under paragraph 2.
- The section applies to existing buildings and to new constructions. This happens also in other sections but not in all, introducing confusion. There is a need to reconsider whether provisions regarding existing buildings should also be covered in this Act. In principle, it is in contradiction with the definition of "buildingö given under section 3 and described above.

- If a person allows a building to be used, inhabited or occupied before it obtains the certificate of occupancy, the Authority has the right to close the building.
- When a structure, certified by an architect or engineer is to be in dangerous condition is not repaired or removed as stipulated by the Authority, the Authority may cause the part in dangerous condition to be taken down, removed, repaired or otherwise secured.
- When a house, building, tenement or area has become waste and ruinous, or unsafe and unfit for use and occupation, the authority may apply to a Judge in Chambers for an order for the sale of the house, building, tenement or area. It is stipulated that one of the conditions of the sale shall be that the purchaser shall either pull down, rebuild or repair the house, building or tenement, or make it fit for use and occupation, in the manner and form to the satisfaction of the Authority, and within the time fixed in the said conditions.
- When the owner of an industrial building whereby exhaust fumes are being produced and where a forge, fireplace, oven or furnace is established has been requested by the Authority to erect a proper chimney and fails to do so, the Authority may order the use of the industrial building be discontinued.

### **Appeals**

If Building permit is refused by the Authority, the person may appeal to the appeal to the Town and Country Planning Board within 21 days of the receipt of the notification. The appeal shall be dealt with in accordance with section 7(6) to (8) of the Town and Country Planning Act.

Appeals made against order or notice given by the Authority for the enforcement or execution of the provisions of the Act, (execution of structural works, closing of premises, removal, alteration reconstruction or destruction of any house or building and refusal of license for hazardous buildings) the competent Court is the Magistrate of the district where the premises built or to be built is situated.

When a person is condemned to a fine of MRU 200 or imprisonment, appeal may be made to the Supreme Court.

### **Powers of the Minister to regulate**

The Minister may make such regulations as he deems fit for the purposes of this Act.

### **Other provisions**

There are separate sections with special provisions for dangerous and hazardous buildings.

Many of the provisions from the draft Building Act will be much affected by the draft Land Use Planning and Development Bill. Particularly those related to Permit, Powers from the Authority and other administrative provisions. The Bill, if approved, will repeal and replace the Town and Country Planning Act and the Planning and Development Act and the permitting functions under the Local Government Act, and will provide for a streamlined planning framework in line with the business facilitation process, reduce administrative hurdles with respect to land use planning and development and foster self-compliance measures.

### **4.3 The draft Land Use Planning and Development Bill**

If approved, this Bill will have an important impact in the new Building Control Bill and must therefore be taken into account. The two Bills are very interlinked and therefore it will be necessary to examine both together and make sure there is no contradiction.

The Bill will repeal and replace the Town and Country Planning Act and the Planning and Development Act and the permitting functions under the Local Government Act. Its stated objective is to provide for a streamlined planning framework which would be customer friendly in harmony with the business facilitation process, reduce administrative hurdles with respect to land use planning and development and foster self-compliance measures while endeavoring to maintain the long term integrity and sustainability of the land resources of Mauritius.

Without aiming at being exhaustive, here below are some elements relevant to the Building Control Bill.

The draft Bill provides for the setting up of a Planning and Development Commission, which shall promote and coordinate all aspects of land use planning and development, and of a Department of Land use Planning and Development (DLPD) in the Ministry, which shall be administered by a Director of Planning. The DLPD is in charge of preparing planning policy guidance on any aspect of land use planning and development and on its relationship to, and impact on, the environment, and economic and social development.

It is stipulated that no development shall be undertaken unless the developer of the land on which the development is to take place, has obtained a Permit. This includes Building Permits. The Monitoring Committee, which processes and decides on Permit applications, must make sure that the application for new building is in compliance with the Building Act. The Authority may decide to attach conditions to the Permit. It is interesting to mention that among the conditions that the draft Bill mentions that can be attached to a Permit are: the design of, and the materials to be used in, any construction and the payment of security for works to be undertaken under a Permit.

A development must commence within two years after the Permit has been granted and the Permit Authority may serve a completion notice if a person has began a development but has not finalized within three years. The draft Bill however excludes specifically issuing completion notice with respect to a residential development comprising a single dwelling house, or an alteration or extension to an existing single dwelling house.

It is also stipulated that no person shall commence occupation or use of a new building in respect of which a Permit has been granted unless a compliance certificate (so this differs from the clearance certificate foreseen under the current draft Building Control Act) has been issued in relation to the building or part of it. The Authority may issue the compliance certificate when it is satisfied that:

- the specified building or subdivision has been completed in accordance with specified plans and specifications;
- the conditions of the Permit have been duly complied with; and
- all aspects of the development comply with the standards or requirements under this Act or the Building Act.

The Permit Authority may take such measures as may be necessary to comply with this Act and the Building Act, where the building has been unlawfully erected or does not comply with this Land Use Planning and Development Bill. It may also order the owner of a building, or any other person managing the building, to demolish or remove the building where the building when it is erected without a Permit where a Permit is required; or is erected in breach of the Permit, the National Development Strategy, a planning policy guidance, a simplified planning zone scheme or a development plan.

For the purpose of enabling a Permit Authority or the Commission to exercise its functions under this Act, the permit authority may authorize a person in writing to enter such land or premises as it may specify.

Penalties for Offences are higher than in the draft Building Act: It is stipulated öany person who commits an offence shall, on conviction, be liable to a fine not exceeding Rs.100,000 and to imprisonment for a term not exceeding 2 yearsö. Furthermore the Court may, in addition to any penalty, order the pulling down or removal of any building or other form of development at the expense of the offender.

The competent Court for appeals changes to the öEnvironment and Land Use Tribunalö.

#### **4.4 The draft Energy Efficiency Bill**

This draft Bill stipulates the setting up of a new Energy Management Office within the Ministry and regulates its mode of operation and competences.

The main competences as defined in the draft Bill relate to equipments and appliances and energy audits. There is no specific mention of competences regarding energy efficiency in buildings, although there is an öopenö clause stating among its functions ödeal with such other matters as referred to it by the Energy Efficiency Committeeö (which would be the body in charge of administering and managing the Energy Management Office). The draft Bill also stipulates that öan enforcement office appointed by the Director of the Office as such, has the power to enter any premises, other than dwelling houses, for the purposes of carrying out an investigation to verify compliance with this Actö. The Office can also commission energy audits. It can therefore be understood that buildings can be included but this is not completely clear. Section 18 dealing with Energy Audits stipulates thatö a person responsible of an energy consumer shall commission an energy audit conducted by an energy auditor by the date determined by the Directorö. öEnergy consumerö means any prescribed enterprise or activity using energyö and öperson responsible for an energy consumerö means the owner or person having the charge, management and control of an energy consumerö.

There is therefore a degree of ambiguity regarding buildings and dwelling houses, particularly the latter. It is also not clear whether the enforcement officer could enter into an apartment block with common installations for all the dwellings in order to check them.

The ambiguity in the draft Energy Efficiency Bill contrasts with the clarity in the 2009-2025 Long Term Energy Strategy, which defines the Energy Management Office as öa nodal agency for a systematic and comprehensive development mad implementation of energy efficiency measures including assessment of energy consumption, formulation of strategy and enforcement of regulation

for product labeling and new building codesö. It also states under the section 6.2 on Energy Audits that öthe new Energy Efficiency Legislation will, inter alia, make energy auditing for designated consumers/sectors mandatory, regulate the standards of energy auditing, allow for the import of energy efficiency appliances, improve standards of energy utilization in buildings and promote awareness and education to the public. The Long Term Energy Strategy is therefore very clear regarding the role of the Energy Management Office in ensuring compliance with minimum energy performance requirements for buildings.

It is therefore advisable to make this clear in the new Building Control Bill. While the Local Authorities will responsible for the compliance with the minimum energy efficiency requirements as long as the building is not finished, the Energy Management Office should be responsible for it once the building is in finalized and occupied. It will be important to define the precise moment when the responsibility is shifted. One additional point is that the powers of the öenforcement officerö as defined in the draft Energy Efficiency Bill relate to ensuring compliance with the Energy Efficiency Bill. However, minimum Energy Performance requirements for new Buildings will emanate from the future Building Control Bill and most likely be included in Policy Planning Guidelines (as described by the 2009-2025 Long Term Energy Strategy).

Additional items that could introduce ambiguity regarding new buildings are related to some of the functions of the Energy Management Office contain in section 6 of the draft Bill are (c) issue guidelines for energy efficiency in all sectors of the economy; and (f) establish energy consumption standards. The future Building Control Bill that will stipulate minimum energy performance requirements for new buildings will be competence of the Ministry of Public Infrastructure, while the Energy Efficiency Bill will be responsibility of the Ministry responsible for Energy Efficiency. There is therefore a need for coordination. According to preliminary discussions with stakeholders, the precise division of competence and coordination mechanisms appear to be clear in the mind of the concerned stakeholders, but it would be advisable to avoid ambiguity in the respective Bills.

#### **4.5 The Environmental Protection Act**

As far as building are concerned, the Environmental protection Act of 2002 makes it compulsory to obtain:

- a) approval for a Preliminary Environmental Report for housing projects and apartments of between 20 and 50 units and for inland hotel;
- b) environmental license (after performance of an Environmental Impact Assessment -EIA) for housing projects of above 50 units and for coastal hotels. These must be attached to the demand for permit.

It can be assumed that the environmental report or environmental impact assessment will also cover energy aspects at least as far as compliance with specific legislation related to environmental aspects is concerned.

The Environmental Act seems to follow the same principle as the Building Act of putting the responsibility of the veracity of the EIA or environmental report on the proposer of the development rather than on the consultants signing it. As already pointed out, the Act foreseen far stricter penalties than those proposed under the draft Building Act.

#### **4.6 The Electricity Bill and the Utility Regulatory Authority Bill**

The Electricity Bill regulates the provision of electricity services including generation, transmission and distribution. These activities are subject to license from the Utility Regulatory Authority as defined per the Utility Regulatory Authority Bill. Certain provisions in the Electricity Bill provide for taking energy efficiency into consideration, providing the basis for regulating energy efficiency on the supply side, in complement to (future) provisions in the Building Act and Codes, which will provide for the regulation of energy efficiency on the demand side.

The Electricity Bill stipulates that the Authority must consider, among other factors, the efficiency of the electricity service and the conservation of resources, as well as the impact on environment after consultation with the Department of Environment. The licensee on his side also has the responsibility to maintain any installation, apparatus or premises relating to his license in such conditions as to enable it to provide safe, adequate and efficient electricity service. It also has the duty to install an accurate meter for the purposes of recording the consumption of the customer. The collection of payment from the customer must be in accordance with the metering, billing and collection procedures.

The Utility Regulatory Authority has the task of drawing up, after consultation with the licensees and other interested parties, standards and codes in respect of quality, reliability, efficiency and economy of electricity service supplied by a licensee. These codes shall be binding on the licensee.

Among the principles for tariff determination, the Authority must ensure that a) the tariff contributes to conservation and efficient use of electricity, b) phases out or reduces cross-subsidies between different categories of customers and c) provides for subsidized charges or other financial assistance for certain categories of customers.

Principle mentioned under c), appears in contradiction with a) and b). Although understandable for social reasons and in line with the provisions for a universal service fund as defined in the Utility Regulatory Bill, subsidizing energy prices usually discourages its efficient use and should be to the largest possible extent avoided as it makes energy efficient investment uneconomic.

#### **4.7 Import tariffs for energy efficiency equipment**

There are no special provisions for reduced import tariffs for energy efficiency equipment or insulation materials in Mauritius. The general rule of 15% VAT applies, and certain items are taxed custom duties on a rate depending on their origin. The Annex contains a table provided by the Mauritius Chamber of Commerce and Industry on import duties and VAT levied on building materials and another table on import duties and VAT levied on appliance. It can be observed that for appliances there is no distinction based on their efficiency either. Only certain medical appliances have a VAT exemption.

Reunion Island applies certain tax reductions to some equipment, but many of these reductions are adapted to the climatic conditions of France than to Reunion Island. Some are nevertheless interesting:

- 50% import duty reduction for:
  - Solar water heaters;

- PV panels;
  - Heat or hot water produced through biomass;
  - Geothermal heat pumps.
- 25% for equipments of recovery and treatment of rain water;
- 40% or 25% (depending on the year of construction of the rooms) import duty reduction for materials for thermal insulation. But, according to some stakeholders, the technical conditions imposed on the material are very strict and not adapted to the climate in Reunion.

Therefore to be effective any reduction on import duty to be proposed should be based on technical requirements adapted to the climatic conditions and regulations and standards applicable to Mauritius.

#### **4.8 The occupational Health and Safety Bill**

This Bill regulates minimum health and Safety conditions for employees at the work place. Among other health and safety requirements, it contains minimum requirements regarding ventilation, temperature and lighting. The Bill stipulates:

- Effective and suitable provision shall be made for securing and maintaining the adequate ventilation of every workroom by the circulation of fresh or artificially purified air of suitable temperature and relative humidity and for rendering harmless, so far as is practicable, all impurities generated in the course of any process or work carried on in the workroom as may be injurious to health;
- Effective and suitable provision shall be made for securing and maintaining a comfortable temperature inside every workroom;
- Effective provision shall be made for securing and maintaining sufficient and suitable lighting, whether natural or artificial, in every part of a place of work in which persons are working or passing.

There are also special requirements regarding the safety of the machinery and other equipment, including steam boilers.

There is no specific mention of energy efficiency provisions, but these would be nevertheless applicable as the person who intends to construct a factory or a building appurtenant to a factory must obtain a Factory Building Permit from the Permanent Secretary of the Ministry to which responsibility for the subject of occupational safety and health. This has relevance for the Building Control Bill, where the competence to grant a Building Permit belongs to the Local Authorities.

The section on Offences can serve as inspiration for the future Building Control Bill, as it considers making a false statement an Offence by stipulating that if a person who knowingly or recklessly makes a false statement in purported compliance with a requirement to furnish any information imposed by or under this Act or for the purpose of obtaining the issue to himself or another person a document under this Act shall commit an Offence.

It is also stipulated that a registered professional engineer registered as machinery inspector shall commit an Offence if he is required to make an examination of a steam boiler, a steam receiver or a machinery fails to make a thorough examination, or makes a report which is false, deficient or misleading in a material particular. The penalty foreseen for this offence is of MRU 75,000 and one year of prison. Furthermore, the Permanent Secretary may remove him from the register of boiler inspectors.

#### **4.9 The Rivers and Canals Act**

This Act dates from 1863 and it is divided in two parts: 1) Rivers and streams and 2) canals.

Rivers and streams are declared as public property. The Act regulates the right to draw water from rivers and streams as well as the servitudes from adjacent land. Buildings (among others such as gardens, yards, and fences) are excluded from these servitudes. The Act also forbids the erection of buildings within 100 feet of any river or stream.

Canals on the other hand are declared as private property of the individuals who have the right to them, and the Act regulates the use of their water and their management.

The Building Control Bill will regulate the building works process. The Rivers and Canals Act has no direct impact in this Bill, as the provisions related to for instance location of buildings at a certain distance from rivers should be regulated under the Land Use Planning and Development Act. The Rivers and Streams Act therefore needs to be therefore analyzed closely in relation to the Land Use Planning and Development Bill (if it has not been done already) and be updated accordingly. This falls out of the scope of the present consultancy. Nonetheless, some provisions that at first sight can be identified by the consultant as in need of update are those related to the Offences and Penalties and those related to the jurisdiction.

#### **4.10 The Forest and Reserves Act**

This Act dates from 1983 and regulates the management of forests and nature reserves, as well as the construction in those reserves. As with the previous Act, the Land Use Planning and Development Bill is likely to have more implications for this Act than the Building Control Bill, and vice versa.

#### **4.11 The Registered Professional Engineers Council Act**

This Act dates from 1966 and regulates the practice of Engineering in Mauritius. Practice of Engineering is defined as:

the advising on, the reporting on, the designing or the approval of designs of all public utilities, industrial works, railways, tramways, bridges, tunnels, highways, roads, canals, harbor works, lighthouses, rivers, improvements, wet docks, floating docks, dredges, cranes, drainage works, irrigation works, water works, water purification plants, sewage works, sewage disposal works, incinerators, hydraulic works, power transmission systems, steels, concrete and reinforced concrete structures, electric lightning systems, electric machinery, electric apparatus, electric communications systems and equipment, mineral property, mining machinery, mining development, mining operations, gas and oil developments, smelters, refineries, metallurgical machinery and equipment; and apparatus for carrying out such operations, machinery, boilers and their auxiliary equipment, steam engines, hydraulic

turbines, pumps, internal combustion engines and other mechanical structures, chemical and metallurgical machinery, apparatus and processes, and aircraft and generally all other engineering works, including the engineering works and installations relating to airports, airfields and landing strips and relating to town, country and community planning.

Although the definition is open and therefore is not excluded, there is no specific mention to building works. It may be advisable to include this, particularly given the fact that Local Authorities in Mauritius usually do not have architects among their staff and need to use engineers in certain instances (example, for declaration of dangerous buildings). This would facilitate their recognition by the Magistrate as legal witness and the Local Authority cannot have an architect.

The Act also establishes the Council of Professional Engineers and regulates its mode of operation. It also stipulates the establishment of a register of professional engineers which should contain the engineers approved by the Council. The minimum qualifications and experience (2 years) to become registered are also stipulated as well as reasons for de-registration, which are:

- a) Death;
- b) To be provided with a guardian or curator under the Code Napoleon or to be deemed under such sentence as provided in section 45 of the Lunacy Act;
- c) To be convicted under criminal offence which renders him to be unfit to practice on the opinion of the Council;
- d) To be, after due inquiry, adjudged by the Council to have been guilty in his professional capacity of infamous conduct, gross negligence or incompetence;
- e) To have obtained the registration by fraud or misrepresentation.

It would be advisable to add a paragraph mentioning any contravention of the Building Control Act as a cause for de-registration. The Act seems to leave de-registration at the discretion of the Council (for instance in the case of criminal offence). This should perhaps be reconsidered.

Some provisions in the Act (to mention just some examples the level of penalties or the minimum qualification for registration) seem to be outdated and the consultant advises for a reconsideration of some of the provisions. The update of this Act is however out of the scope of the present consultancy.

#### **4.12 The Registered Professional Architects Council Act**

The current Act dates from 1988 and is currently being revised. The new draft had not been made available to the consultant at the time of writing and so the present report only contains an analysis of the current Act.

The Act establishes a Professional Architects Council and regulates its composition. Its operation is further regulated by its 1990 Rules.

The Act also stipulates the establishment of a register of professional architects. The Act regulates the minimum qualification and experience (1 year) to be in the register. Possible causes for de-registration are the same as those mentioned as causes for de-registration of engineers. Again, there seems to be a need to update these causes and at least to add contravention of the Building Control Act. As in the Professional Engineers Council Act, the decision seems to be left at the discretion of the Council. The same comment applies.

The Act furthermore allows for licensed architects who are persons who does not hold any formal qualification in architecture but are authorised by the Council to practise architecture. Given the safety concerns attached to building works, this should be reconsidered.

The definition of building given by this Act needs to be reconsidered as well as any building or building complex the total floor area of which exceeds 250 square metres.

It has been recognized that the Act is outdated and is currently under revision. As mentioned above, the consultant has not seen the new draft and can therefore at present not comment on it.

Neither the Professional Engineers Council Act nor the Professional Architects Council Act stipulate the obligation for engineers or architects respectively to hold insurance policy for liabilities in which they may incur in the exercise of their profession. This contrasts with legislation in European countries.

#### **4.13 The Business Facilitation Act 2006**

This Act unified the Land Use permit and the Building Permit into one Permit (Building and Land Use Permit) and simplified and speeded up the procedures. Its provisions in this regard have been commented under the chapter on the current Building Act (see 4.1). Its main principles have been reincorporated (with a few modifications) in the new Land Use Planning and Development Bill, and so the Act will have to be amended accordingly. This has been commented under the chapter of analysis to the Land Use Planning and Development Bill (see 4.3).

### **5 Recommendations on the way forward for the drafting of the Building Control Bill**

The first step will be to harmonize the current draft with the draft Land Use Planning and Development Act, if this is likely to be approved without major changes. The new Bill will have a considerable impact in many of the administrative provisions and will solve some of the issues pointed in the analysis above.

The definition of building needs to be harmonized or at least reconsidered. There is a need to define what exactly means extensive for extensive alterations needing Permit. There is also a need to reconsider whether the Building Control Bill will cover only new buildings or will continue covering, in some cases, existing buildings. This is for instance the case in the current Act for safety requirements or for the provisions under hazardous and dangerous buildings. If they are not to be covered here there is a need to decide where they should be.

The stakeholders consulted have reported problems faced by the Local Authorities regarding the enforcement of the compliance. The solution can only lie in a reinforcement of their capacities (both financial and in terms of human resources) but the Building Control Bill can help facilitating compliance by:

- Introducing more severe penalties, at least to the level of those contemplated in the Environmental Protection Bill, in the draft Energy Efficiency Act or in the draft Land Use Planning and Development Act;

- Regulating also penalties for non compliance for the other agents involved in the construction process and defining their liabilities and responsibilities. This should include the developer, the design team (including the draughtsman if he signs the plan), the authorized agent, the project management team and the builder;
- There is a need to reconsidered the minimum professional requirements that each of the agents must hold;
- The introduction of legal guarantees needs to be considered;
- The powers of control and enforcement from the Energy Management Office need to be made clear, as well as the division of roles and competences between the Office, the Local Authorities and the Ministry of Public Infrastructure.

As pointed out above, some aspects are repeated in several articles of the current draft Building Act. There is a need to rationalize this and specify which aspects must be regulated further by the Ministry. These are at least partly mentioned in the draft Land Use Planning and Development Act.

The aspects covered under the minimum technical requirements, including those related to energy efficiency, need to be regulated further by regulations or guidance issued by the Minister.

Finally, there is a need to ensure that all the other related Acts are not contradicted by the new Building Control Bill and that common provisions are harmonized.

## 6 Annex

**Table I: Import duties and VAT applied to building material**

HSCode	Description	Unit	VAT	Custom Duty	Excise Duty	Free/Preferential Trade Agreements					
						<u>Comesa</u> <u>Group I</u>	<u>Comesa</u> <u>Group II</u>	<u>IOC</u>	<u>SADC</u>	<u>Pakistan</u>	<u>Agency</u>
25151110	Marble, travertine, ecaussine and other calcareous monumental or building stone of an apparent specific gravity of 2.5 or more, and alabaster, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (inc	kg	15	0		0	0	0	0	0	
25152000	Marble, travertine, ecaussine and other calcareous monumental or building stone of an apparent specific gravity of 2.5 or more, and alabaster, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (inc	kg	15	0		0	0	0	0	0	
68101100	Building block,brick of cement/concrete/artifici	kg	15	15		0	1.5	0	15	15	
69041000	Building bricks of ceramic	1000U	15	0		0	0	0	0	0	
76109020	Aluminium structures (excluding prefabricated	kg	15	0		0	0	0	0	0	

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	buildings of heading 94.06) and parts of structures (for example, bridges and bridge- sections, towers, lattice masts, roofs, roofing frameworks, doors and windows and their frames and thresholds for doors, bal									
84791000	Machinery for public works, building/like having	U	15	0		0	0	0	0	0
94060000	Prefabricated buildings	kg	15	0		0	0	0	0	0

**Table II: Import duties and VAT applied to appliances**

HSCode	Description	Unit	VAT	Custom Duty	Excise Duty	Free/Preferential Trade Agreements					Agency
						<u>Comesa Group I</u>	<u>Comesa Group II</u>	<u>IOC</u>	<u>SADC</u>	<u>Pakistan</u>	
30069100	Appliances identifiable for ostomy use	kg	0	0		0	0	0	0	0	IMP+MOH
73211100	Cooking appliances, plate warmers, for gas fuel,	U	15	0		0	0	0	0	0	
73211200	Cooking appliances, plate warmers, for liquid fu	U	15	0		0	0	0	0	0	
73211900	Other Cooking appliances and plate warmers:, inc	U	15	0		0	0	0	0	0	
73218100	Other appliances, for gas fuel or both gas and o	U	15	0		0	0	0	0	0	
73218200	Other appliances, for liquid fuel of iron or ste	U	15	0		0	0	0	0	0	
73218900	Other appliances:, including Appliances for sol	U	15	0		0	0	0	0	0	

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82100000	Hand-operated mechanical appliances, weighing 10	kg	15	0		0	0	0	0	0	
84163000	Mechanical stokers/grates/ash-dischargers and similar appliances	kg	15	0		0	0	0	0	0	
84242000	Spray guns and similar appliances	U	15	0		0	0	0	0	0	
84818090	Other taps, cocks, and similar appliances for pi	kg	15	0		0	0	0	0	0	
84819000	Parts of valves and similar appliances of 8481	kg	15	0		0	0	0	0	0	
85098000	Electro-mechanical domestic appliances,excl 8509	U	15	0		0	0	0	0	0	
85099000	Parts for electro-mechanical domestic appliances	kg	15	0		0	0	0	0	0	
85103000	Hair-removing appliances electric	U	15	15		0	1.5	0	0	15	
85167990	Electro-thermic domestic appliances, excl 851631	U	15	0		0	0	0	0	0	
85169000	Parts of appliances of 8516	kg	15	0		0	0	0	0	0	
90138000	Optical devices, appliances and instruments, exc	U	15	0		0	0	0	0	0	
90184900	Instruments and appliances used in dental scienc	U	EXM	0		0	0	0	0	0	
90185000	Ophthalmic instruments and appliances	kg	EXM	0		0	0	0	0	0	
90191050	Mechano-therapy appliances, psychological aptitude-testing appa	kg	EXM	0		0	0	0	0	0	

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90211000	Orthopaedic or fracture appliances	kg	EXM	0		0	0	0	0	0	
90241000	Machines/appliances for testing the hardness, strength etc of metals	U	15	0		0	0	0	0	0	
90248000	Machines/appliances for testing hardness etc of	U	15	0		0	0	0	0	0	
90318000	Instruments, appliances and machines for measuri	U	15	0		0	0	0	0	0	