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**Analysis of the Portuguese building regulation system** 

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**Abstract** 

The Portuguese building regulation system of has undergone significant changes in the last 20 years. Almost all building regulations presently in force were approved during that period. Some of those building regulations resulted from the transposition of European Directives. Other building regulations were changed due to improvements in the scientific knowledge. The changes in the building control system were mainly driven by an adaptation to more pressing circumstances of practice. The lack of municipal technicians and the need to abbreviate procedure times were two determinant circumstances. The solution was to reduce public building control and make private parties responsible for complying with the building regulations.

This paper analyses the Portuguese system of building regulation. The organization, content and authorities responsible for the building regulations are described. Regarding the building control system, an overview is provided of the main stages of the building permit procedure. For each subject the legal documents and the opinions expressed in written documents by professional associations of the construction sector are analysed.

The conclusion is that, although there was a positive evolution in the last years, two structural problems persist: the building regulations are complex and disperse, and the qualifications of technicians involved in construction works are not clearly established. Other shortcomings of the system are also pointed out. Drawing on these conclusions, some proposals to improve Portuguese building regulation system are summarized.

The research is embedded in a European comparative research project that is currently being carried out at OTB.

Keywords: Building regulations, Building control system, Portugal

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#### 1. Introduction

The construction sector is strategically important for all countries. It provides building and infrastructure on which modern living depends, having great impact on the safety and health of people. The sector has significant social and economic relevance, since it is an important generator of employment, induces development in other economic sectors and investments have a multiplying effect. Construction activities and sustainable development are closely related, as construction uses significant quantities of raw materials and the operation of the built environment accounts for an important consumption of natural resources.

Therefore, a well organized building regulation system is of most importance. The building regulation system encloses the building regulations and the building control system. The building regulations set baseline regulatory standards to ensure that buildings are safe, healthy, energy efficient and accessible for everyone who lives and works in and around them. The building control system is the system through which these standards are applied and enforced (CLG, 2008).

This paper describes the Portuguese building regulation system. The purpose is to provide a general overview, highlight the main proposals of change and identify the main weaknesses. To pursue these goals the following activities were carried out: an analysis of the main building regulations and their enforcement, to provide a description of the Portuguese situation; and, a review of the appraisals issued by professional associations of the construction sector, in order to explore the subjects under public debate. On the basis of information collected, the main problems of the Portuguese building regulation system were identified and suggestions of possible improvements were put forward.

The research is embedded in a European comparative research project that is currently being carried out at OTB Research Institute for Housing, Urban and Mobility Studies (Meijer and Visscher, 2008). The project is divided in two phases. In the first phase (2007-2008), the aim is to describe the building regulation system in 35 European countries. For each country a monograph is being prepared addressing the following subjects: the position of building regulations within the legislative system of the countries, the scope and contents of the building regulations that regulate the minimum quality level for buildings, the building permit procedures, and the main features of the building control system. In the second phase (2009), a comparison of the information collected will enable to detect trends and developments taking place in the building regulation systems of the European countries.

Following this introductory section, the Portuguese building regulations are described in section 2 and the building control system is presented in section 3. Finally, in section 4 an assessment of the system is presented and some practical actions to improve it are summarized.

#### 2. Building Regulations

#### 2.1 Organization

In Portugal there is no Building Act that forms the legal basis for the building regulations and procedures, and defines of obligations and responsibilities of parties involved. The *General Building Regulations*<sup>1</sup> is the main national building regulation, setting general provisions for building, regarding construction, health, safety and aesthetics. It is in force since 1951 and, although several small amendments, no fundamental revision has been approved. In addition, there are more than 45 national building regulations and other regulatory documents that focus on specific requirements. Most of these were approved in the last two decades and some of them resulted from the transposition of European Directives<sup>2</sup>.

In addition there are other national regulations with construction and/or operational provisions for different types of buildings, which have to be observed to ensure that the building can be used for the intended purpose. For example, social housing, nurseries, elderly homes and stadiums have to comply with specific regulations.

In the continental territory there are no building regulations at the regional level. However, the two autonomous regions of Azores and Madeira can approve regional regulations and have the competence to adapt the building regulations approved by the Central Government to the local circumstances. The municipalities can approve building regulations, complementary to national ones, to regulate subjects of municipal competence or local traditions and uses.

As a result, the Portuguese building regulations are complex and disperse. The Architects Association, (2006a) described the building regulations as chaotic, claming that they are spread in about one thousand legal documents. These characteristics make it difficult to have a comprehensive knowledge of the building regulations and to apply them, particularly in design. Architects and engineers show particular concern with the situation since they are responsible for designs compliance with the building regulations.

<sup>&</sup>lt;sup>1</sup> Decree-Law 38382 Portuguese Official Journal (POJ) 7 August 1951.

<sup>&</sup>lt;sup>2</sup> Council Directive 95/16/EC of 29 June on the approximation of the laws of the Member States relating to lifts JO L 213 of 7 September 1995, Council Directive 2002/49/EC of 25 June relating to the assessment and management of environmental noise JO L 189/12 of 18 July 2002, Council Directive 2002/91/EC of 16 December on the energy performance of buildings JO L 1/65 of 4 January 2003.

It is consensual among politicians and technicians, that the *General Building Regulations* is outdated and needs an urgent revision<sup>3</sup> (Engineers Association, 2006). However, the proposal of 2006 to review this regulation was severally criticized by both Architects and Engineers Associations. Rather than a simple review of the regulation, a complete reorganization of the system was demanded. According to the Architects Association (2006a), to improve the building regulations: a main act should set the main goals for constructions, one coherent document should group main technical building regulations, and the *General Building Regulations* should be revised to fit in this model. After the negative appraisals to the 2006 proposal no further developments became of public knowledge.

#### 2.2 Formulation

Some recently published building regulations are performance based<sup>4</sup>, but most existing ones adopt a prescriptive formulation. It is expected that in the near future more performance based regulations will be approved.

There are no official documents with deemed to satisfy solutions. The National Standards are not part of the building regulations and are not accessible free of charge. Some building regulations make direct reference to specific National Standards that are mandatory.

A Resolution of the Council of Ministries<sup>5</sup> states that, whenever possible, building regulations should establish general principles and standards should enclose detailed information. However, the last proposal to review the *General Building Regulations* was criticized for being too prescriptive (Architects Association, 2006a; Engineers Association, 2006).

#### 2.3 Authorities responsible

Each ministry takes the initiative to developed national building regulations within its attributions, separately or with other ministries. The *Ministry for Public Works, Transport and Communications* and the *Ministry of Economy* were involved in the preparation of most of the national building regulations. Several other ministries also participated or promoted the approval of national building

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<sup>&</sup>lt;sup>3</sup> Ministerial Order 62/2003 [Terminates the sub-commission for buildings and creates the sub-commission to review the General Building Regulations] POJ 16 January.

<sup>&</sup>lt;sup>4</sup> Law 80/2006 [Regulation of the thermal behaviour characteristics of buildings] POJ 4 April, Decree-law 9/2007 [General regulation on noise] POJ 17 February.

<sup>&</sup>lt;sup>5</sup> Resolution of the Council of Ministries 91/86 [Technical characteristics of the products – New approach regarding technical harmonization and normalization] POJ 26 December.

regulations. Since 2007, the *Institute for Construction and Real Estate* (InCI) is responsible for the coordination of the national building regulations.

Regional regulations are approved by the regional assembly. Municipal regulations are approved by the municipal council. These regulations have a period of public discussion before their approval, but are not subjected to review or approval by the national authorities.

During the last years the approval of several new building regulations by different authorities prevented an improvement of the building regulations organization and compatibility. For the future, there is a general understanding that an effort should be made to improve the system, but is difficult to predict when that development may occur. In fact, there is a possibility that the present situation will persist due to the still reduced activity of the InCI in this field, the increase of municipal regulations, and the attribution of regulatory competences to several authorities dependant of different ministries (Paiva, 2007).

Governmental proposals to review the building regulations encounter recurrent critics (Ad Urbem, 2007; Architects Association, 2006a, 2007a): no studies about the construction sector are presented to justify the changes; the proposals are developed without the participation of important stakeholders of the construction sector; and, the proposals are unveiled short before their approval, giving little opportunity for public debate and eventual improvement. The consequences of this approach are that the approval of some proposals is postponed indefinitely, or when approved some building regulations cause difficulties of application and need extensive amendments. For the Architects Association (2006a) the main building regulations should be developed by a platform opened to all stakeholders in the construction sector and effective ways to ensure citizens participation and public debate should be pursued.

#### 2.4 Requirements for existing buildings

The constructions built under a former regulatory framework do not have to comply with supervening building regulations. Therefore a building permit or a building notice for works of reconstruction or alteration of existing buildings can not be denied based on regulations approved after the original construction, if those works do not create or aggravate a disconformity with present regulations<sup>6</sup>. This general principle is not observed if the building regulations explicitly set additional conditions for activities to occur in certain buildings (even if they are already taking place), or request construction works to assure safety and health in existing building.

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<sup>&</sup>lt;sup>6</sup> Decree-Law 555/99 [Legal framework for urban development and construction works] POJ 16 December.

Most building regulations apply to new construction with one exception. A Ministerial Order sets minimum conditions of habitability that derogate certain specifications of the *General Building Regulations* in reconversion processes of existing illegal urban areas<sup>7</sup>.

There are no building regulations specific for renovation works of existing buildings, yet renovation of the building stock is presently one of the governmental priorities to improve citizens' life quality (PCM, 2005). Approximately 25% of the buildings were built before the approval of *General Building Regulations* in 1951, and consequently most of them have habitability conditions bellow what is presently mandatory (INE, 2001). To impose the compliance with the present building regulations in the renovation of these buildings would be impractical or require extensive demolition and reconstructions. Though, minimum habitability conditions must be ensured to all buildings, especially when renovation works are carried out. Therefore, absolute minimum habitability requirements for renovation works should be defined. The proposal of the Engineers Association (2006) is that the quality level required in renovation works should depend on their extension, considering both complexity and cost.

#### 3. Building control system

#### 3.1 Development

The present building control system was the result of a natural evolution driven by an adaptation to more pressing circumstances of practice, rather than based on a carefully designed and discussed overall plan.

In the seventies, the plan approval usually took too long because in some municipalities there were not enough qualified municipal technicians to cope with the amount of applications. In addition, a technical verification of a design would imply that the responsibility of the designer was transferred or extended to the entity or technician that approved it. The solution adopted by the legislator<sup>8</sup> was to reduce the municipal control during plan approval and to make designers responsible for complying with the building regulations. The municipal control was exerted during construction in regular site inspections or before issuing the occupancy permit.

<sup>8</sup> Decree-Law 166/70 [Reforms the building permit procedure of private construction works] POJ 15 April.

<sup>&</sup>lt;sup>7</sup> Decree-Law 243/84 [Minimal habitability conditions for illegal construction] POJ 17 April.

The *legal framework for construction works* of 1991<sup>9</sup> aimed at simplifying the building permit procedure. It became possible to submit a voluntary pre-consultation, a system to certify designs' compliance with building regulations by private building inspectors was created<sup>10</sup>, and the professional liability insurance for designers and contractors was made mandatory<sup>11</sup>. However, the last two changes were not put into practice.

Eight years after, a new *legal framework for construction works*<sup>12</sup> was approved with the aim of simplifying the building permit procedure even further. The main changes were the creation of a building notice procedure and the possibility to issue a partial building permit for the construction of the structure before the final plan approval. At least one site inspection to all construction works was mandatory before issuing the occupancy permit. The roles and responsibilities of the parties stayed unchanged.

In 2007 significant amendments were introduced to the legal framework of 1999<sup>13</sup>. Private building inspectors and designers were made responsible for assuring the compliance of construction works with building regulations and approved designs. Site inspections by the municipalities are no longer mandatory. The sanctions for non compliance were increased.

#### 3.2 Types of procedures

According to their category, construction works can be exempt from building permit procedures, require a building notice or go through a regular procedure.

Are exempt from building permit procedures construction works: for conservation, inside the buildings or their fractions (without modifying the structure, façade or roof), with small urban relevance, and promoted by public authorities.

The building notice applies to<sup>14</sup>: reconstruction with preservations of the facades; new construction, modification or enlargement works inside an area with local development plan or a consolidated urban

<sup>13</sup> Law 60/2007 [Sixth amendment to the Decree-Law 555/99, 16 December]. POJ 4 September 2007.

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<sup>&</sup>lt;sup>9</sup> Decree-Law 445/91 [Amendment of legal framework for building permit procedures of private construction works] POJ 20 November.

<sup>&</sup>lt;sup>10</sup> Decree-Law 83/94 [Certificate of design conformity for construction works that require plan approval] POJ 14 Marc.

<sup>&</sup>lt;sup>11</sup> Regulatory Decree 11/92 [Liability insurance for designers in building permit procedures of private construction works] POJ 16 May.

<sup>&</sup>lt;sup>12</sup> Decree-Law 555/99 (n 6).

<sup>&</sup>lt;sup>14</sup> Decree-Law 555/99 (n 6) Art 4 and 6.

area; swimming pools related to a main building; and changes in building use. In a building notice an authorization is given after the administrative aspects of the notification and the technical aspects of architectural design are checked. The submission demands are similar to a regular procedure, but the procedure times are shorter since construction parameters and rules are established.

The regular procedure applies to the remaining construction works, as well as all interventions on listed buildings and inside their protection zones<sup>15</sup>. In this procedure a building permit is issued after the administrative aspects of the request and the technical aspects of architectural design are checked.

During the last years the trend has been to shift some types of building works from the regular procedure to building notice and from the building notice to exempt of building permit. The exemption of some building works is not consensual. For instance, the Portuguese Federation of the Construction Industry (2008) asked the legislator to reconsider the exemption of changes inside the buildings or their fractions. For this Federation there is the risk of construction works being done without technical support from designers and by contractors without proper capability.

#### 3.3 Design

For private construction works, the phases, outputs and payment to develop a design depend on the agreement between the developer and the designer. No rules are established by law, but those used for design of public construction works are usually a reference. The absence of rules is understandable since it concerns a private agreement between the developer and the designer. This absence is partially replaced by statutory submission demands.

The requirements regarding the qualifications of designers were established 35 years ago<sup>16</sup>. Two circumstances influenced the definition of these requirements (Engineers Association, 2004): the small number of architects and engineers, and the common practice of having designs developed by other less qualified technicians. As a consequence, the specialization and level of qualification demanded was not high. For instance, an architectural design can be signed by architects, civil engineers, or civil and mining technical engineers. Contractors with professional technical education can also sign simple architectural designs.

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<sup>&</sup>lt;sup>15</sup> Decree-Law 555/99 (n 6) Art 4.

<sup>&</sup>lt;sup>16</sup> Decree 73/73 [Qualification of the technicians responsible for designs of construction works submitted for plan approval] POJ 28 February.

The social-economic framework changed significantly since the approval of the law. This change had considerable influence in the nature and level of the education of the technicians qualified to design: new degrees were created and there was a significant increase in the number of architects and engineers (Engineers, Association 2004; Architects Association, 2005). There is a generalized consensus among the professionals that the law on the requirements of designer's qualifications should be changed. In 2004 the Engineers Association presented a proposal to change it. In 2005 the Architects Association submitted to the Parliament a petition aimed at revoking the law, signed by more than 35,000 citizens.

Attending to the progressive inadequacy of the existing law and the initiatives of the professional associations, the government prepared a proposal of law<sup>17</sup>. This proposal defines the qualifications, obligations and responsibilities for designers and technicians that carry out inspection and management of construction works. The proposal of law received unenthusiastic appraisals from several associations (ANET, 2007; Ad Urbem, 2007; Architects Associations, 2007b; SATAE, 2007). The main motive of dissatisfaction was that some professional corporations had their area of intervention limited. The process for approval stopped and in 2008 a workgroup was constitute in the Parliament to study this subject.

#### 3.4 Pre-consultation

A voluntary pre-consultation to discuss planning and technical requirements can be carried out before a design is submitted<sup>18</sup>. During the pre-consultation phase there can be consultations to external authorities. These consultations remain valid for a period of one year, excusing new consultation in later stages of the procedure. If the result of the pre-consultations is unfavourable, information must be given on how to modify the proposal so as to comply with the planning requirements.

#### 3.5 Submission

There are statutory submission demands established at national level to apply for a building permit<sup>19</sup>. The municipalities can complement the list of demands. For each building permit procedure there is a

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<sup>&</sup>lt;sup>17</sup> Proposal of Law 116/X/2 [Professional qualification required to technicians responsible for developing and signing designs, inspections of construction works and management of construction works] February.

<sup>&</sup>lt;sup>18</sup> Decree-Law 555/99 (n 6) Art 14, 15 and 16.

<sup>&</sup>lt;sup>19</sup> Ministerial Order 232/2008 [Submission demands for requests to carry out construction works foreseen in Law 60/2007, of 4 September] POJ 11 March.

*manager* in the municipal building authority<sup>20</sup>. He accompanies the procedure from start to finish and is responsible for guaranteeing its normal development.

Different levels of implementation of electronic handling have been achieved. In almost all municipalities it is possible to download information and paper forms, and some major municipalities already accept electronic intake and process follow up. A system to handle electronically the building permit procedures is being developed<sup>21</sup>.

#### 3.6 Plan approval

The regular building permit procedure is divided in two phases<sup>22</sup>. In the first phase, the municipality verifies the administrative aspects of the request and assess the architectural design compliance with the urban development plans and the building regulations. Depending on the location and type of the building, other authorities may also be consulted for approval of the architectural design. After the approval of the architectural design, the engineering designs are submitted. In this second phase the municipality makes an administrative verification of the engineering designs and other authorities may also be consulted for technical appraisal. After the construction has begun, a copy of the detailed design (detailed architectural and engineering designs) must be submitted to the municipality.

In a building notice the plan approval procedure is similar to the one described for the regular procedure. However, it is not divided into phases and a detailed design in not required.

The compliance of each design with the applicable building regulations and planning requirements is attested by liability declarations of the designers<sup>23</sup>. The compatibility between designs is attested by a liability declaration of the design coordinator. If it is not possible to comply with all building regulations, designers must also declare which provisions are not fulfilled and justify the reasons. In this case, the parts of the designs that do not comply with some building regulations are thoroughly checked by the municipality to confirm designers' justifications.

The detailed design is submitted after the building permit has been issued and is not subjected to a technical verification<sup>24</sup>. This enables poorly developed detailed designs to be submitted just to

<sup>21</sup> Decree-Law 555/99 (n 6) Art

<sup>&</sup>lt;sup>20</sup> Decree-Law 555/99 (n 6) Art 8.

<sup>&</sup>lt;sup>21</sup> Decree-Law 555/99 (n 6) Art 8-A, Ministerial Order 216-A/2008 [Regulation of the operation of the informatics' system foreseen in Law 60/2007, of 4 September] POJ 3 March.

<sup>&</sup>lt;sup>22</sup> Decree-Law 555/99 (n 6) Art 20.

<sup>&</sup>lt;sup>23</sup> Decree-Law 555/99 (n 6) Art 10.

<sup>&</sup>lt;sup>24</sup> Decree-Law 555/99 (n 6) Art 80.

complete an administrative requirement. The Architects Association (2007b) pointed out that the detailed design is an essential element for the quality of the building work. If the design is not developed until that phase, there is not enough information for the designer to assure the compliance with the building regulations. Furthermore, the detailed design is also important for contractors to manage the construction process, for insurance companies to determine the risk of the investment, and for building control authorities to inspect construction works.

The Architects Association (2006b) considers that a certification system of designs' compliance with building regulations by private building inspectors, similar to the one which failed to be implemented in the nineties, should be resumed. The Engineers Association (2004) suggests the creation of a construction observatory that would keep a national register of designs (including the formation of the team) and would verify, with a sample, the conformity of the designs with the respective liability declarations.

#### 3.7 Objections to construction works

For general knowledge, an announcement must be put at the construction site, visible from the public space, after the application for a building permit or the notification of the building notice<sup>25</sup>. An announcement must also be put at the construction site after a building permit is obtained. This announcement must remain visible until the end of the construction works<sup>26</sup>.

Other parties can object to the intended construction work. During plan approval, the objections are taken into consideration. After plan approval, if other parties consider that their objections were not properly attended, they can appeal to court.

#### 3.8 Commencement of construction work

The construction work can start after a building permit or an authorization to a building notice is obtained<sup>27</sup>. There are two exceptions: a partial building permit can be issue for the construction of the structure immediately after the delivery of the engineering designs<sup>28</sup>; and the demolition or excavation and peripheral contention of the soil until the level of the lower floor can be allowed after the application for a building permit<sup>29</sup>.

<sup>26</sup> Decree-Law 555/99 (n 6) Art 61.

<sup>&</sup>lt;sup>25</sup> Decree-Law 555/99 (n 6) Art 12.

<sup>&</sup>lt;sup>27</sup> Decree-Law 555/99 (n 6) Art 80.

<sup>&</sup>lt;sup>28</sup> Decree-Law 555/99 (n 6) Art 23.

<sup>&</sup>lt;sup>29</sup> Decree-Law 555/99 (n 6) Art 81.

Until five days before the beginning of the construction works, the developer must inform the municipality of his intention, as well as the identity of the *technical director* responsible for the work<sup>30</sup>.

#### 3.9 Quality control

The quality control during construction is assured by<sup>31</sup>: a *private building inspector*, selected by the developer, who guarantees the compliance with the approved design; and a *technical director*, who is an employee of the contractor responsible for the constructions works. The developer should hire the *design coordinator* to give technical assistance in the contest to select the contractor and during construction.

There must be a construction log book at the building site<sup>32</sup>. In this book the *technical director* registers relevant facts about the construction works, such as, beginning, suspension and conclusion of works, as well as, modifications made to the approved design. The *private building inspector* and the *design coordinator* also register their participation in the construction log book.

#### 3.10 Site inspections

Site inspections are not mandatory. The municipality may carry out site inspections, independently of the type of procedure<sup>33</sup>. The site inspections are carried out at random without previous notification of the developer. All aspects of the construction works can be verified during the inspections, including the construction log book.

The municipality has the legal power to stop the construction works when it is executed without a building permit or a building notice, not respecting the approved design, or in violation of the building regulations<sup>34</sup>.

<sup>&</sup>lt;sup>30</sup> Decree-Law 555/99 (n 6) Art 80-A.

<sup>&</sup>lt;sup>31</sup> Decree-Law 555/99 (n 6) Art 63.

<sup>&</sup>lt;sup>32</sup> Decree-Law 555/99 (n 6) Art 97.

<sup>&</sup>lt;sup>33</sup> Decree-Law 555/99 (n 6) Art 93.

<sup>&</sup>lt;sup>34</sup> Decree-Law 555/99 (n 6) Art 102.

#### 3.11 Completion

Prior to occupation, it is mandatory to obtain an occupancy permit<sup>35</sup>. The list of submission demands includes the design with the actually built solutions, the construction log book, and liability declarations by the *design coordinator* and the *private building inspector*<sup>36</sup>. In these declarations the signers state that the construction work was carried out according to the approved design, and, if existing, changes comply with the applicable legal and regulatory requirements.

The occupancy permit is issued by the municipality on the basis of the above mention liability declarations<sup>37</sup>. No site inspection is mandatory. The municipality can decide to carry out an inspection if there are suspicions about the compliance of the construction works with the approved design.

#### 3.12 Procedure times

For a pre-consultation, the maximum procedure time is 20 days if the process does not require consultation of exterior authorities and 70 days if that consultation is required<sup>38</sup>. For a building notice, the maximum procedure times are 20 and 60 days for the same situations<sup>39</sup>. After the maximum procedure time for a building notice expires without a rejection, it is assumed it was accepted<sup>40</sup>.

For a regular procedure, the maximum procedure time is 185 days for common construction works and 225 days for construction works carried out in listed buildings<sup>41</sup>. After the maximum procedure time expires without a municipal deliberation, the developer can appeal to court<sup>42</sup>.

#### 3.13 Professional liability insurance

As stated before, in the nineties the obligation to have professional liability insurance was established and regulated by law, but its implementation was not successful and it became voluntary (Portugal, 1991, 1992). Some designers voluntarily subscribed insurance and some developers request that

<sup>&</sup>lt;sup>35</sup> Decree-Law 555/99 (n 6) Art 62.

<sup>&</sup>lt;sup>36</sup> Decree-Law 555/99 (n 6) Art 63.

<sup>&</sup>lt;sup>37</sup> Decree-Law 555/99 (n 6) Art 64.

<sup>&</sup>lt;sup>38</sup> Decree-Law 555/99 (n 6) Art 26.

<sup>&</sup>lt;sup>39</sup> Decree-Law 555/99 (n 6) Art 36.

<sup>&</sup>lt;sup>40</sup> Decree-Law 555/99 (n 6) Art 36-A.

<sup>&</sup>lt;sup>41</sup> Decree-Law 555/99 (n 6) Art 23.

<sup>&</sup>lt;sup>42</sup> Decree-Law 555/99 (n 6) Art 112.

designers have insurance when hiring them. At the moment, the Architects Association is negotiating a group liability professional insurance for all its members.

#### 3.14 Sanctions

If municipalities detect irregularities in liability declarations, they must inform the professional associations. Technicians that signed those liability declarations might be subjected to a disciplinary procedure by their professional associations. If the gravity of the infraction justifies, municipalities can interdict the technician of working in its territory for a period until four years<sup>43</sup>.

The increase of the sanctions for false declarations was one the changes of the 2007 amendment of the *Legal framework for construction works*<sup>44</sup>. This change was presented as a way to reinforce the responsibility of the technicians. The Architects Association (2007a) suggested the clear definition of obligations and responsibilities rather than the increase of sanctions.

#### 4. Discussion

There is a positive evolution of the Portuguese building regulations. Almost all main subjects are covered with building regulations approved in the last two decades. The more recent building regulations adopt a performance based formulation. The revision of important building regulations is in progress as well as the transposition of the harmonised European standards to national standards. Most municipalities also have up-to-date municipal building regulations.

Although this evolution, one main problem persists: the building regulations are complex and disperse, making it difficult to have a comprehensive knowledge and to apply them. Other problems are: the lack of building regulations specific for existing buildings; an impasse in the process to review the *General Building Regulations*; the attribution of regulatory competences to several authorities dependant of different ministries; and the limited participation and debate of proposals to review the building regulations.

The building control system has also changed significantly along the last years. The simplification of the building permit procedure and the abbreviation of the procedure time were the main aims that guided this change. Several procedural modifications were introduced: a building notice was created, some constructions works changed to a procedure with less municipal control, voluntary pre-

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<sup>&</sup>lt;sup>43</sup> Decree-Law 555/99 (n 6) Art 99.

<sup>44</sup> Law 60/2007 (n 13).

consultation became possible, partial building permit can be issued, statutory submission demands were established, procedure times were shortened, and online handling of procedures is being implemented. Besides these procedural modifications, the roles of the parties involved also changed. The responsibility for verifying plan compliance with building regulations and controlling construction works has shifted from municipalities to private parties. The municipalities still hold the responsibility for granting building and occupancy permits, but besides that have taken mainly a supervision role.

One important reform is undermining the building control system. The qualifications, obligations and responsibilities of technicians involved in construction works are not clearly defined. Furthermore, although technicians take the responsibility for their acts, professional liability insurance is not mandatory. The proposal of law to establish these requirements is in progress, but a delicate balance between the interests of professional corporations has not been reached.

On the basis of the proposals put forward by professional associations and the knowledge acquired in previous and on going European comparative research projects, some suggestions can be drawn to improve the Portuguese building regulations system. Regarding the building regulations, a main act should set the main goals for constructions, one coherent document should group main technical building regulations, performance formulation should be adopted, detailed technical information should be enclosed in standards, and minimum habitability requirements for renovation works of existing buildings should be defined. In what concerns the building control system, only qualified professionals should be able to operate within the system, responsibilities and obligations of professionals should be clearly defined, detailed design should be mandatory to obtain a building permit, and certification of designs compliance with building regulations by private building inspectors should be required for large construction works.

In order to accomplish these reforms a detailed study of how the present Portuguese system is working should be undertaken. The building regulation systems of other countries should also be considered by decision makers, since much can be learned from their experience. Once the legislator has defined the overall model, a debate with the stakeholders should be carried out. This debate should launch the bases to establish a permanent platform opened to all stakeholders in the construction sector where reforms of the system are discussed.

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