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Comparison of tasks and responsibilities in the building control systems of European Union countries

João Branco Pedro^{1&2}, Frits Meijer¹ and Henk Visscher¹

¹OTB Research Institute for Housing, Urban and Mobility Studies,
Delft University of Technology, Jaffalaan 9, 2628 BX Delft,
The Netherlands

²LNEC – National Laboratory for Civil Engineering
Av. do Brasil 101, 1700-066 Lisbon
Portugal

Email: Jpedro@lnec.pt; F.M.Meijer@tudelft.nl; H.J.Visscher@tudelft.nl

Abstract:

Building regulations set minimum requirements for safe, healthy, energy-efficient and accessible buildings. To guarantee that these requirements are applied, a building control system is indispensable. The trend towards a common market for construction products and services justifies gaining better insight into the building control systems in the European Union. This paper presents a comparison of the tasks and responsibilities of public and private parties in the building control systems of the 27 European Union countries. To gather the necessary information, a questionnaire on building regulatory systems was distributed to national experts in each country, and the major legal documents were reviewed. The information was organized in thematic tables that contain all the countries. The themes are as follows: regulatory framework, application, plan approval, site inspection, completion and supervision. The main conclusion is that the building control systems of EU countries have many similarities. Public parties set the regulatory framework, check planning demands, issue building permits, conduct final inspections, grant completion certificates and supervise the system. The main difference concerns the involvement of private parties in checking technical requirements and in site inspections. Three basic types of building control systems were identified: public building control, mixed building control and dual building control. The majority of the countries have mixed systems. Although several variations were found among the mixed systems, the most common situation is for public parties to check the technical requirements and private parties to be involved in site inspections. Additional uniformity among building control systems would help to support a single market for services in the construction industry, in which architects, developers and builders are no longer limited to working within national markets.

Keywords:

Building control system, Comparative study, European Union.

1 Introduction

In every European country, there is a building regulatory system encompassing the building regulations and the building control system. Building regulations set minimum quality requirements to ensure that buildings are safe, healthy, energy-efficient and accessible to everyone who lives and works in and around them. Building control aims to guarantee the application and enforcement of these minimum requirements.

The general characteristics of the building control system in European countries are similar. Designs must be prepared and submitted to an authority that approves its compliance with zoning demands and building regulations. During construction, site inspections guarantee that the structure is built according to design and that it complies with the building regulations. Once construction is complete, a final check is conducted and a completion certificate is issued.

There are many differences between countries regarding procedural aspects of building control, including the following: simplified procedures, categories of construction works included in each type, possibility of phasing, submission requirements, frequency and moment of site inspections, criteria for determining the value of fees and time limits of the procedure. However, the most prominent structural difference concerns the division of tasks and responsibilities between public and private parties. Differences can be explained by the presence of diverse legal and administrative frameworks, socioeconomic conditions and cultural traditions. It is beyond the scope of this research to explore the reasons why these differences exist.

The purpose of this paper is to compare the tasks and responsibilities assigned to public and private parties that enforce the building control systems in the European Union countries. The three research questions addressed are as follows: What are the main differences and similarities between EU countries regarding the tasks and responsibilities of enforcement actors? What are the main types of building control systems? What lessons can be learned from the various building control systems?

The following section justifies the importance of carrying out comparative research on building control systems. Section 3 explains the research methodology and Section 4 presents the results of the comparative analysis. Section 5 describes the main types of building control systems.

2 Trends of change in building control systems

Studying the tasks and responsibilities in the building control systems of EU countries is important for several reasons (CEBC, 2006; DCLG, 2008):

1. The EU has developed a single market, thereby ensuring the freedom of movement of people, goods, services and capital. Developments towards the harmonisation of national regulations have enabled construction products to be traded freely across the European Economic Area. Nonetheless, differences among the building control systems of EU countries continue to represent a barrier to the freedom of movement of services.

- 2. The present trend towards a common market for construction products and services is likely to increase cross-border activities in the construction industry. Designers, applicants and builders will have to deal with the different building control systems of the EU countries.
- 3. The building control system is changing. Building control was originally performed by building authorities, but there is currently a trend towards the gradual privatization of building control. The tasks assigned to private parties vary by country.
- 4. The growing need for housing in some countries justifies continuing or increasing the construction of new buildings. The goal of improving the maintenance condition and the energy efficiency of the existing housing stock is intended to stimulate rehabilitation activity. To face these demands an adequate, efficient and effective building control system is required to operate today and to develop into the future.

Recent international comparative research on building control is quite scarce. Within this field, the OTB Research Institute for Housing, Urban and Mobility Studies conducted a comparative study of building regulations and systems of building control in eight European countries (Meijer et al., 2002). The study showed a broad variety of organizational models for building control systems, with private parties playing an important role. The Consortium of European Building Control (CEBC) conducted a study on the building control systems in Europe (Mikulits, 2006). Information about 21 European countries was collected and analysed. The main conclusion was that there were fewer differences among the building control systems in the responding countries than had been expected. In nearly all countries private control elements were found at least as a means of delegating tasks to independent private experts. More recently, OTB conducted an analysis of the consequences of private sector involvement in building regulatory enforcement (van der Heijden, 2009). To support the analysis, the regulatory enforcement regimes of eight case studies in Australia and Canada were compared. One of the results was the identification of five types of building regulatory enforcement regimes.

3 Methodology

The research presented in this paper was conducted as part of a European comparative research project currently underway at OTB (Meijer and Visscher, 2008). The project aims to describe and compare the building regulation system in 34 European countries. The main subjects addressed are as follows: the organization and formulation of technical building regulations, the tasks and responsibilities of actors involved in building control, the technical and administrative aspects of the building permit procedure and the quality demands imposed on building control bodies.

The development of the research project was divided into two phases. In the first phase, the aim was to describe the building regulation system. National experts in each country received questionnaires about their building regulatory systems. Based on information obtained from the questionnaire and the analysis of major legal documents, a

monograph was written for each country. In the second phase of the project, the aim was to compare the building regulation systems of the European countries in order to identify trends and developments.

This paper presents results from the second phase of the research project. The focus is on the tasks and responsibilities of actors involved in building control. The basis of the analysis is restricted to the 27 countries of the European Union. Due to the federal structures of Austria, Germany and Belgium, analyses of each of these countries focuses on a single province or region. With regard to the United Kingdom, information was collected for England and Wales.

The comparison of building control systems is divided into the following parts: regulatory framework, application, plan approval, site inspection, completion and supervision.

The actors who intervene in the building control systems are divided into public parties and private parties. Public parties are the central, regional and local authorities, including their departments and agencies that relate to construction. Private parties (individuals or corporate bodies) were classified as follows:

- 1. The *applicant* starts the project and manages its implementation.
- 2. The *designer* develops the design submitted with the application for a building permit.
- 3. The *design auditor* checks the compliance of the design with the building regulations.
- 4. The *builder* builds the construction work under a contract with the applicant.
- 5. The *building surveyor* is authorized to conduct site inspections.
- 6. The *approved inspector* is authorized to perform private building control, which includes checking the compliance of the design with the building regulations and site inspections.

The conclusions presented in this paper are not definitive, as the necessary information has not yet been gathered and validated for all countries. This paper focuses only on the construction works that follow a regular building-permit procedure. The categories of construction works that require building permits varies by country. Specific aspects of simplified procedures (e.g. building notice and simple procedure) are not included in the analysis.

4 Comparative analysis

4.1 Regulatory framework

In all EU countries, building regulations and the rules for their enforcement are set by the public parties at a central level (Table 1). In some countries, this legislation can be

complemented at the regional and local levels. Due to their particular administrative divisions, some countries do not follow the general rule. These exceptions are as follows:

- 1. In Austria and Germany, central (federal) authorities set a model of building regulations and enforcement rules that is adapted by regional authorities.
- 2. In the United Kingdom, different regulatory systems exist in England and Wales, Northern Ireland and Scotland.
- 3. In Belgium, the different levels of authority legislate over different requirements.

In some countries (e.g. England and Wales), responsibility for the enforcement of building regulations concerning quality demands for private parties is delegated to private parties. In these countries, public parties outline the criteria, and private parties are responsible for determining the details.

Czech Republic Luxembourg Netherlands Denmark Germany Hungary Slovenia Cyprus Estonia Finland Greece Ireland Poland France Latvia Spain Italy Central authorities (x) (x) (x) x (x) X Regional authorities х х Local authorities (x) No information

Table 1 – Which public parties set the building regulations and the rules for their enforcement?

Although public parties take a leading role in setting the regulatory framework of building control, most countries have schemes to ensure the participation of private parties. For example:

- 1. In Denmark, there is an ongoing dialogue with the parties of the building industry. Collaboration takes place through a building policy forum and user panels on specific areas.
- 2. In the Netherlands, an advisory board discusses future developments in the building regulatory regime and may give advice to public authorities. All parties within the building sector are represented in these boards.
- 3. In England and Wales, public authorities promote the public debate concerning proposed reforms to the building regulatory regime.

4.2 Application

An application for a building permit may be submitted by the owner of the property, a person who holds the right of construction on someone else's property, or a person who manages the building permit procedure on behalf of the owner.

The application includes a design of the proposed project. In the majority of the EU countries, the design must be developed and signed by a qualified designer (Table 2). In most cases, the design team is coordinated by the architect, and specialists may be appointed to prepare particular designs.

The qualifications of designers must be documented by registration in the appropriate professional association. In some countries, the qualifications (education and experience) required to carry responsibility for a design vary according to the complexity of the construction work (e.g. more than four floors), type of building (e.g. listed building) and location of the building (e.g. inside the protection area of a listed building). The design of small construction works may be exempt from the requirement to be signed by a qualified designer (as in France).

In some countries (e.g. Denmark, Estonia, Netherlands, Sweden, England and Wales), there are no demands regarding the qualification of individuals who are responsible for the design. In these countries, it might be usual or advisable to hire a qualified designer, although doing so is not mandatory. In Estonia, designs that are not signed by a qualified designer must be checked by a design auditor. In the Netherlands, building authorities pay special attention during the process of plan approval for designs that are not signed by a qualified designer.

In all countries, the designer is responsible for ensuring that the design complies with planning demands and building regulations.

	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Qualified designer	х	х	х	х	x			x	x	x	х	х		х	х	х	х			х	x	х		х	х		
Anyone						х	х		(x)										х							х	x
No information													х					х					х				

Table 2 – Who is responsible for the design?

4.3 Plan approval

In the plan approval process, the applicant submits the building permit application with the information necessary to demonstrate compliance with planning demands and technical requirements. The competent building authority scrutinises the application and consults other authorities, if the applicant has not already done so. A design auditor may conduct an audit to provide a substantiated opinion regarding the extent to which the design conforms to technical requirements. If opinions from other authorities and design auditors are favourable, and if the competent building authority is satisfied, a building permit is granted.

In all the EU countries, public parties check design compliance with the planning demands (Table 3). In most of the countries, planning demands are checked by a department of the local authority in charge of enforcing building and planning

No information

regulations. In some countries, there are separate departments for planning and building issues. The following are exceptions to this rule:

- 1. The central planning authority is responsible for enforcing building and planning regulations (e.g. Malta).
- 2. A regional building authority provides advice to local authorities that do not have complete permitting autonomy (e.g. Belgium).
- 3. The local or regional office of the central planning authority enforces the planning instruments (e.g. Cyprus, smaller municipalities of France, Poland, Slovenia).

	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Central authorities				x					x									x						х			
Regional authorities		х																		х							
Local authorities	х	х	х	х	х	х	х	х	х	х		х	х	х	х		х		х		х	х	х		х	х	х

x

Table 3 – Which public parties check planning demands of building permit applications?

Public parties, particularly local authorities, are also responsible for checking the technical requirements of designs in most of the EU countries (Table 4). Private parties may be involved in or responsible for checking the technical requirements in one fourth of the EU countries. In addition to the countries in which the building authority checks the technical requirements, the following distributions of tasks and responsibilities between public and private parties were found:

- 1. The building authority and the professional association of designers check the technical requirements (e.g. Spain).
- 2. The building authority may appoint a design auditor to check the design on their behalf (e.g. Germany) or may require the applicant to have the design checked by a design auditor (e.g. Finland, Latvia).
- 3. The applicant must appoint a design auditor for certain categories of construction works, with the remaining categories checked only by the building authority (e.g. Bulgaria).
- 4. The applicant may voluntarily have the design checked by a design auditor, and the building authority can choose either to re-check the design or to accept the declaration of the auditor (e.g. Latvia).

- 5. The applicant may choose between having the design checked by the building authority or by an approved inspector, excluding re-checks by the building authority (e.g. England and Wales).
- 6. The applicant must appoint a design auditor (e.g. Romania).
- 7. The applicant must appoint a design auditor for certain categories of construction works, and the remaining works are not checked (e.g. France, Slovenia).
- 8. The building authority checks only the preliminary design (e.g. Portugal).
- 9. Plan approval does not include checking the technical requirements (e.g. Sweden).

For some requirements (e.g. energy and indoor air quality), there may be specific control systems that are separate from those used during the general procedure for approving plans. Auditors may be appointed to check either the complete design or some part of it (e.g. gas installations, energy and indoor air quality).

When the technical requirements are not checked in their entirety (as in Portugal and in the case of some categories of construction works in France, Slovenia and Sweden), the designer's declaration of compliance constitutes sufficient guarantee for the building authorities. In France, an audit of the design may be necessary for insurance purposes.

	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Building authority	Х	x	x	x	x	x	x	(x)	(x)	(x)	x	х	х	x	(x)	х	х	х	x	х	(x)		x		х		(x)
Professional association																									х		
Design auditor			(x)					(x)	(x)	(x)					(x)							х		(x)			
Approved inspector																											(x)
Not checked									(x)												(x)			(x)		х	

Table 4 – Who checks the technical requirements of a building permit application?

Depending on the type of building and its location, approvals from authorities other than the one issuing the building permit may be required. The authorities that are consulted fall into four main groups, according to their tasks: authorities that manage the listed buildings, collective facilities or environmental heritage and their protection areas; authorities that supervise the use of certain types of buildings; authorities that provide urban services; and authorities that guarantee health and safety.

In some countries, the necessary approvals are requested by the building authorities (Table 5). In other countries, the applicant must request the approvals directly and submit them either along with the building permit application or before the start of construction. Building authorities usually offer some support to the applicant by

providing a service through which most approvals can be requested at the same time. In some countries (e.g. Italy, Portugal), the applicant may choose to collect the approvals in advance and submit them along with the application.

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	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Building authority		х				х	х		х	х				х					х		х						x
Applicant			х								x			(x)			х				(x)	х				х	
No information	х							х					х		х	х		х		х			х	х	х		

Table 5 – Who requests approvals from other authorities?

In all EU countries, the building permit, or an equivalent document, is granted by public parties, usually the local authorities (Table 6). Only in England and Wales, where the procedure is operated by approved inspectors, may construction begin without a building permit issued by the public parties. However in England and Wales planning permits granted by the planning authority are mandatory and the local building authority can reject a plan certificate that has been issued by the approved inspector.

Table 6 – Who grants the building permit or equivalent document?

	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Building authority	x	х	х	х	x	х	x	x	х	х	x	х	х	x	x	x	х	х	х	х	х	x	х	х	х	х	(x)
Approved inspector																											(x)

Other parties can object to a proposed construction work in all EU countries. The objections must be presented before the building permit has been granted. Only in France are objections presented within 2 months after the day on which the notice that the building permit has been granted is displayed on the property in question. To make the application for a building permit public, the building authority, applicant (or both) must usually take one or more of the following actions:

- 1. Display a site notice on or near the property to which the application relates.
- 2. Post an advertisement in the press or on an Internet site.
- 3. Send notification in writing to neighbours and other affected parties.

4.4 Site inspections

The applicant, the builder or both are responsible for ensuring that the construction work complies with the approved design and the building regulations. To control the construction work, site inspections are conducted by public or private parties (or a

combination). If there are indications that no building permit has been issued for a part of the construction work or that construction is in violation of the building permit, construction work is stopped.

In approximately half of the EU countries, public parties are involved in some way in site inspections. Private parties may be involved in site inspections in almost all EU countries (Table 7). The degree to which public and private parties are involved in site inspections varies significantly. The following distributions of tasks and responsibilities between public and private parties were identified:

- 1. The building authority conducts site inspections (e.g. Hungary, Ireland, the Netherlands, Slovakia).
- 2. The building authority is responsible for site inspections but may appoint a building surveyor to conduct them on their behalf (e.g. Germany).
- 3. The building authority may conduct site inspections or delegate them to a private party, such as the applicant, the builder, the designer or a building surveyor (e.g. Finland, Sweden).
- 4. The building authority and a building surveyor (appointed by the applicant) conduct site inspections (e.g. Bulgaria, Czech Republic, Italia, Lithuania, Malta, Poland, Spain).
- 5. A building surveyor appointed by the applicant conducts site inspections, with the building authority participating as well for some categories of construction works as well (e.g. Lithuania).
- 6. A building surveyor appointed by the applicant conducts site inspections (e.g. Belgium, Cyprus, Romania, Slovenia).
- 7. A building surveyor appointed by the applicant carries out site inspections of some categories of construction works, and the remaining categories are exempt from control (e.g. Estonia, France).
- 8. The applicant may choose between having site inspections carried out by the building authority or by an approved inspector (e.g. England and Wales).
- 9. Site inspections are not mandatory, but no final site inspection by the building authority is required if the construction work has been checked by a building surveyor and the designer (e.g. Portugal).

Like Germany, other countries allow building authorities to appoint building surveyors to conduct site inspections on their behalf. Unlike the situation in Germany, however, this arrangement has no statutory status. For some requirements (e.g. energy and indoor air quality), there may be specific control systems other than those used during general site inspections.

Almost all countries require the designation of a public or a private party to be responsible for site inspections. Estonia, France and Portugal are the only exceptions. In

France, however, most applicants voluntarily submit their construction works to comprehensive schemes of private building control that include site inspections, as building control involves lower premiums for the mandatory decennial insurance.

In some countries (e.g. Italy, Romania), the designer may also be the building surveyor, while other countries require site inspections by the designer for all construction works (e.g. Slovenia) or for particular categories (e.g. Bulgaria, Latvia).

	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Building authority	(x)		х		x			(x)		х		х	х	х	х	(x)	х	х	x	х			х		х	(x)	(x)
Building surveyor	(x)	x	(x)	х	x	(x)	(x)	(x)	(x)	(x)				х	(x)	х	(x)	х		х	(x)	х		х	х	(x)	
Approved inspector																											(x)
Designer			(x)					(x)							(x)						(x)			х			
Builder	(x)					(x)		(x)																		(x)	
Applicant							(x)																				
No mandatory inspection							(x)		(x)												(x)						
No information											х																

Table 7 – Who conducts site inspections (if required)?

Although private parties assume an important role in site inspections, public parties have the legal power to stop a construction work in all EU countries (Table 8). In a few countries (e.g. Bulgaria, Italy, Latvia), the building surveyor or designer also has the same power.

United Kingdom Czech Republic Luxembourg Netherlands Lithuania Slovenia Belgium Bulgaria Denmark Germany Hungary Cyprus Estonia Finland Portugal Sweden Austria Greece Ireland France Latvia Malta Spain Italy Building authority X X X X х X X х X X х X х х х X X X х х Building surveyor х x Designer No information

Table 8 – Who has the power to stop a construction work?

4.5 Completion

Once the construction work is finished, the building authorities are notified. A final site inspection is usually conducted by the building authorities and other authorities. If problems are found, the building authorities specify the corrective measures to be undertaken. If satisfied with the final site inspection, the building authorities issue or approve a document that certifies that the construction was completed successfully (i.e. a completion certificate) or can be used for the intended purpose (i.e. a use permit). In some countries, the building authorities rely on declarations by the private parties that

conducted the building work or the site inspections, and they do not perform a final site inspection.

According to the information that has been gathered to date, public parties conduct final site inspections for all types of buildings in the majority of the EU countries (Table 9). In almost all the remaining countries, the final site inspection is required only for certain types of buildings, usually those that are open to the public. In Poland, Portugal and Sweden, public parties do not conduct a final site inspection if they are satisfied with the documentation that attests to the fulfilment of the obligations of construction control and if they find no cause to intervene. Even if final site inspections are not mandatory, public parties can always choose to do so.

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	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Building authority	(x)		x	x	x		x	x	(x)			х		(x)			х		(x)			x		x			
Not required	(x)								(x)					(x)					(x)	х	х					х	
No information		х				х				х	х		х		х	х		х					х		х		x

Table 9 – Who conducts the final inspection (if required)?

Approximately two thirds of EU countries require for all types of buildings completion certificates or use permits granted or approved by the public parties (Table 10). In almost all of the remaining countries, such documents are required only for certain types of buildings, including:

- 1. all buildings except small buildings (e.g. single-family houses, holiday homes, garages, carports, greenhouses) in Denmark;
- 2. buildings open to the public and very high buildings in France;
- 3. buildings with which the public interest is concerned (e.g. hotels, hospitals, theatres, shopping centres) in Belgium and the Netherlands.

An exceptional case emerges in countries in which the completion certificate is not required but the applicant can request it from the builder (e.g. Ireland) or the building authority (e.g. England and Wales when the applicant opts for public building control).

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	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Building authority	(x)	(x)	х	х	х	(x)	х	х	(x)	х	х	х		х	х	х	х	х	(x)	х	х	х	х	х	х	х	(x)
Approved inspector																											(x)
Not required	(x)	(x)				(x)			(x)				(x)						(x)								(x)

Table 10 – Who issues the completion certificate /use permit/approval (if required)?

When required, the completion certificate or use permit is usually issued by public parties. Exceptions occur in England and Wales, for situations in which applicants have opted for private building control; in such cases, the approved inspector issues the completion certificate and informs the local authority, who has a specified period within which to reject it. In Poland, some buildings require a use permit, while the rest require the submission of a completion notification and other documentation to the building authority, which has a specified period within which to raise objections.

4.6 Supervision

Supervision involves overseeing and auditing entities that carry out plan approval and site inspection. In all EU countries, public parties perform the supervision of the building control system. These public parties are central or regional governmental bodies. When local authorities are not involved in the control of construction works, they usually supervise the performance of private parties as well.

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	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Central authority			x	x			x		х	х		x			x	x		х	х	х	х	х	x	х		x	х
Regional authority		x								х						x											
Local authority									х												х	х				х	
No information	х				х	x		x			x		x	x			х								x		

Table 11 – Who performs supervision of regulatory system?

5 Conclusion and discussion

What are the main differences and similarities between EU countries regarding the tasks and responsibilities of enforcement actors?

In EU countries, public parties set the regulatory framework, check planning demands, issue building permits, conduct final inspections, grant completion certificates and supervise the system. The main difference between countries concerns the parties responsible for verifying the technical requirements of the design during plan approval and for conducting site inspections during construction.

The involvement of public and private parties in checking the extent to which building designs comply with technical requirements can be classified into four main patterns (Table 12): the designs are checked by public parties, public parties may delegate responsibility for checking to private parties, applicants may choose between having their designs checked by public or by private parties, designs are checked by private parties. In some situations, the technical requirements of the design are not checked. Public parties play a dominant role in checking the technical requirements of the design.

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Table 12 – Who checks the requirements of the design during plan approval?

Public	Austria, Belgium, Bulgaria (some types), Cyprus, Czech Republic, Denmark, Estonia, France (some types), Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Malta, Poland, Portugal (preliminary design), the Netherlands, Slovakia, Spain
Public may delegate to private	Finland, Germany, Latvia
Applicant may choose between public and private	Latvia, England and Wales
Private	Bulgaria (some type), France (some types), Romania, Slovenia (some types)
Not checked	France (some types), Portugal (detailed design), Slovenia (some types), Sweden

With regard to site inspections, the involvement of public and private parties can be classified into five main types (Table 13): Site inspections are conducted by public parties, public parties may delegate responsibility for site inspections to private parties, applicants may choose between having their sites inspected by public or by private parties, site inspections are conducted by public and private parties, site inspections are conducted by private parties. In some situations, there are no mandatory site inspections. Private parties play a dominant role in site inspections.

Table 13 – Who conducts site inspections?

Public	Bulgaria (some types), Hungary, Ireland, the Netherlands, Slovakia
Public may delegate to private	Germany, Luxembourg
Applicant may choose between public and private	Finland, Sweden, England and Wales
Public and private	Austria, Bulgaria (some types), Czech Republic, Italy, Latvia (some types), Lithuania (some types), Malta, Poland, Spain
Private	Belgium, Cyprus, Denmark, Estonia (some types), France (some types), Latvia (some types), Lithuania (some types), Romania, Slovenia
Not checked	Estonia (some types), France (some types), Portugal

What are the main types of building control systems in the EU countries?

With regard to private and public responsibilities in plan approval and site inspections, three basic types of building control were identified (Table 14):

- 1. Public building control: Public authorities are responsible for plan approval and site inspection (e.g. Hungary, Ireland, the Netherlands, Slovakia).
- 2. Mixed building control: Public authorities and private parties share responsibilities for plan approval and site inspection.
- 3. Dual building control: The applicant can choose to have plan approval and site inspection conducted by public or by private parties (e.g. England and Wales).

A number of variations were found within the category of mixed systems:

- 1. Public parties check the technical requirements, but private parties may be involved in site inspections (e.g. Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Italy, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Spain).
- 2. Private parties may be involved in checking the technical requirements and site inspections (e.g. Bulgaria, France, Germany, Latvia).
- 3. Private parties are responsible for both the technical requirements and site inspections (e.g. Slovenia).
- 4. Technical requirements are not checked during plan approval, and private parties may be involved in site inspections (e.g. Sweden).

The first situation is the most common in EU countries. Public parties are still responsible for plan approval, although they encourage the participation of private parties in site inspections. In very few countries, it is possible for applicants to choose between private or public parties. Only in England and Wales is there a complete system of private building control.

Table 14 – Analysis of the main features of building control (Pr - private sector, Pu - public sector, Mi – public and private, Du - public our private, blank - not applicable or information unavailable)

	Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Regulatory framework	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu		Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu
Planning demands	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu		Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu
Technical requirements	Pu	Pu	Mi	Pu	Pu	Pu	Pu	Mi	Mi	Mi	Pu	Pu	Pu	Pu	Du	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pr	Pu		Du
Building permit	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Du
Site inspections	Mi	Pr	Mi	Pr	Mi	Pr	Pr	Du	Pr	Mi		Pu	Pu	Mi	Mi	Mi	Mi	Mi	Pu	Mi	Pr	Pr	Pu	Pr	Mi	Du	Du
Completion certificate	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu		Pu	Pu	Pu	Pu		Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu
Supervision	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu	Pu
Туре	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Public	Public	Public	Mixed	Mixed	Mixed	Mixed	Mixed	Public	Mixed	Mixed	Mixed	Public	Mixed	Mixed	Mixed	Dual

In general, public parties maintain a dominant role in the building control systems of EU countries. The role of private parties is generally to support the enforcement of the system, primarily in tasks that demand technical expertise or intensive survey of construction works.

What lessons can be learned from the building control systems of the EU countries?

In an overall analysis, similarities were identified among the building control systems of EU countries regarding the tasks and responsibilities of enforcement actors. Public parties maintain a dominant role, and private parties are involved in building control systems of 23 of the 27 EU countries. The tasks of private parties include checking technical requirements and conducting site inspections. These results are consistent with the conclusions of previous studies about the subject, particularly the 2006 CEBC report (Mikulits).

A closer analysis of plan approval and site inspection shows that the degree of privateparty involvement varies significantly. Further differences are likely to exist in the quality demands of public and private building-control bodies.

Building upon previous studies (Meijer et al., 2002; van der Heijden, 2009), an analytical framework was established. The analysis provided a global picture of the building control systems of the European countries. The results can be useful for situating the systems of each country within the European panorama, assessing the main trends and developments and guiding strategic choices on possible improvements in each country.

A complete analysis of the regulatory systems of the European countries requires further comparative studies, focusing on the organization and formulation of technical building regulations, the procedural aspects of building control and the quality demands of public and private building-control bodies. Furthermore, the analysis of regulatory systems should proceed with studies about the performance of each type of system in terms of adequacy, efficiency and effectiveness.

Although many similarities were found among the building control systems of the EU countries, the differences in the involvement of private parties in building control still constitute a barrier to the freedom of movement of people and services. Additional uniformity among building control systems would be beneficial in supporting a single market for services in the construction industry, in which architects, applicants and builder are no longer limited to work in national markets.

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