All papers submitted to COBRA were assessed by expert panel, drawn from the construction and building research community. The conference organisers wish to extend their appreciation to the members of the panel for their work, which is invaluable to the success of COBRA.

Kate Carter  Heriot-Watt University, UK
Keith Cattell  University of Cape Town, South Africa
Grace Ding  University of Technology Sydney, Australia
Tom Dunne  Dublin Institute of Technology, Ireland
Charles Egbu  University of Salford, UK
Chris Fortune  University of Salford, UK
Rod Gameson  University of Wolverhampton, UK
Louis Gunnigan  Dublin Institute of Technology, Ireland
Martin Hanratty  Dublin Institute of Technology, Ireland
Alan Hore  Dublin Institute of Technology, Ireland
Myles Keaveny  Dublin Institute of Technology, Ireland
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Keith Potts  University of Wolverhampton, UK
David Root  University of Cape Town, South Africa
Kathy Roper  Georgia Institute of Technology, USA
Lloyd Scott  Dublin Institute of Technology, Ireland
Winston Shakantu  Nelson Mandela Metropolitan University, South Africa
Lorcán Sirr  Dublin Institute of Technology, Ireland
Suresh Subashini  University of Wolverhampton, UK
Stephen Walsh  Dublin Institute of Technology, Ireland
Sara Wilkinson  Deakin University, Australia

In addition to this, a specialist panel assessed paper for the session arranged by CIB W113.

John Adriaanse  London South Bank University, UK
Julie Adshead  University of Salford, UK
Rachelle Alterman  Technion, Israel
Jane Ball  University of Sheffield, UK
Michael Brand  University of New South Wales, Australia
Penny Brooker  University of Wolverhampton, UK
Ruth Cannon  Dublin Institute of Technology, Ireland
Alice Christudason  National University of Singapore
Paul Chynoweth  University of Salford, UK
Philip Chan  National University of Singapore
Sai On Cheung  City University of Hong Kong
Ron Craig  Loughborough University, UK
Jose Caramelo Gomes  University of Lusiada, Portugal
Asanga Gunawansa  National University of Singapore
Rob Home  Anglia Ruskin University, UK
Peter Kennedy  Glasgow Caledonian University, UK
Anthony Lavers  Keating Chambers, UK
Tim McLernon  University of Ulster, UK
Frits Meijer  TU Delft, The Netherlands
Jim Mason  University of the West of England, UK
Brodie McAdam  University of Salford, UK
Issaka Ndékugri  University of Wolverhampton, UK
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Building regulations from an European perspective

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Abstract

During the last ten years OTB has studied building regulations in various European countries. Developments in the building regulatory systems are being placed within the context of general trends in the regulatory sciences, particularly with reference to Europeanization studies. Within the regulatory sciences, there is broad consensus about the trend towards deregulation and privatisation in recent decades. Studies conducted under the rubric of ‘Europeanization’ analyse the effects of European policies on the policy frameworks of the member states in more detail. The results so far show that building control tasks are more and more privatised and administrative procedures are under the influence of deregulation processes. The influence of the European Union is especially recognizable in developments regarding the content, scope and formulation of technical requirements. In the end of last year we started a major new European comparative research project to actualize and expand our knowledge. In this new project the regulatory systems of all European countries will take be taken into account. Three main subjects are being addressed:

• The position of building regulations within the legislative system.
• The scope of technical requirements that regulate the minimum quality level for buildings.
• The building permit procedures and the system of building control.

This paper highlights the results from previous projects and presents the research framework and the first considerations on the three main subjects of this ongoing research project. Actual trends and expected developments are sketched.

Keywords: Building regulations, Europe, Housing quality, Deregulation, Privatization.

1. Introduction

There are various reasons for studying building regulatory systems. Our starting point is the (physical) quality of constructions and more specifically dwellings. Building regulations are one of the most
important instruments to guarantee an adequate quality of the European built environment. In practice the quality of constructions is an issue in every European country. One of the indicators are the failure costs in the construction industry: (avoidable) costs that occur because products and services fail to conform the requirements (both prior or after the sale to customers). In 2007 failure costs in the Dutch construction industry were estimated to be 11% of the total turnover in the construction industry. Based on the total turnover in 2007 this means that some € 6,2 billion is wasted yearly (USP Marketing Consultancy, 2008). We assume that the Dutch situation is comparable with the situation in other European countries. In some countries the defects on completion of dwellings are remarkably high and once every while countries are startled by serious incidents in the construction sector. Despite the fact that the requirements are not always met, building regulations are often subject of deregulation. Governments want to diminish the burden of regulations, but impose at the same time regulations on new subjects (e.g. on environmental issues). It is interesting to study how countries within the European Union deal with this issues and dilemmas. Our studies focus on the content and formulation of requirements, as well as on the methods and procedures that have been developed to ensure that demands are actually met in practice (e.g., Meijer and Visscher, 1998 and 2006; Visscher, 2000). The results of our latest European comparative research project have been published in two volumes. The first volume compares the building control systems of eight European countries (Meijer, Visscher, Sheridan, 2002), and the second addresses technical requirements (Sheridan, Visscher, Meijer, 2003). Recently we have started new projects in which not only more European countries but also other countries in the Western world are being included (e.g. Australia, Canada and New Zealand). Besides analyzing developments in the various building control systems, but the focus also lies on a comparative analyse of public and private building regulatory enforcement regimes.

Following this introductory section, we provide our research framework (section 2) and a short overview of current discussions and trends within the regulatory sciences (e.g. that part within the academic tradition of policy analysis that addresses issues of regulatory convergence/divergence and Europeanization). In section 4 the content and research method of our current research project is presented. In the first phase of this project we aim to sketch the building regulatory systems of more than 30 European countries (including all EU-member states). We know from our previous research projects that, in recent decades, the building regulatory frameworks of many European countries have changed considerably. Section 5 presents the main results of our latest research projects and the first insights of our current research.

2. Research framework

In our studies we zoom in on the aspects that fit within the framework outlined in figure 1. Although building regulatory systems differ widely, their broad outlines share systematic similarities. In most
countries a Building Regulations Act or Decree provides technical requirements that set minimum demands for health, safety, comfort, energy efficiency and similar issues. These requirements are mostly set on a national level and are part of the public law system of a country. In some cases additional requirements have been established for specific construction works (e.g. in the field of infrastructural or hydraulic engineering). Besides the Building Regulations all countries have requirements with respect to planning aspects, which are generally regulated on various administrative levels. In order to guarantee that regulations are met a Building or Housing Act dictates the administrative procedures that have to be followed. These Acts regulate subjects as procedures for various types of construction works, the fee system, maximum procedure times and the tasks and responsibilities for building control. Besides the regulations that are embedded in public law, all countries have documents/agreements/regulations that are based on private law. The building regulations often refer to National or European Standards. Most countries have sets of documentation that describe constructional solutions that deemed to satisfy the requirements. Besides that certification schemes have been established in the construction sector for products, persons, processes and or quality systems.

Figure 1 Schematic overview of our field of study

Although building regulations are based on (public and private) law, we do not approach our field of study from a judicial point of view. In most case we join in with the scientific field of policy analysis and look at
regulatory systems in terms of effectiveness, efficiency, accountability and equity. We try to embed our ongoing European comparative study within the framework of Europeanization, a rather new branch in the regulatory sciences.

3. Deregulation and Europeanization

Despite the presence of numerous approaches to the notion of what constitutes regulation, the distinction between economic and social regulations is generally accepted (e.g., Ogus, 1994; Den Hertog, 1999). Economic regulation consists of structural (or ‘access’) regulation and conduct (or ‘behavioural’) regulation. Structural regulation refers to the process of regulating the market structure, and conduct regulation refers to the regulation of behaviour within the market. Economic regulation is exercised primarily within markets that are characterised by monopoly conditions. Social regulation involves regulation in such areas as the environment, safety, health and consumer protection. Social regulation is generally justified by referring to externalities and information asymmetries.

Only a part of the building regulations can be described in terms of economic regulation. For instance, the EC Building Products Directive and the Euro Codes are primarily intended to facilitate the barrier-free trade of building products. Nonetheless, the ‘social aspects’ are the most important component of building regulations to ensure that buildings meet basic quality standards. Safety and health have traditionally been the core elements of the regulations. In the course of time, most countries have added other considerations, including amenity/comfort, energy savings and sustainability.

As stated in the introduction, this paper focuses on developments within building regulatory systems and on the question whether these systems are converging or diverging in Europe. This question is difficult, as regulatory systems are determined by institutional and national factors within individual countries. Ogus (2002) makes a number of generalisations, based on information obtained from a survey of historical and inter-jurisdictional practice. Most importantly, he identifies a global tendency away from central governmental control, a crucial feature of what has been called the ‘deregulation movement’ (e.g., Francis, 1993). He notes, however, that the extent to which deregulation has occurred varies by country, due to differences in regulatory culture. Ogus also observes that government involvement is more prominent in the field of social regulation than it is in the field of economic regulation. At the same time, he acknowledges the existence of long traditions of tripartite governance structures and an increasing tendency to work out regulatory policies through consensus with the industries that are regulated. This paper does not directly address the influence of the building industry on the formulation of building regulations.
The European Union (EU) is able to influence the regulatory systems of the member states. The influence of the EU can be independent of all other international external developments (e.g., deregulation, convergence or harmonization that may affect national policies (Vink, 2002). In recent years, the impact of the EU on its member states has become a topic in studies of the European Union. Researchers are studying the effects of European integration on the politics, policies and administrative structures of the member states. Although there is no agreement about what ‘Europeanization’ actually is, most research implies that it has to do with the process through which European integration penetrates – and in certain circumstances, brings about adjustments to – domestic institutions, decision-making procedures and public policies of the member states.

In a report on the state of affairs, Bulmer and Radaelli (2004) observe that Europeanization has had a profound impact on the public policy functions of the member states, but that its impact has not been uniform. In some policy areas (e.g., monetary policy and trade), member states have lost much of their scope for independent action. In other areas, however, the impact has been much more fragmented, as in health care or employment policy. Most policy areas lie between these two extremes. The intellectual history of Europeanization is still short, however, and it is unlikely that a single interpretation will predominate.

The building regulatory field has not yet been a point of scholarly attention. The related set of environmental regulations has been studied by Liefferink and Jordan (2002). They make distinctions between the influences of the EU on the content, structure and style of policy in the member states. Liefferink and Jordan conclude that, while it has influenced some aspects of the contents of national environmental policies (e.g., the standards, positions and strength of ministries, parliaments and NGOs); the EU has not managed to change either their fundamental composition or design. In other words, policy content is more susceptible to convergence under the influence of the EU than are either policy structure or policy style.

4. Research method of current research project (2007-2010)

In the period 2000 – 2002 we researched the building regulatory systems of eight (northern) European countries: Belgium, Denmark England, France, Germany, Netherlands, Norway and Sweden. We asked ourselves the questions whether the systems were converging or not and if we could detect an influence from the EU. In our current research project we want to picture the situation in all member states of the European Union. We not only want to have insight in the ‘building regulatory state of the art’ of the EU member states. We also want to know if we can detect European wide the same trends and developments that have and are taken place in the eight European countries we studied so far.

In our current research project we address the following subjects:
• The position of building regulations within the legislative system of the countries: how, where and at what level the laws and regulations are established, which parties are involved (beside the government) and what developments have taken place or are expected to occur?
• The scope and contents of the technical requirements that regulate the minimum quality level for buildings: which are the goals, what subjects are regulated, how are the regulations formulated, have there been any developments in the recent past and what is expected for the near future?
• The building permit procedures and the main features of the system of building control are being taken into account. Who is responsible for plan approval and site inspections, how is the quality of these responsibilities safeguarded and what developments have taken place in the recent past and what is expected for the near future?

The project is split in two phases. In the first phase (2007/8) per country monographs will be produced that describe the building regulatory system in 35 European countries. Focus lies on all current member states of the EU (for the UK England & Wales, Scotland and Northern Ireland will be studied separately), plus 3 candidate member states and Iceland, Norway and Switzerland (see figure 2).

The project is being carried out in close co-operation with the Consortium of European Building Control (CEBC). The Consortium’s mission is to assist in the promotion of the ideals of the European Union in relation to the building control function. CEBC was formed in 1989 and currently, twenty three European countries participate in its activities in a forum where all kind of issues are discussed that could impact on the building control discipline. Members from CEBC are representatives from building control organisations in European countries. In this project the CEBC-members will safeguard the quality of the country monographs.

In order to get structured information OTB has made a questionnaire that is electronic available. We have asked all our contact persons (from ministries, universities, umbrella organizations, etc.) and CEBC-members to fill in the questionnaire. At the moment we have got questionnaires returned from roughly three quarters of the countries.

The filled in questionnaires are the basis for the country monographs. In most cases additional desk research is needed to complete a country monograph. When a draft monographs is ready it will be sent for verification to our contact persons in the respective countries. In most case we will also have additional questions for the contact persons.

The country monographs have a fixed structure so that countries and subjects can be easily compared:
1) Introduction with relevant country facts and a short characterization of the building regulations.
2) Tasks and responsibilities for establishing the requirements and procedures, for building control and for supervision on the regulatory system.
3) Technical building regulations: contents, organization and formulation of the regulations.
4) Building permit procedures for construction works: categories of construction works, phasing, pre-
consultation, submission demands, plan approval, site inspections, completion, fees and procedure
times.
5) Quality demands on (both public as private) building control bodies on staff, working methods and
liability.
6) Conclusion on the remarkable aspects and similarities/differences with other countries.

It is the intention that the country monographs are ready at the end of this year (2008). The results are
going to be published in an international scientific book. Phase 2 will start in 2009 and in that phase
the attention will be shifted to more in depth comparisons. Certain subjects and/or specific countries
will be thoroughly analyzed. The exact selection of countries and subjects and the exact research
method still has to be determined.

5. Results and conclusion

In recent decades, the historical differences between the building control systems in the various
European countries have gradually been fading away, not only because of developments in regulations
at the level of the European Union, but also because of such international trends as deregulation and
the privatization of technical building control. It is from this viewpoint that we identify and discuss
some actual subjects and trends in the building regulatory field. The identification of these actual
trends is based on the results of our previous projects and the insights we gained through the first
results of our ongoing project.

5.1 Technical requirements (technical building regulations)

In every country studied so far the technical requirements are set by the government. In 99% of the
cases this is done by the national state, and in a few cases (e.g. Belgium) on a federal (provincial)
level. In almost every country the important stakeholders have the possibility (e.g. through a
institutionalized consultations) to influence the content of these regulations.
The scope of technical requirements for regulating the minimal quality of buildings in European
countries is not diminishing. The first results of our ongoing project confirm that statement. Nearly
every country has adopted new regulations for energy performance and environmental issues, while
the current regulations have stayed in place. There is no question of deregulation in this regard. The
policy of the European Union has had its intended converging effect, particularly with regard to the
content (scope and formulation) of the technical demands. More and more countries include
performance standards in their technical requirements, which has a converging effect on the building
regulations. Although there is still a wide variety concerning the technical requirements and the way they are formulated it is likely that the converging trend will continue in the years to come. The European Building Products Directive provides a solid foundation on which to base further developments in building requirements. Issuing the Euro Codes and implementing them in the member states will be yet another step forward. When they are finished, the Euro Codes will form a set of almost 60 European standards that will provide calculation methods to determine the mechanical strength required of each element to withstand expected loads. The calculation methods will cover all construction methods and materials used. The Construction Products Directive (CPD -89/106/CEE) defines six essential requirements for construction works, which are detailed in interpretative documents. These essential requirements are mechanical resistance and stability, safety in case of fire, hygiene, health and environment, safety in use, protection against noise and energy economy and heat retention. The essential requirements for construction works serve as a foundation for the harmonised technical product specifications (i.e., harmonised European standards or European Technical Approvals) that have been and are being developed for assessing the performance of building products. The directives from the new approach of the EC in general, and those of the CPD in particular, introduce a mandatory system for attesting conformity throughout the construction products sector. In general, technical requirements are increasingly coming to be phrased in terms of performance.

Privatisation of the regulatory role has nowhere taken place and is neither expected nor necessary. The setting of the technical requirements rules will stay the prerogative of the (national) state.

5.2 Procedures and tasks & responsibilities

To paraphrase a popular expression one can say that: “the strength of a regulatory system is in its weakest link”. In the building regulatory field in general the weakest links can be found in the way procedures are organized and especially the division of tasks and responsibilities to enforce the regulations. Because tasks and responsibilities are unclear or not followed by the rule, the building regulatory system sometimes does not deliver what it should deliver: sound and safe constructions, built in an efficient and effective way. European governments are aware of this. Time and again initiatives are started (and probably will start in the future) in European countries to improve the actual enforcement of the regulations and to reduce the administrative burden. Although the initiatives and the current organisation of procedures and tasks and responsibilities vary widely, some parallel developments are evident. These developments indicate a trend towards convergence across the Europe member states. This trend is best described as ‘procedural (or administrative) deregulation’. Within these countries, the category of construction works that require building permits is diminishing. Authorities are trying to improve both the effectiveness and the efficiency of their procedures through such initiatives as making a procedural distinction between simple and regular
procedures. Actions being taken to streamline regular procedures even further include introducing online facilities for acquiring information and applying for permits (Meijer, 2005), allowing exceptions for certain frequent construction works (i.e., Type Approval) and dividing the regular procedure into phases. With the possible exception of the digitalisation of the procedure, the influence of the European Union on these developments is negligible.

Almost all European countries once had ‘traditional’ control systems, in which local authority building control played a key role. Such systems have undergone major changes, and the role of private organisations in the permit procedure has expanded the last decades. The move towards more privatisation seems to be a sensible move. But the experiences show that one should not consider it as a panacea for (serious) failures and weaknesses of current building control systems. It means a complete new role for the building industry. Examples in various countries show that it is an absolute necessity to define the exact tasks and responsibilities of the parties involved. A reliable system has to be ‘built’ (e.g. via certification or accreditation) that guarantees that the various parties live up to their tasks and responsibilities.

To improve a system in general one should address current problems and barriers without the exclusion of possible solutions beforehand. Developments and solutions found in one country can inspire other countries in their strife for a better building regulatory system. However solutions for one country can not be automatically implemented in another country. Tailor-made solutions for certain problems/barriers still are needed. So it is not to be expected that the current differences among the European countries in the field of administrative and building permit procedures will disappear completely. The international trend towards reducing government responsibility for building quality will probably decrease the number of areas that are covered by building regulations and will encourage governments to shift the responsibility for building control (scrutiny of permit applications and site inspection) to the private sector. This trend is also supported by the development of methods for quality assurance (certification and accreditation) and their increasing implementation in design, engineering and construction companies.

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