

Supporting study for the Fitness Check on the construction sector: EU internal market and energy efficiency legislation

Executive Summary

Written by
Economisti Associati, Milieu,
and CEPS,
With the contribution of
BPIE and DBRI
October 2016



EUROPEAN COMMISSION

Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
Directorate C — Industrial Transformation and Advanced Value Chains
Unit C.1— Clean Technologies and Products
Contact: GROW-CONSTRUCTION@ec.europa.eu

*European Commission
B-1049 Brussels*

Supporting study for the Fitness Check on the construction sector: EU internal market and energy efficiency legislation

Executive Summary

***Europe Direct is a service to help you find answers
to your questions about the European Union.***

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

LEGAL NOTICE

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

More information on the European Union is available on the Internet (<http://www.europa.eu>).

Luxembourg: Publications Office of the European Union, 2016

ISBN 978-92-79-52343-4
doi: 10.2873/240051

© European Union, 2016
Reproduction is authorised provided the source is acknowledged.

1 INTRODUCTION

This report presents the results of the '**Supporting Study for the Fitness Check on the Construction Sector in the policy areas of Internal Market and Energy Efficiency**', carried out for the European Commission - Directorate General for Internal Market, Industry, Entrepreneurship and SMEs.

Objective of the Study. The Study aimed to assess the **costs and benefits as well as the coherence of the EU legislation impacting on the construction sector**. The results will feed into the Fitness Check for the Construction Sector, expected to be published in Spring 2017. The Fitness Check aims at examining how various EU legal acts impact on the construction sector, and at identifying possible areas of improvement, including reduction of regulatory costs and burdens and a better alignment of provisions, if applicable. The analysis included evaluating the efficiency, coherence, effectiveness, relevance and EU added value of most relevant provisions of EU legislation, with respect to the objective for a more competitive and sustainable construction sector, in particular for small and medium enterprises. A particular attention was paid therein to identify any synergy or inefficiency arising from these acts.

Scope of the Study. The Study reviews the EU legislation concerning two policy areas, **Internal Market and Energy Efficiency**, with focus on the most relevant texts that have a significant impact on the construction sector competitiveness and sustainability. The Study adopts a retrospective view, covering the effects of EU legislation over the **2004 – 2014 period**. The analysis covered **nine pieces of current legislation as well as their predecessors in force during the relevant period**, namely:

- The Construction Products Regulation¹ and its predecessor Construction Products Directive²;
- The Professional Qualifications Directive³;
- The Services Directive⁴;
- The Late Payments Directive⁵ and its predecessor Directive 2000/35/EC⁶;
- The Energy Efficiency Directive,⁷ and its predecessor Directive 2006/32/EC⁸;
- The Energy Performance of Buildings Directive⁹ and its predecessor Directive 2002/91/EC¹⁰;
- The Ecodesign Directive¹¹;
- The Energy Labelling Directive¹² and
- The Renewable Energy Sources Directive¹³.

¹ Regulation No 305/2011 of the European Parliament and the Council laying down harmonized conditions for the marketing of construction products.

² Council Directive 89/106/EEC on the approximation of laws, regulations and administrative provisions of the MS relating to construction products.

³ Directive 2005/36/EC of the European Parliament and the Council on the recognition of professional qualifications

⁴ Directive 2006/123/EC of the European Parliament and the Council on services in the Internal Market.

⁵ Directive 2011/7/EU of the European Parliament and the Council on combating late payment in commercial transactions.

⁶ Directive 2000/35/EC of the European Parliament and the Council on combating late payment in commercial transactions.

⁷ Directive 2012/27/EU of the European Parliament and the Council on energy efficiency.

⁸ Directive 2006/32/EC of the European Parliament and the Council on energy end-use efficiency and energy services.

⁹ Directive 2010/31/EU of the European Parliament and the Council on the energy performance of buildings.

¹⁰ Directive 2002/91/EC of the European Parliament and the Council on the energy performance of buildings.

¹¹ Directive 2009/125/EC of the European Parliament and the Council establishing a framework for the setting of ecodesign requirements for energy-using products.

¹² Directive 2010/30/EU of the European Parliament and the Council on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products.

¹³ Directive 2009/28/EC of the European Parliament and the Council on the promotion of the use of energy from renewable.

The Study focuses primarily on **the 'core' construction sector**, i.e. the **construction and renovation of buildings and specialized construction activities** (NACE Divisions 41 and 43, with exclusion of infrastructure works). In order to provide a comprehensive picture of the effects of EU legislation, the Study also covers the other sectors in the construction value chain, i.e. the **manufacture of construction products** (encompassed under NACE Sections B and C), **construction-related professional services**, e.g. architects, engineers, or energy auditors (NACE Group M71), and **real estate** (NACE Section L). For these other sectors, the coverage across the various part of this Study is variable, depending on the relevance of the different regulatory effects on the different links of the value chain.

The sector focus is a distinctive feature of the Study, differentiating it from other Fitness Check-related exercises, which typically take a look at all impacts of EU legislation (e.g. including social and/or environmental effects), whoever is concerned and whenever they are or will be impacted. The approach of this Study concentrates on one single industry sector, representing 18 million direct jobs and contributing to about 9% of the EU's GDP. This allows for **a detailed analysis of regulatory impacts**, for instance with an assessment of the effects on operators active at different stages of the value chain; and for **a comprehensive assessment of the coherence** of various legislative provisions, i.e. whether any synergy or shortcoming identified generates positive or negative impacts on market operators. Yet, it has to be noted that such sectoral approach overlooks the impacts on industries other than construction and the society at large, be they at the core of EU legislation as in the case of environment or social protection.

Operational Aspects.

The Study consists of two components, namely:

- an **economic analysis**, concerned with the identification and, whenever feasible, the quantification of the costs and benefits of EU legislation;
- a **legal analysis**, aimed at assessing the coherence of EU legislation, with the identification of shortcomings, overlaps, gaps, and obsolete measures.

Fact finding work involved the review of a variety of documentary sources as well as primary data collection from firms, stakeholders, and public authorities. **Documentary sources** included available relevant Commission documents (such as evaluation studies, impact assessments, reports on the transposition of various directives, reports on public consultations); policy and operational documents issued by industry associations and government authorities (such as position papers, replies to public consultations, annual reports); legal reviews, economic studies and technical documents on selected aspects of the various pieces of legislation analysed (such as studies on the market for building renovations); and various statistics on the construction and related sectors. As for primary data collection, **132 interviews** were carried out, of which 10 with national public authorities, 13 with EU industry associations, 28 with national stakeholder associations, and 81 with economic operators (construction firms, providers of specialised construction services, professionals, and manufacturers of construction products). **Fact finding work focused on ten Member States**, namely: Belgium, Denmark, France, Germany, Ireland, Italy, Poland, Romania, Spain, and the United Kingdom, that account for about 80% of the total turnover in the European construction sector.

In the context of the Study, an **Open Public Consultation was also carried out**. It was launched on 29 March 2016 and, in line with relevant Commission guidelines, remained opened for 12 weeks, until 20 June 2016. Contributions were submitted by 55 entities, including 37 economic operators/industry associations, 13 government authorities, and 5 citizens. Contributions were submitted by entities located in 20 countries, namely 18 Member States and two other European countries. Findings of the Open Public Consultation were duly included in the analysis. Finally, to address specific research needs, two other surveys were set up: (i) an online questionnaire with associations and other stakeholders active in the construction product industry, covering 33 stakeholders in 10 Member States and Norway; and (ii) an email survey of architects' professional bodies, to which 10 EU bodies replied.

Stakeholder Involvement. Representatives of **leading industry associations at the EU level and MS representatives** were invited to contribute to the Study through the participation in a dedicated **Mirror Group**. The Mirror Group held four meetings, during which the scope, methodology and results of the Study were presented and extensively discussed. Mirror Group members were also instrumental to reach out to national associations and firms. The preliminary results were presented at a **Validation Workshop** intended to test the Study conclusions. Held on 26 May 2016, the Validation Workshop was attended by over 40 representatives of national authorities and industry associations active at the EU or national level. The comments formulated during the workshop and the written contributions subsequently provided were duly taken into consideration when finalising this report.

2 ECONOMIC ANALYSIS: COSTS AND BENEFITS OF EU LEGISLATION

The economic analysis aimed at assessing the impacts, i.e. the **costs and benefits** of EU legislation. In line with the sector focus of the Study, the impacts were assessed from the perspective of operators in the construction value chain.

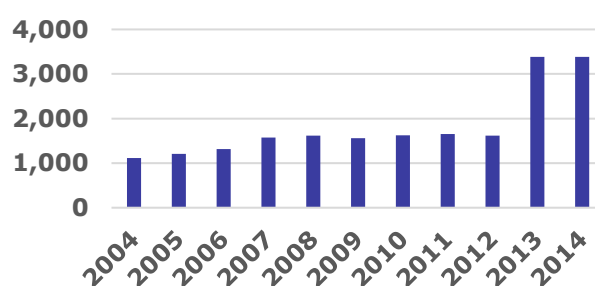
The impacts analysed fall into three main categories, namely:

1. **administrative costs and savings**, which refer to the resources (staff time, out-of-pocket expenses) used to fulfil the administrative obligations provided for by the selected EU acts;
2. **compliance costs and savings**, which relate to the resources devoted to the fulfilment of substantive obligations spelled out in the selected EU acts; and
3. **new market opportunities**, which relate to the business opportunities created or facilitated by the regulation.

2.1 Construction Product Legislation

The **Construction Product Regulation** and its predecessor the Construction Products Directive define rules for the measurement and declaration of the performances of construction products with regard to basic works requirements. It sets the general objectives for manufacturers, while the detailed specifications for products are set through the standardisation or secondary legislation. **The regulatory burden placed by this piece of legislation on construction products manufacturers is estimated in the order of € 3.4 billion, i.e. 1.1% of total turnover** in 2014. Such regulatory burdens are mainly linked **the obligation to supply information to clients, which was extended by the Construction Product Regulation with the introduction of the Declaration of Performance, and made mandatory the affixing of the CE marking on products in all Member States**. At the same time, the Construction Product Regulation also introduced the possibility of supplying the Declaration of Performance in an electronic format, which allowed containing the cost increase (with up to a 50% saving compared with the paper-based version) and is used by the vast majority of operators interviewed.

EU Regulatory Burdens on Construction Products Manufacturers (€ Million)



Source: Authors' elaboration on Interviews and Eurostat

The Construction Product Regulation introduced **a series of simplifications**, aimed at reducing administrative burdens for small and medium enterprises. The simplification concerning product testing under article 36 is effectively used in certain sub-sectors (windows), allowing small scale producers to achieve significant cost savings. In contrast, other **derogations** (e.g. exemptions for certain categories of products under art. 5) have been scarcely used and, therefore, those different simplification measures **seem not to have generated tangible benefits** for the industry so far.

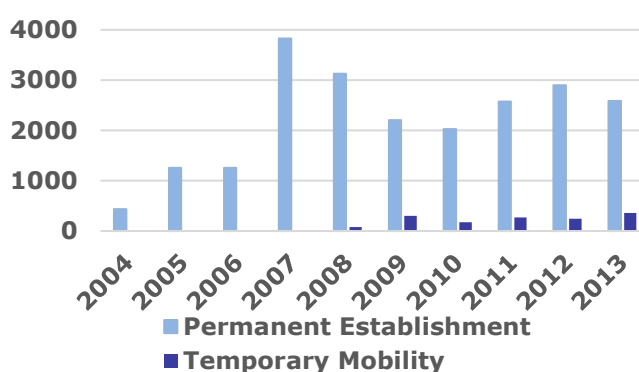
The Construction Product Regulation also introduced new provisions regarding issues related to the **sustainable use of natural resources**. While these provisions can potentially play an important role in enhancing sustainability in the construction sector, their inclusion in relevant harmonised standards is **still in the making**.

Finally, regarding the **benefits linked to improved circulation of goods** in the Single Market, for most construction products the cross-border flows remain low and **only a few product categories or high-value niche products benefit** from the harmonized framework provided by this Regulation.

2.2 Cross-Border Mobility of Professionals and Craftsmen

The **Professional Qualifications Directive** aims at facilitating the mobility of professionals and craftsmen by ensuring that they can exercise the freedom of establishment and the freedom to provide services in another MS on a temporary basis. **The mechanisms established by the Directive appear to work well in the sector**. While there are some differences between the automatic recognition system and the general system, the professionals and craftsmen interviewed and their associations generally hold a favourable view of these mechanisms. Accordingly, **administrative costs incurred to obtain recognition in another country are negligible**.

Professionals and Craftsmen Moving Cross-Border in the Construction Sector



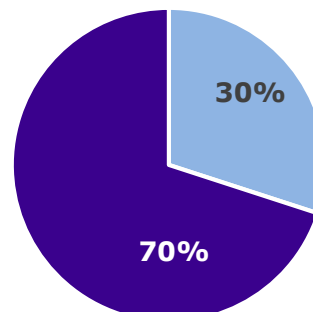
Source: Regulated Profession Database

However, **few professionals and craftsmen have taken advantage of the mechanisms established by the Professional Qualification Directive**. Data from the Commission-managed database on Regulated Professions shows that, in the most recent period, only about 2,000 construction professionals and craftsmen permanently resettled in another EU country every year, and just a few hundred made use of the temporary mobility provisions. Though concerns exist on the accuracy of the database, stakeholders and secondary sources confirmed the order of magnitude of these flows. Overall, as confirmed by stakeholders, **the cross border mobility of construction-related professionals and craftsmen is limited primarily by structural factors** (such as language barriers, differences in construction regulations and related procedures, acquaintance with local building customs, customer relationships). As a result, **the benefits generated by the PQD are modest**, and the value of the new business triggered by cross-border mobility accounts for a small fraction of the sectoral value added (between 0.04% for civil engineers and 0.4% for craftsmen).

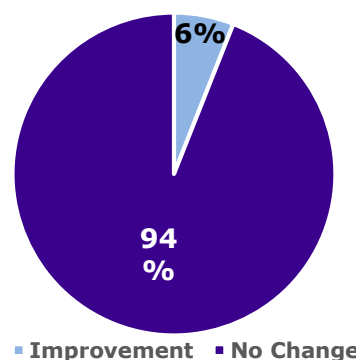
2.3 Services: Simplification of the Regulatory Framework and Facilitation of Cross-Border Operations

The **Services Directive** requires Member States to simplify the procedures that service providers, including construction firms, need to comply with when setting up a business or when providing services cross-border. The Directive has a very broad scope, and was implemented by national authorities primarily through general measures, with limited consideration of the specifics of the construction sector. In addition, in the majority of countries, the setting up of a construction firm is not subject to any authorization or licensing and this per se limits its potential. As a result, operators often have a limited perception of the effects of the Services Directive and the majority of firms interviewed did not notice an appreciable improvement in the regulatory framework for construction activities. When improvements were recorded, stakeholders tended to attribute them to national policy initiatives, only indirectly inspired by the Services Directive. Whatever the origin, the improvements mostly concerned a reduction in waiting times for approvals, the introduction of tacit approval mechanisms, the simplification of documents, and the availability of e-government solutions. While generally appreciated, these improvements did not significantly alter the costs incurred by operators, and therefore it is not possible to provide any meaningful estimate of the cost savings generated by the SD. **In conclusion, cost savings under the service directive are estimated to be limited for the sector.**

Perceived Improvements
Building Permits



General Authorisations



■ Improvement ■ No Change

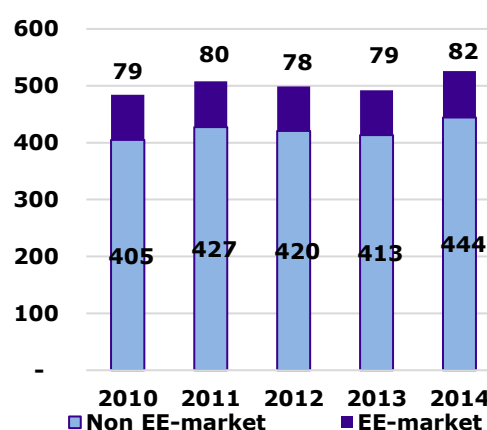
Source: Authors' elaboration on Interviews

Regarding the facilitation of cross border operations, two opposite trends emerge. On the one hand, **few firms have taken advantage of the opportunities** offered by the Directive, and those who did it mostly indicated that their ability to do business abroad was only marginally improved. On the other hand, many interviewees noted an **increase in competition in their domestic markets**, due to a growing presence of operators from other countries. This apparent contradiction is due to the different nature of the operators involved, with larger firms more inclined (and better equipped) to work abroad and smaller operators active only in the domestic market and suffering from more foreign competition. However, and most importantly, the increased competition is primarily attributable to the posting of workers from countries with lower social security contributions, which is unrelated to the SD. Finally, **difficulties persist regarding cross-border liability insurance for construction companies**, although some progress can be noticed. Overtime, insurance companies have developed mechanisms to try and cope with different insurance requirements in different countries (in particular, between France and Germany). Therefore, while cross-border insurance still represents a cost for market operators, there are indications that purchasing the necessary coverage is now possible in most cases.

2.4 Market Opportunities Linked to Energy Efficiency in Buildings

The **Energy Performance of Buildings Directive** requires Member States to adopt minimum energy performance requirements for both existing and newly built buildings. **The effects of these requirements ultimately fall upon the building owners and occupiers**, who must incur whatever costs may be associated with higher energy efficiency standards and who benefit from the savings resulting from lower energy consumption. However, this regulation also exerts a major influence on the construction sector, as the growing demand for energy-efficient buildings and building elements creates **new business opportunities for construction firms and related activities** (e.g. installers). This is particularly the case for the **renovation of residential buildings**, which increasingly involve insulation works and other measures aimed at improving thermal efficiency (replacement of windows, new heating systems). Indeed, over the 2010-2014 period, the turnover linked to energy efficiency-motivated renovations in the ten Member States analysed was estimated at some € 364 billion. In the case of new buildings, the corresponding value is about € 35 billion, bringing the total energy efficiency market to € 399 billion, i.e. about 16% of the total residential building market.

Energy Efficiency-Related Market for Residential Buildings (€ Billion)



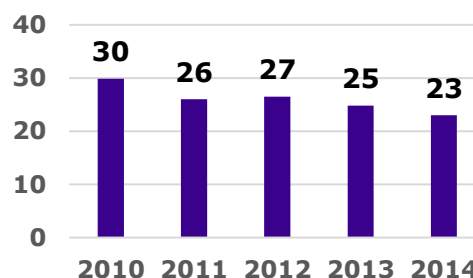
Source: Authors' own elaboration on national sources

The influence of EU legislation on the EE-related market varies considerably across countries. In some Member States, the Energy Performance of Buildings Directive did play a major role in fostering the adoption of more stringent energy efficiency requirements, that sometime had remained unchanged for a long period. In other countries, the progressively greater emphasis on energy efficiency in buildings is mainly the result of policy developments at the national level, with some countries being clearly on the forefront. The influence of domestic factors is generally stronger in the case of building renovations. Indeed, in virtually all countries the demand for renovation was strongly supported by a variety of government incentive schemes (such as grants, subsidized loans, preferential VAT regimes, and tax deductions), entailing substantial budgetary allocations and whose establishment sometimes pre-dates the adoption of the relevant EU legislation. In any case, the relative importance of EU legislation vis-à-vis national factors can be determined only with some degree of approximation, due to the interplay of numerous factors. Subject to this caveat, **the business opportunities generated by EU legislation can be estimated at some € 124 billion** over the 2010-2014 period, corresponding to about 5% of the total value of the residential building market. This definitely constitutes a meaningful contribution to sustain the level of activity during a difficult period for the construction industry and also had **positive effects across the whole supply chain**, with an increase in the demand for energy-related construction products and equipment and for related professional services. In addition, considering the small scale of the majority of building renovation interventions (whose average values typically range between € 4,000 and € 10,000), EU legislation on energy efficiency in buildings **contributed to enhance opportunities for small and medium companies.**

2.5 Other Costs and Benefits in the Energy Efficiency Policy Area

The Energy Performance of Building Directive, already in its 2002 version, mandates the adoption of **energy performance certification for buildings** that are constructed, rented or sold. The Study considered that the EU legislation had a prominent role in the introduction of such a certification. The **administrative costs generated by the Energy Performance Certificate on construction companies are estimated as negligible in the 10 MS covered by the analysis, costs vary between €23 and €30 million per year**, a fraction of the value of production in the markets for new building. Indeed, construction companies are only affected by the duty to provide it for new buildings, and only in case they also operate as developers or sellers. Such a business model applies to a minority of EU construction companies, except for contractors in Southern Europe. The bulk of costs linked to the certificates fall on owners, tenants, and companies other than construction firms. **With respect to recommendations included in Energy Performance Certificates – which were intended to stimulate landlords or tenants to invest further into energy efficiency measures – stakeholders and Commission studies pointed out that more or more ambitious renovations have not yet been triggered.** Hence, the recommendations did not have any tangible impact on construction companies.

Burdens from Energy Performance Certificates on Construction Firms (€ Million)



Source: Authors' elaboration on BPIE

The Energy Efficiency Directive, which is in force only as from the very end of the period in scope of the analysis, also affects the public and private demand for energy efficient construction services. In particular, art. 5(1) establishes a **3% yearly renovation rate for buildings owned and occupied by the central government**. Art. 5(6) allows Member States to opt for alternative measures. Among the 10 Member States covered by the Study, only Spain and Romania implemented art. 5(1) so far, and **additional market opportunities are estimated at € 79 million per year**. With respect to the **inclusion of energy efficiency requirements in national public procurement policies, it is too early to measure any benefit. Obligations for energy distributors to achieve energy savings (art. 7) fostered small-scale interventions** in several countries, in particular France, Italy, and the United Kingdom. Their impact in terms of additional market opportunities are already accounted for in the estimates provided in Section 2.4 above. Finally, with **respect to accreditation, certification or qualification of certifiers, inspectors, and installers of renewable systems, an estimate of costs could not be provided**, as the schemes show a wide variation across countries.

2.6 Late Payments

The **Late Payments Directive** aims at reducing payment delays and at mitigating their negative effects. Payment delays have a negative impact on liquidity, contributing to reduce the competitiveness of enterprises. The problem is particularly severe in the construction industry, where payment times are traditionally longer than in other sectors, and where firms, especially small, are often undercapitalized and therefore less able to withstand 'liquidity shocks'.

Trends in Payment Times and Financial Savings (2010-2014)

	Average Payment Time (days)		Variation 2010-14 (days)	Cost Savings (2014, €mln)
	2010	2014		
BE	82	65	-17	12.0
FR	87	66	-21	22.5
DE	41	45	4	-2.7
IT	127	102	-25	83.0
ES	174	87	-87	15.6
UK	33	55	22	-11.7
Total				118.7

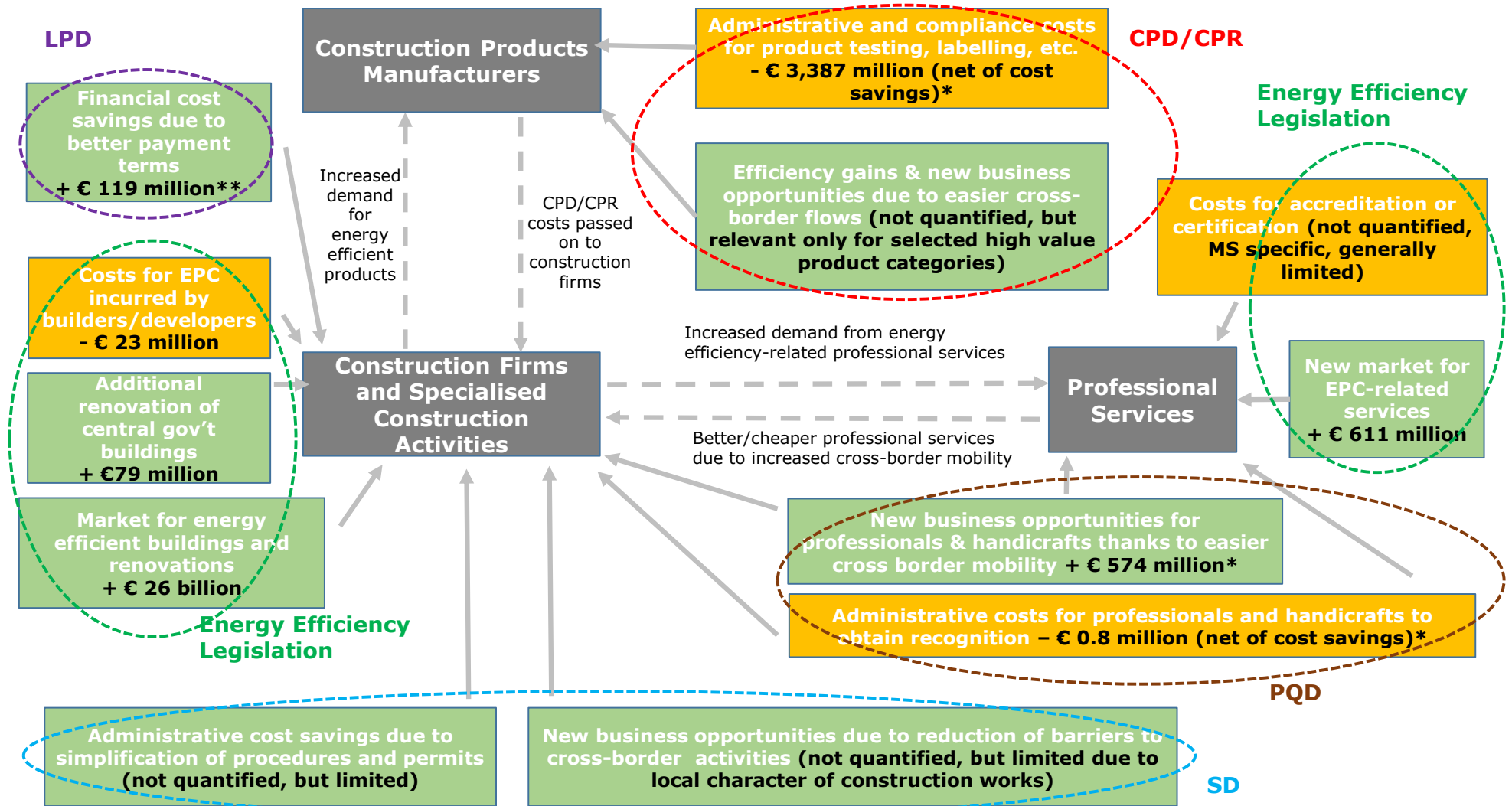
Source: Authors' elaboration on Euler Hermes and Eurostat

Precise data on payment times are difficult to obtain, and there are often discrepancies among the various sources. However, available evidence suggests that, **over the 2010 – 2014 period, there was a shortening in payment times in four out of the six countries for which data is available**. The influence of the EU legislation on these developments is difficult to ascertain, given its recent adoption. Even more importantly, trends in payment times are influenced by concomitant factors, sometimes moving in opposite directions, ranging from general economic conditions to regulatory developments at national level. Subject to this major caveat, **EU legislation seems to have played a positive role, although with significant differences across countries**. For instance, in Spain the shortening in payment times started well before the adoption of the Directive. Instead, in Italy the decline in payment times is much more recent and EU legislation appears to have substantially contributed to the improvement. Overall, **the financial cost savings associated with the Late Payments Directive for the EU construction sector can be estimated at about € 119 million for 2014**.

2.7 Overview of Economic Impacts

An **overview of the costs and benefits generated by the EU legislation** is provided in the Exhibit overleaf, giving an **indication of the values at stake and of the influence exerted by the selected pieces of legislation on the various stages of the value chain in 2014**.

Summary of Economic Impacts



Notes: in green, positive impacts (new market opportunities; cost savings); in orange, negative impacts (costs); in grey: typology of economic operators. Solid arrows refer to direct impacts while dotted arrows show indirect effects. Impact figures refer to the 10 MS analysed in detail, except for those with * which refer to EU28 and those with **, which refer to BE, DE, ES, FR, IT, UK

3 LEGAL ANALYSIS: COHERENCE OF LEGAL INSTRUMENTS

The analysis of the legal instruments applicable to the construction sector aims to assess the extent to which the selected EU acts are mutually supportive, or whether, conversely, any legal shortcomings (i.e. inconsistencies, overlaps, gaps) could be identified. The analysis of coherence focused on three main aspects, namely: (i) the **consistency among the objectives pursued** by the various pieces of legislation in so far they impact on the competitiveness and sustainability of the construction sector; (ii) the **coherence of the scope and definitions**; and (iii) the **coherence of substantive requirements** imposed upon construction sector operators. While the analysis obviously focuses on EU legislation, whenever relevant the interaction with national legislation was also considered.

Operationally, the analysis considered the nine legal instruments in three groups addressing similar themes. The first group deals with legislation establishing **requirements for construction products**, either as product requirements or as labelling requirements, namely the Construction Products Regulation, the Ecodesign Directive, and the Energy Labelling Directive. The second group encompasses the **energy efficiency legislation** applicable to the construction sector, which includes the Energy Efficiency Directive, the Energy Performance of Buildings Directive and the Renewable Energy Sources Directive. The third group consists of the legal instruments regulating the **provision of services in the construction sector**, namely the Services Directive, the Professional Qualifications Directive, and the Late Payments Directive. Additionally, the analysis also considered the coherence between acts belonging to different groups.

3.1 Coherence of Instruments Establishing Product or Labelling Requirements

Consistency of Objectives. The Construction Products Regulation on one side, and the Ecodesign and the Energy Labelling Directives on the other pursue **distinct but complementary objectives**. The former lays down conditions for placing construction products on the EU market, and now also includes consideration on sustainability issues. The latter are primarily concerned with the reduction of the environmental impact caused by the use of energy-related products (including certain construction products), but, in addition, also aim at eliminating barriers in the EU internal market for these products.

Coherence of the Scope and Definitions Used. Several construction products, covered by the Construction Products Regulation can be classified as energy-related products under the Ecodesign framework. Currently, this is the case for five product categories, and one of them is subject to both a harmonised standard and an Ecodesign implementing regulation (solid fuel local space heaters).

Coherence of Substantive Requirements. There is a risk of inconsistency between the **substantive requirements established in the harmonised standards and the Ecodesign secondary regulation**, as the product characteristics or testing requirements may be different. So far, this has materialised only for solid fuel local space heaters, and may do so if and when the Ecodesign framework is extended to other construction products. The impact of this overlap would be limited for the whole sector, though significant for manufacturers of covered products. The impact may grow if and when more products fall under both the Construction Product Regulation and the Ecodesign frameworks.

3.2 Coherence of Energy-Efficiency Instruments

Consistency of Objectives. The Energy Efficiency Directive, Energy Performance in Buildings Directive, and Renewable Energy Sources Directive were all enacted in the context of the commitment for the EU to become a highly energy-efficient and low carbon economy, namely through the setting of the so called '20-20-20 targets'. As buildings account for some 40% of total energy consumption (as well as for 35% of CO₂ emissions), the three Directives aim, to a

varying degree, at tapping the considerable energy saving potential in the building sector. Therefore, **the objectives of these three directives are compatible and coherent.**

Coherence of the Scope and Definitions Used. *There are some inconsistencies in the definitions used in the three Directives, but their practical impact appears to be minimal.* In particular, the three Directives include provisions applying to buildings, but only the Energy Performance in Buildings Directive provides some definitions of the related terms, and these definitions are not always cross referenced and/or used consistently. As for the term 'major renovation' is defined in Article 2(10) of the EPBD and cross-referenced in the EED, but it is not used consistently throughout the three directives and it is often employed in conjunction with other terms, such as 'comprehensive renovation' and 'retrofit', for which no definition is provided. While a greater consistency would be certainly desirable from a strictly legal point of view, notably neither the secondary sources reviewed nor the stakeholders consulted have highlighted situations in which definitional issues have resulted in any tangible consequence for construction sector operators. Importantly, the assessment regarding the desirability of certain definitions may depend upon the perspective adopted, **with stakeholders representing different interests sometimes displaying divergent views.** In particular, the adoption of single EU-wide definitions common to all directives for 'deep renovation' and 'staged deep renovation' is generally supported by producers of energy efficient products and systems. However, stakeholders in the 'core' construction sector have some reservations, as they fear that a common definition would contrast with the widely different conditions prevailing across EU countries. This negative view was adamantly expressed inter alia by the largest EU construction industry organization during the validation process. Conciliating these diverging interests is far from being an easy task, as producers of energy efficient products and systems mostly have cross-border activities across the Single Market, and would then benefit from further harmonisation of definitions and requirements. To the contrary, construction operators mostly work in local markets only and have no interest and very limited expected benefits from the adoption of a more coherent legal framework across the EU, hence supporting keeping local norms, to which they are well acquainted.

Coherence of Substantive Requirements. Concerning substantive requirements, two instances of overlapping provisions have been identified, regarding:

1. Regarding the **certification of buildings or building systems** four different schemes are set up between, namely: (i) the energy performance certification of buildings; (ii) the inspection of heating systems; (iii) the inspection of air-conditioning systems; and (iv) the energy audit of large companies, which also encompasses their buildings. The coexistence of these various schemes may give rise to some inconsistencies, also due to the interaction with national legislations. **As the obligations regarding the certification of buildings and building systems typically fall on the owners, the above considerations have limited relevance for construction firms, whereas the lack of coordination among the various schemes may 'artificially' increase the revenues of the professionals** involved in certification activities.
2. Concerning the **accreditation/qualification and training of experts**, the three Directives all create legal obligations for Member States to ensure that the experts, inspectors, energy auditors and installers have the necessary accreditations/qualifications and training. **The opportunity of coordinating the accreditation/qualification and training schemes for energy professionals across these Directives, in order to reduce burdens on market operators, is currently underexploited.** Noteworthy, these aspects remain a competence of Member States, sometimes at regional level, leading to diverging approaches. The lack of a better coordination may result in entry costs, and thus barriers, in the various markets for professionals.

3.3 Coherence of Instruments Dealing with the Internal Market for Services

Consistency of Objectives. The Services Directive and the Professional Qualifications Directive aim at making the free provision of services and of establishment in the EU as simple as within an individual Member State. While the latter covers the recognition of professional qualifications, use of titles and knowledge of languages as well as any other requirements under national legislation restricting access to a profession, the former deals with other requirements, such as tariffs, legal form requirements or ownership requirements, among others. **The objectives of these Directives are fully complementary and coherent.**

Coherence of the Scope and Definitions Used. The analysis did **not reveal any material issue regarding the scope of the two instruments.** The Services Directive covers a large variety of sectors ranging from traditional activities to knowledge-based services, including services in and for the construction sector. The two Directives are considered to complement each other whilst covering different aspects of the free movement of professionals. **Consistency in definitions is ensured** through a specific cross-reference in the definition of ‘regulated professions’.

Coherence of Substantive Requirements. All in all, **no major overlaps** have been identified between the Services Directive and the Professional Qualification Directive. The review of the latter, in 2013, took into account some areas where coherence could still be improved (e.g. with regard to the exchange of information and the introduction of a point of single contact), resulting in **consistent substantive requirements at EU level.** However, **the implementation of the Services Directive for the construction sector at national and local level is far from being perfect** and this affects the implementation on the ground of its substantive requirements. In particular, (i) it was mostly implemented by means of horizontal regulation, without any specific provisions relating to the construction sector; (ii) it was mostly implemented through principle regulations, hence not affecting how administrative procedures are applied, especially at local level; and (iii) in many cases, local entities lacked the expertise, skills and manpower to properly implement it. Accordingly, the various studies and reports by the Commission, as well as the empirical findings of this Study, identified a set of persisting regulatory barriers to the activity of construction companies.

3.4 Coherence of instruments pertaining to different groups

Product requirements and energy efficiency. The Energy Efficiency Directive, the Energy Performance of Buildings Directive, the Ecodesign Directive and the Energy Labelling Directive have complementary objectives which are well aligned with each other and which do not overlap, given that the directives focus on energy efficiency at different levels in the building chain. Their synergies could be strengthened by streamlining the concepts of ‘system’, ‘product’ and ‘component’ and by focusing on overall system efficiency instead of single-minded measures. Further fragmentation can be avoided by requiring that the outputs under the Ecodesign and Energy Labelling frameworks are directly compatible with the inputs under the Energy Performance of Buildings Directive.

Energy Performance of Buildings Directive and Construction Product Regulation. A link exists between these two acts, as the latter establishes harmonised rules for the marketing of construction products, hereby allowing the comparison of the energy-related performance of products from different manufacturers. As the Energy Performance of Buildings Directive takes a system approach while the Construction Product Regulation acts at product level, it is generally acknowledged that both directives do not overlap. Nevertheless, the adoption of a new standard on sustainability or energy economy under the Construction Product Regulation, could contribute to achieving the objectives of the Energy Performance of Buildings Directive. Many stakeholders moreover clearly express a preference for regulating the issue of sustainable construction products through the construction product legal framework.

Accreditation of professionals and Professional Qualifications and Services Directive.

The provisions on accreditation/certification of energy efficiency professionals in the energy efficiency policy areas should apply without prejudice to the requirements of the Professional Qualifications and Services Directives. Even though the Directives on energy efficiency consistently urge Member States to take the Professional Qualifications Directives into account, the differences in certification and qualification criteria persist and cross-border mutual recognition therefore remains slow to emerge. This is considered problematic, as Internal Market Directives apply without prejudice to the specific certification requirements set out in the Energy Efficiency Directives, in particular as this applicability should result in some cases in automatic recognition

3.5 Impact of Legal Shortcomings

In the exhibit below, the impact of legal shortcomings is assessed on a qualitative scale. Broadly speaking, legal shortcomings do not currently affect the performance of the sector to a significant extent. However, with respect to the overlap of the Construction Products Regulation and the Ecodesign Directive, and the implementation of the Services Directive for domestic operators, the potential impacts – both in terms of costs and benefits – may be larger in the future.

Impacts of Legal Shortcomings

Issue	Impact
<i>Inconsistencies in definitions, cross-references</i>	<ul style="list-style-type: none"> • Negligible
<i>Overlap of the Construction Products Regulation and the Ecodesign Directive</i>	<ul style="list-style-type: none"> • Limited costs for the whole sector, but increasing if and when the scope of Ecodesign is extended to other construction products • High costs for manufacturers of specific products covered by both harmonised standards and the Ecodesign
<i>Overlap of schemes for the assessment of buildings / building systems</i>	<ul style="list-style-type: none"> • Limited costs of familiarisation for providers of professional services, but more problematic: (i) for independents and small companies; or (ii) in Member States where third-party certification is mandatory • Moderate additional revenues for providers of professional services • Negligible costs for construction companies
<i>Accreditation and training of experts</i>	<ul style="list-style-type: none"> • Opportunities for exploiting moderate synergies across different professions • Potential to allow for automatic recognition for cross-border services
<i>Insufficient implementation of the Services Directive provisions</i>	<ul style="list-style-type: none"> • Limited costs and high potential from simplifications for domestic construction companies (via better/targeted/detailed implementation, raising awareness at local level and across market operators) • Limited costs and limited potential largely limited to domestic impacts in relation to simplifications for cross-border construction companies

4 SUMMARY OF THE EX POST EVALUATION

The exhibit below shows the summary table of the ex post evaluation exercise. The assessment under each evaluation criterion is provided separately for the two policy areas over a three-ladder scale – High, Medium, and Low – together with a synthesis assessment.

Ex Post Evaluation: Summary Table

Evaluation Criterion	Internal Market	Energy Efficiency
<i>Relevance</i>	Medium	High
<i>Coherence</i>	Medium	Medium
<i>Effectiveness</i>	Low	Medium
<i>Efficiency</i>	Medium	High
<i>EU Added Value</i>	Medium	Medium

Relevance. The relevance of Internal Market legislation for the construction sector is considered as medium, with barriers other than regulatory hampering the integration of the EU construction market and reducing the potential benefits generated by the Construction Products Regulation, the Professionals Qualification Directive, and the Services Directive. ***The relevance of the Energy Efficiency legislation can be rated as high, especially thanks to the Energy Efficiency Directive and the Energy Performance of Buildings Directive pursuing objectives better meeting the challenges and needs of the EU construction sector.***

Coherence. The coherence is assessed as medium for both the Internal Market and Energy Efficiency policy areas. With respect to the former, the Services Directive and the Professional Qualification Directive aim at removing existing barriers to the free movement of construction service providers and strengthening the mobility of professionals in the EU through different measures. These objectives are considered as complementary and coherent. However, a number of instances of inadequate implementation of the Services Directive hampering the mobility of construction companies were identified by the current analysis and in the relevant Commission Staff Working Document. As for the Construction Products Regulation, some of its provisions remain in practice not applied because of their limited legal clarity. Furthermore, a potentially significant overlap exists between the Construction Products Regulation and Ecodesign Directive: though it is currently limited to only one product category, manufacturers risk bearing duplicated costs whenever the same product is covered by both a harmonised standard and an Ecodesign secondary regulation. With respect to the Energy Efficiency policy area, great synergies were observed among the aims pursued by the acts in scope of the analysis. Overlaps, however, exist among the Energy Efficiency Directive, the Energy Performance of Buildings Directive and the Renewable Energy Sources Directive with regard to the relationship among the certifications, inspections and energy audits of buildings and building systems, and their related certification/qualification schemes and training programmes for professionals.

Effectiveness. Once the impacts of the economic and financial crisis are accounted for, assessing the effectiveness of the acts in the policy areas of Internal Market and Energy Efficiency on the competitiveness of the construction sector is far from easy. In addition to that, though the Study has a sectoral dimension, not all the acts in scope of the analysis necessarily target the construction sector. On the one hand, the measures under the Energy Efficiency policy area did benefit construction companies and other nexuses of the value chain, with national interventions and support programmes playing a major role. As for the Internal Market policy area, having only limited impacts, it is assessed as being little effective. Here, a distinction must be made between the Construction Products Regulation, partially achieving its aims; the Professionals Qualification Directive, working well, but resulting only in a limited number of professionals and craftsmen working abroad; and the Services Directive, being almost ineffective for the construction sector. In terms of sustainability, the Energy Efficiency policy area contribute to the reduction of the energy consumption in buildings, while the Internal Market policy area has not yet had an important role in this respect.

Efficiency. With regard to efficiency, the only significant categories of costs identified in the Internal Market policy area were generated by the Construction Products Regulation, affecting product manufacturers, while the costs generated for contractors and professionals under other acts are negligible. Once again, this points to the fact that national and sometimes local frameworks are far more important for construction operators. As costs, benefits in this policy area were also limited. The most important advantages are the new business opportunities created by the Professionals Qualification Directive and the financial cost savings generated by the Late Payments Directive, both only accounting, however, for a fraction of the sectoral added value. As a result, the efficiency of this policy area is considered as medium. Differently, the Energy Efficiency policy area had a far greater impact, creating business opportunities in the related markets worth about €26 billion per year, that is 7.8% of the sectoral added value. Professionals benefited from the significant business opportunities accrued from the energy performance certificate. In light of the above, ***the Energy Efficiency policy area is considered as highly efficient for the construction sector.***

EU added value. The added value of EU actions in the Internal Market policy area is rated as medium. By their very nature, the objectives of the Construction Products Regulation, the Services Directive, and the Professionals Qualification Directive could only be achieved with EU measures. As for the Late Payments Directive, it played an important role in promoting a pan-European culture for timely payments. Turning to the Energy Efficiency policy area, the Energy Performance of Buildings Directive and the Energy Efficiency Directive contributed to creating an energy efficiency market for both new buildings and renovations, with added value delivered at all links of the construction value chain. National legislation, however, continued to play a very important, and sometimes predominant, part. Therefore, the EU added value of the Energy Efficiency legislation for the construction sector can be assessed as medium too.

