Evaluation of the Practical Implementation of the EU Occupational Safety and Health (OSH) Directives in EU Member States

REPORT BY DIRECTIVE: DIRECTIVE 92/57/EEC ON THE IMPLEMENTATION OF MINIMUM SAFETY AND HEALTH REQUIREMENTS AT TEMPORARY OR MOBILE CONSTRUCTION SITES
Evaluation of the Practical Implementation of the EU Occupational Safety and Health (OSH) Directives in EU Member States

REPORT BY DIRECTIVE: DIRECTIVE 92/57/EEC ON THE IMPLEMENTATION OF MINIMUM SAFETY AND HEALTH REQUIREMENTS AT TEMPORARY OR MOBILE CONSTRUCTION SITES
CONTENTS

List of abbreviations 7

Executive summary 9

1 Introduction 13

2 The Directive 17
   2.1 Background and objective 17
   2.2 Risks 18
   2.3 Provisions 20
   2.4 Intervention logic 23
   2.5 Measuring impacts 26

3 Implementation in MSs 29
   3.1 MQ1: Common Processes and Mechanisms 29
   3.2 MQ2: Derogations and transitional periods 30
   3.3 MQ3: Compliance 31
   3.4 MQ4: Accompanying actions 35
   3.5 MQ5: Enforcement 37
   3.6 MQ6: Vulnerable groups 38
   3.7 MQ7: SMEs and microenterprises 38

4 Assessment of relevance 40
   4.1 EQR1: Current relevance 41
   4.2 EQR2: Future relevance 44

5 Assessment of effectiveness 48
   5.1 EQE1: Effect on occupational safety and health 48
   5.2 EQE2: Effect of derogations and transitional periods 55
5.3 EQE3: Effect of Common Processes and Mechanisms 56
5.4 EQE4: Effect of enforcement 59
5.5 EQE5: Benefits and costs 60
5.6 EQE6: Broader impacts 61
5.7 EQE7: Objective achievement 61

6 Assessment of coherence 63
6.1 EQC1: Coherence with other OSH Directives 63
6.2 EQC2: Coherence with other EU policies 66

7 Conclusions and recommendations 71
7.1 Implementation 71
7.2 Relevance 72
7.3 Effectiveness 72
7.4 Coherence 73
7.5 Overall discussion 73
7.6 Overall conclusion and recommendations 74

APPENDICES

Appendix A References
# List of abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACBH (WP)</td>
<td>Advisory Committee on safety and health at work (Working party)</td>
</tr>
<tr>
<td>CPM</td>
<td>Common Processes and Mechanisms</td>
</tr>
<tr>
<td>CSR</td>
<td>Country Summary Report</td>
</tr>
<tr>
<td>CTS</td>
<td>Carpal tunnel syndrome</td>
</tr>
<tr>
<td>DWEA</td>
<td>Danish Working Environment Authority</td>
</tr>
<tr>
<td>EAV</td>
<td>Exposure action values</td>
</tr>
<tr>
<td>ELV</td>
<td>Exposure limit values</td>
</tr>
<tr>
<td>EQC</td>
<td>Evaluation question Coherence</td>
</tr>
<tr>
<td>EQE</td>
<td>Evaluation question on Effectiveness</td>
</tr>
<tr>
<td>EQR</td>
<td>Evaluation question on Relevance</td>
</tr>
<tr>
<td>ESENER</td>
<td>European Survey on New and Emerging Risks</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EU-OSHA</td>
<td>European Agency for Safety and Health at Work</td>
</tr>
<tr>
<td>EWCS</td>
<td>European Working Conditions Survey</td>
</tr>
<tr>
<td>FIEC</td>
<td>European Construction Industry Federation</td>
</tr>
<tr>
<td>HAV</td>
<td>Hand-arm vibration</td>
</tr>
<tr>
<td>HAVS</td>
<td>Hand-arm vibration syndrome</td>
</tr>
<tr>
<td>HLSF</td>
<td>The High-Level Strategic Forum</td>
</tr>
<tr>
<td>HSE</td>
<td>Health and Safety Executive</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
</tr>
<tr>
<td>KR</td>
<td>Key requirement</td>
</tr>
<tr>
<td>LFS</td>
<td>Labour Force Survey</td>
</tr>
<tr>
<td>MQ</td>
<td>Mapping question</td>
</tr>
<tr>
<td>NIR</td>
<td>National Implementation Report</td>
</tr>
<tr>
<td>OSH</td>
<td>Occupational Safety and Health</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>PPE</td>
<td>Personal Protective Equipment</td>
</tr>
<tr>
<td>SBS</td>
<td>Structural Business Statistics</td>
</tr>
<tr>
<td>SLIC</td>
<td>Senior Labour Inspectors Committee</td>
</tr>
<tr>
<td>SRPP</td>
<td>Socially Responsible Public Procurement</td>
</tr>
<tr>
<td>SRR</td>
<td>Standardised Risk Ratios</td>
</tr>
<tr>
<td>TFEU</td>
<td>Treaty on the Functioning of the European Union</td>
</tr>
<tr>
<td>Acronym</td>
<td>Definition</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>TS</td>
<td>Tender Specifications</td>
</tr>
<tr>
<td>VDV</td>
<td>Vibration Dose Values</td>
</tr>
<tr>
<td>VOV</td>
<td>Virksomhedsovervågning (Monitoring Preventive Work Safety and Health Measures at Workplace Level)</td>
</tr>
<tr>
<td>WBV</td>
<td>Whole-body vibration</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
</tbody>
</table>
**Executive summary**

The present document is a Directive-specific report, which forms part of the overall reporting of the evaluation of 24 Directives on Occupational Safety and Health (OSH) commissioned by DG Employment of the Commission. The objective is to evaluate the practical implementation of the EU OSH Directives in the EU Member States (MSs), to assess their impacts and to identify their strengths and weaknesses with the aim of presenting possible improvements to the regulatory framework. The present report concerns Directive 92/57/EEC on the implementation of minimum safety and health requirements at temporary or mobile construction sites, from now on referred to as the ‘Construction Directive’.

The Construction Directive was developed as the eighth specific Directive, meaning that it tailors the principles of the Framework Directive specifically to the construction sector and supplements it with more stringent and specific provisions. The construction sector was selected for specific attention because it is one of the largest industrial sectors in the EU, and because it accounts for a large share of all occupational fatal injuries. Traditionally, work within the construction sector has been rendered dirty, difficult and dangerous contributing to the poor image of construction work (see e.g. ILO, 2001).

Consequently, the Construction Directive aims to prevent risks by establishing a chain of responsibility, linking all parties involved. Being a sector specific Directive does not mean that it establishes minimum requirements for all potential risks occurring at temporary or mobile construction sites, instead the Directive covers risks not (or insufficiently) covered by other Directives.

Hence, the Construction Directive lays down minimum requirements for the sector at a fairly general level in order to increase focus on the prevention of occupational risks. At the more specific level, it contains annexes that refer to particular types of work and accompanying risks such as slipping, stumbling, falling and loss of control of hand-held tools and objects. Furthermore, the construction sector reports the highest level of exposure to ergonomic risk factors, biological and chemical risk factors and noise/temperature risk factors.
**Methodology**

Findings are based on an analysis of the OSH legislation in each of the MSs, official statistics at national and EU level, National Implementation Reports (NIRs) (submitted to the Commission by the MSs by end of 2013) as well as on scientific articles, existing studies and interviews with both national and EU stakeholders. It is, however, not straightforward to attribute the collected information on safety and health developments to the different Directives. However, as the Construction Directive has a reasonably precise sectoral delimitation, this problem is considered to be minor than for most of the other OSH Directives.

**Implementation**

With only few observed discrepancies and infringement proceedings since 1990, we conclude that the national transpositions of the Construction Directive have been smooth. Furthermore, most MSs have implemented more detailed or stringent requirements than those specified by the formulations of the provisions in the Construction Directive. However, ten MSs have derogated from the requirements to draw up a safety and health plan.

**Compliance**

Although there seems to be overall good compliance with the Construction Directive provisions among the establishments in the MSs, compliance is relatively poor among the smaller establishments. This is partly due to the fact that several of these are sub-contracted construction companies, many of which are SMEs or even comprise self-employed workers.

A number of accompanying actions have been taken at both MS and EU level to encourage the achievement of the safety and health targets of the Construction Directive. These include guidance documents, support tools, awareness-raising campaigns, education and training activities and financial incentives. A few stakeholders have pointed to gaps in these actions, although without providing specific recommendations.

**Relevance**

Despite surveys that point to the fact that workers in the construction sectors consider themselves to be neither more nor less healthy than the EU-27 workforce as a whole, there are also statistics suggesting that the construction sector remains a high-risk sector, which supports the continued relevance of the Construction Directive. Furthermore, according to Eurostat, ESAW, the construction sector had in 2012 the highest incidence rate of non-fatal accidents, and it became second – after mining and quarrying – in terms of fatal accidents.

Construction activities at existing level are expected to continue throughout the EU, and the incidence rates of occupational injuries are expected to remain relatively high. Hence, it is assessed that a specific need for regulatory control will remain within the construction sector.

**Effectiveness**

The Construction Directive is assessed to have affected the enterprises’ behaviour when it comes to securing occupational safety and health – particularly the large enterprises and, to a lesser extent, the SMEs and microenterprises. The differences in securing occupational safety and health are due to difficulties in complying with provisions, just as they are related to a lack of financial resources as well as safety and health expertise and cultures. Some have also criticised the Construction Directive for not dealing adequately with sub-consultancy contracts,
which are plentiful within the construction sectors, and which in many cases are held by SMEs and microenterprises.

The majority of the MSs actually failed to meet the transposition deadlines for the Directive. This is assessed to have had considerable repercussions on the levels of practical implementation at workplaces. The impact of this is yet to be determined.

It is difficult to attribute the effect of enforcement activities to the Construction Directive and its provisions, as they mostly concern the OSH acquis as a whole. That said, improved guidance may provide particular benefits for the smaller, often subcontracting construction companies.

Nevertheless, we assess that the Construction Directive has achieved its stated objective of introducing measures to encourage improvements in terms of safety and health at work. This answer is supported by the above answers to the other evaluations questions – i.e. that in general, the Construction Directive is implemented and complied with, that it remains relevant, that it has led to positive workplace impacts as well as safety and health impacts, and that it has contributed to levelling the playing field by setting common standards for occupational safety and health in the EU.

It is assessed that there are no significant internal coherence issues related to the Construction Directive. The only issue identified relates to the overlap of inspection requirements on work equipment, Directive 2009/104/EC. Other international organisations – in particular the ILO – also make improvements to construction site working conditions. For example, the ILO Safety and Health in Construction Convention (No. 167) sets additional requirements related to inspection and reporting of occupational accidents and diseases.

Our overall conclusion is that the Construction Directive has been well-implemented in the MSs. It remains relevant and has been effective, and it has not given rise to significant coherence issues.

During the analysis, we have looked into strengths and weaknesses of the present regulatory framework, and have from these derived a number of recommendations for the way forward when developing the Construction Directive:

We assess that the Construction Directive has had an important role within the OSH acquis in addressing risks specific or most widespread for construction sites. Hence, it accompanies the Framework Directive by focusing on a number of specific acute as well as long-term risks by introducing a number of minimum requirements of which some are prescriptive while others can be argued to be goal-oriented.

For that reason, we recommend to maintain a Construction Directive in the future. However, it could be considered to include a ‘without prejudice clause’ in Directive 2009/104/EC (work equipment) to ensure that equipment inspected under Directive 92/57/EEC (e.g. scaffolding) are not subject to other inspection requirements under Directive 2009/104/EC. A strategy to further enhance synergies could include the promotion of safety and health education, and training and capacity building.
programmes within the construction sector. Such programmes could specifically target safety and health coordinators in construction sites.

### Recommendation on SMEs and microenterprises, and vulnerable groups

Many construction activities, including those performed on large construction sites, are, as already mentioned, carried out by small, often sub-contracted construction companies or even by self-employed workers. In our analysis we found that such small construction companies have a relatively low level of knowledge and training on occupational safety and health matters.

Hence, we recommend to put more emphasis on the safety and health within SMEs and microenterprises in a future revised Construction Directive. Furthermore, unless the focus on vulnerable groups is increased in the Framework Directive, there might be a need to highlight and avoid particularly dangerous work functions for e.g. less mobile workers. However, this goal could also be pursued by improving guidance on how to comply with the present provisions.

### Recommendation on scope and definitions

Finally, other international organisations – in particular the ILO – pursue improvements to construction site working conditions. For example, the ILO Safety and Health in Construction Convention (No. 167) sets additional requirements related to inspection and reporting of occupational accidents and diseases.

Hence, there could be a need for reviewing the scope of application and relevant definitions of the Construction Directive in the light of the ILO Convention. Furthermore, one could consider including a requirement on reporting of occupational accidents and diseases as well as specifying requirements relevant in connection with inspections by national authorities.
## 1 Introduction

This report is a Directive-specific report which forms part of the reporting of an overall evaluation of 24 Directives on Occupational Safety and Health (OSH) commissioned by DG Employment. The report concerns Directive 92/57/EEC on the implementation of minimum safety and health requirements at temporary or mobile construction sites, from now on referred to as the Construction Directive.

### About this report

The evaluation of the 24 OSH Directives was initiated in 2013 and finalised in June 2015. The evaluation produced cross-cutting findings on the implementation of the 24 Directives, which are documented in the main report. Annexed to this main report are Directive-specific reports – such as this one – for each of the 24 Directives (Annex A) and reports on the implementation of the 24 Directives in the MSs (Annex B comprising 27 reports, as Croatia was not yet a MS during the evaluation period 2007-2012).

### Evaluation of OSH Directives

The objective was to evaluate the practical implementation of the EU OSH Directives in the EU MSs in order to assess their impacts and identify their strengths and weaknesses with the aim of putting forward possible improvements to the regulatory framework. The evaluation was guided by a set of questions and evaluation criteria, which were to be addressed for all Directives and MSs.

There were two main sets of questions. The first set related to the implementation of the Directives in the MSs:

- **Implementation**: MQ1-MQ7 are mapping questions that, apart from addressing the overall implementation of the Directives, look into specific implementation issues such as derogations, transitional periods, compliance and enforcement.
MQ1: Across the MSs, how are the different Common Processes and Mechanisms foreseen by the Directives put in place, and how do they operate and interact with each other?

MQ2: What derogations and transitional periods are applied or have been used under national law under several of the Directives concerned?

MQ3: What are the differences in approach to and degree of fulfilment of the requirements of the EU OSH Directives in private undertakings and public sector bodies, across different sectors of economic activity and across different sizes of companies, especially for SMEs, microenterprises and self-employed?

MQ4: What accompanying actions to OSH legislation have been undertaken by different actors (the Commission, the national authorities, social partners, EU-OSHA, Eurofound, etc.) to improve the level of protection of safety and health at work, and to what extent are they actually used by companies and establishments to pursue the objective of protecting the safety and health of workers? Are there any information needs that are not met?

MQ5: What are the enforcement (including sanctions) and other related activities of the competent authorities at national level and how are the priorities set among the subjects covered by the Directives?

MQ6: What are the differences of approach across MSs and across establishments with regard to potentially vulnerable groups of workers depending on gender, age, disability, employment status, migration status etc., and to what extent are their specificities resulting in particular from their greater unfamiliarity, lack of experience, absence of awareness of existing or potential dangers or their immaturity, addressed by the arrangements under question?

MQ7: What measures have been undertaken by the MSs to support SMEs and microenterprises (e.g. lighter regimes, exemptions, incentives, guidance, etc)?

The second set addressed the three main evaluation criteria of relevance, effectiveness and coherence (a total of 11 evaluation questions):

› **Relevance**: EQR1-EQR2 relate to the extent to which the provisions of the Directive are relevant for the current and future risks and composition of industry sectors.

**EQR1**: To what extent do the Directives adequately address current occupational risk factors and protect the safety and health of workers?

**EQR2**: Based on known trends (e.g. new and emerging risks and changes in the labour force and sectoral composition), how might the relevance of the Directives evolve in the future, and stay adapted to the workplaces of the future in light of the horizon of 2020? Does the need for EU level action persist?

› **Effectiveness**: EQE1-EQE7 explore whether the introduction of the Directive has led to changes in enterprise behaviour and the occupational safety and health of workers (note that EQE5-EQE6 only are answered for the Framework Directive and for the OSH Directive acquis as a whole).
**EQE1:** To what extent has the Directive influenced workers’ safety and health, the activities of workers’ representatives, and the behaviour of establishments?

**EQE2:** What are the effects on the protection of workers’ safety and health of the various derogations and transitional periods foreseen in several of the Directives concerned?

**EQE3:** How and to what extent do the different Common Processes and Mechanisms that were mapped contribute to the effectiveness of the Directives?

**EQE4:** To what extent do sanctions and other related enforcement activities contribute to the effectiveness of the Directives?

**EQE5:** What benefits and costs arise for society and employers as a result of fulfilling the requirements of the Directives?

**EQE6:** To what extent do the Directives generate broader impacts (including side effects) in society and the economy?

**EQE7:** To what extent are the objectives achieving their aims and, if they are not, what cause could play a role? What factors have particularly contributed to the achievement of the objectives?

**Coherence:** EQC1-EQC2 concern the extent to which the objectives and actions from a given OSH Directive interact or overlap with other OSH Directives and/or with other EU policies.

**EQC1:** What, if any, inconsistencies, overlaps or synergies can be identified across and between the Directives (for example, any positive interactions improving health and safety outcomes, or negative impact on the burdens of regulation)?

**EQC2:** How is the interrelation of the Directives with other measures and/or policies at European level also covering aspects related to health and safety at work, such as EU legislation in other policy areas (e.g. legislation: Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH); Cosmetics Directive, Machinery Directive, policy: Road Transport Safety, Public Health, Environment Protection), European Social Partners Agreements or ILO Conventions?

---

**Methodology and sources of information**

The overall methodology applied for the evaluation – and thus also for the analysis presented in this report – is presented in detail in Chapter 2 in the Final Report.

These Directive-specific report findings are based on the analysis of the OSH legislation in each of the MSs, official statistics at national and EU level, NIRs submitted to the Commission by each of the MSs by the end of 2013 as well as scientific articles, existing studies and interviews with both national and EU stakeholders.

**Report structure**

The report is structured according to the themes and issues listed above:

- Chapter 2 presents the overall understanding of the Directive, i.e. its rationale, provisions and intervention logic, and it introduces the issue of measuring the impacts of the Directive.

- Chapter 3 provides the relevant findings with regard to the implementation of the Directive in the MSs (addressing questions MQ1-MQ7).
Chapter 4 provides the relevant findings with regard to the relevance of the Directive (addressing questions EQR1-EQR2).

Chapter 5 provides the relevant findings with regard to the effectiveness of the Directive (addressing questions EQE1-EQE4 and EQE7).

Chapter 6 provides the relevant findings with regard to the coherence of the Directive (addressing questions EQC1-EQC2).

Chapter 7 draws the main conclusions emanating from the findings presented in Chapters 3-6.
2 The Directive

2.1 Background and objective

Article 153 of the Treaty on the Functioning of the European Union (TFEU) provides that the European Council shall adopt, by means of directives, minimum requirements for encouraging improvements, especially in the working environment, to ensure a better level of protection of the workers' safety and health. Furthermore, the Single European Act from 1986 (European Commission, 1986) extended the EU's authority to legislate in the field of occupational safety and health. It added Article 118a to the EEC Treaty authorising the adoption of minimum workplace requirements on safety and health by way of directives. This led to the introduction of the Framework Directive 89/391/EEC in 1989, which describes the responsibilities and obligations of workers and employers and, at the same time, it serves as a basis for the 23 other Directives – such as the Construction Directive – covered by the present evaluation.

With outset in the Framework Directive – in particular Article 16.1 – the Construction Directive for temporary or mobile construction sites was developed as the eighth specific Directive. The Directive is a sector-specific Directive meaning that it tailors the principles of the Framework Directive specifically to the construction sector and supplements it with more stringent and specific provisions. The Construction Directive has been amended once in 2007 with a view to simplify and rationalise the reports on practical implementation.

The construction sector was selected for specific attention because it is one of the largest industrial sectors in the EU, and because it accounts for a large share of all occupational fatal injuries. Traditionally, work within the construction sector has been rendered dirty, difficult and dangerous contributing to the poor image of construction work (see e.g. ILO, 2001). This has made working within the construction sector increasingly temporary or has limited working lives due to physical wearing-down, contributing, as discussed in detail in Chapter 5, to a profound impact on occupational safety and health, training and the level of skills.

This perception is also stated in the preamble to the Construction Directive. It states, for example, that unsatisfactory architectural and/or organisational options
or poor planning of works at the project preparation stage have played a role in more than half of the occupational accidents occurring on construction sites in the Community. Furthermore, it states that when a project is being carried out, a large number of occupational accidents may be caused by inadequate coordination, particularly where various undertakings work simultaneously or in succession at the same temporary or mobile construction site. Consequently, it is necessary to improve coordination between the various parties concerned at the project preparation stage and also when the work is being carried out. Setting up minimum requirements for such coordination is assessed as the primary rationale for preparing the Construction Directive.

### Objective

From this background, the Construction Directive aims to prevent risks by establishing a chain of responsibility, linking all parties involved. Being a sector-specific Directive does not mean that it establishes minimum requirements for all potential risks occurring at temporary or mobile construction sites, instead the Directive covers risks not (or insufficiently) covered by other directives. In short, it provides more detailed sector-specific requirements to implement the provisions of the Framework Directive.

In addition to providing protection for workers, it is also an objective of the Construction Directive to offer companies operating in the European market the possibility of working on an equal footing. This permits the MSs, after consulting both management and the workforce, to allow derogations from the requirements to draw up a safety and health plan as referred to in the first subparagraph of Article 3.2, except where it is a question of work involving particular risks as listed in Annex II to the Directive or work for which prior notice is required, as set out in Article 3.3.

#### 2.2 Risks

The Construction Directive lays down the minimum requirements for the sector at a fairly general level in order to increase focus on the prevention of occupational risks. Hence, it refers to measures intended to provide higher safety and health standards.

Annexes II and IV contain references to particular types of work and accompanying risks to which derogations do not apply, and therefore can be considered of specific concern and relevance to the construction sector. Table 2-1 summarises the most relevant risks, which also follow on from the European Commission (2008) guide, which states that slipping, stumbling and falling on the same level and loss of control of hand-held tools and objects are the most recurrent causes leading to non-fatal accidents. Furthermore, it is stated that the construction sector reports the highest level of exposure to ergonomic risk factors, biological and chemical risk factors and noise/temperature risk factors. Finally, the interviewed stakeholders have pointed to a need for updating the annexes.
Table 2-1  Acute and long-term risks

<table>
<thead>
<tr>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute risks</strong></td>
</tr>
<tr>
<td>Risks of burial under excavation/earthworks, of engulfment in swampland, of drowning, of back injuries from manual material handling, of electrical shocks e.g. due to work near high voltage power lines, of injuries due to work with explosives, of acute safety and health impacts from contact with hazardous chemicals or biological substances, and of compression illnesses from work in a compressed air atmosphere.</td>
</tr>
<tr>
<td><strong>Long-term risks</strong></td>
</tr>
<tr>
<td>Risks from monotonous work, from contact with hazardous chemical or biological substances, from exposure to ionizing radiation, from exposure to noise, and from inhalation of harmful dusts, vapours or gases.</td>
</tr>
</tbody>
</table>

In the attempt to reduce construction site risks, it must be acknowledged that exposure to risks differs from trade to trade, from job to job, day by day and possibly even by the hour. In other words, the onus is on the employer to ensure that risks are addressed in time. The employer must, for example, make sure that the safety and health measures take into account that work on construction sites often involves long working hours by workers posted by construction companies residing in other countries. Hence, there are risks of tired workers who do not always have the language skills mainly used on the construction site – and so may miss out on some safety instructions. Additionally, the workforce may have got different levels of OSH training. This underlines the importance of the role of a safety coordinator on construction sites.

Construction work takes place throughout the year. During winter, cold temperatures often bring snow, ice, and other conditions that warrant special equipment including personal protective equipment and clothing such as gloves, facemasks, and ice/snow traction devices that attach to heavy boots. During the summer, construction workers may be exposed to heat – that lead to increased tiredness, lower job performance and increased risks of injury – and so there is e.g. a need to secure areas for cooling off and to secure sufficient access to water. Furthermore, sun is the primary cause of skin cancer, which means that construction workers, who work outside most of the time, are at high risk for this disease.

Finally, as already mentioned, the Construction Directive covers risks not (or not sufficiently) covered by other specific directives, such as the Vibration Directive 2002/44/EC, the Noise Directive 2003/10/EC, the Manual Handling Directive 90/269/EEC, the Asbestos Directive 2009/148/EC, the Chemical Directive 98/24/EC, the ATEX Directive 1999/92/EC, the Equipment Directive 2009/104/EC and the Signs Directive 92/58/EEC.

For instance, it is important to place emphasis on chemical risks on constructions sites, such as silicosis among sand blasters, tunnel builders and rock drill operators; asbestosis among asbestos insulation workers, steam pipe fitters, building demolition workers and others; bronchitis among welders; skin allergies among masons and others working with cement; and neurologic disorders among painters and others exposed to organic solvents and lead. Similarly, construction
workers are often exposed to biological risks such as infectious micro-organisms and to toxic substances. Excavation workers can, for example, develop histoplasmosis, which is a lung infection caused by a common soil fungus.

This does of course, as mentioned in the coherence evaluation questions, lead to certain issues/developments being addressed by several directives. EU-OSHA (nd a) does, for example, emphasise the importance of preventing vibration risks within the construction sector, while EU-OSHA (nd b) addresses asbestos in buildings.

2.3 Provisions

Table 2-2 lists the key requirements (KR) of the Construction Directive, which emphasises that it firstly applies to:

"... any construction site at which building or civil engineering works are carried out."

Furthermore, temporary or mobile construction sites include, as specified in Annex I to the Directive, excavation, earthworks, construction, assembly and disassembly of prefabricated elements, conversion or fitting-out, alterations, renovation, repairs, dismantling, demolition, upkeep, maintenance - painting and cleaning work, and drainage.

However, the Directive excludes:

"... drilling and extraction in the extractive industries within the meaning of Article 1 (2) of Council Decision 74/326/EEC of 27 June 1974 on the extension of the responsibilities of the Mines Safety and Health Commission to all mineral-extracting industries."

Furthermore, particular attention is given to the self-employed workers where they are personally engaged in work activity. According to the preamble, self-employed persons and employers that are personally engaged in work activity may, through their activities on a temporary or mobile construction site, jeopardize the safety and health of workers. Therefore, the Directive is extended to self-employed persons and to employers where they are personally engaged in work activity on the site.

Table 2-2 then lists the provisions of the Construction Directive that have been identified as the ones that in particular need to be addressed when assessing the impacts of the Directive. Hence, the assessment focuses on the so-called Common Processes and Mechanisms (CPM) and other KRs.

Table 2-2 shows that the Construction Directive only places little additional emphasis on the CPMs when compared to the Framework Directive. In other words, for aspects such as risk assessment, preventive and protective services, training of workers and consultation of workers, the Directive relies on the respective provisions in the Framework Directive. The additional CPM emphasis in the Construction Directive is thus on:
› **Information of workers** and/or their representatives concern all the measures taken to improve safety and health on the construction site, and that the information must be comprehensible to the workers concerned.

› **Consultation of workers** emphasises the need to ensure, whenever necessary, proper coordination between workers and/or their representatives in undertakings carrying out their activities at the workplace, having regard to the degree of risk and the size of the work site.

The other KRs of the Construction Directive are as shown in Table 2-2:

› **Appointment of coordinators** emphasises the increased complexity of securing safety and health on construction sites where more than one contractor is present.

› **Drawing up safety and health plans** concerns the requirement to have specific plans for a given construction site.

› **Prior notification** shall be given to the competent authorities in case of construction sites on which work is scheduled to last longer than 30 working days and on which more than 20 workers are occupied simultaneously, or on which the volume of the work is scheduled to exceed 500 man-days.

› **Employer responsibility** emphasises that the appointment of coordinators does not reduce the responsibility of the employer.

› **Measures in line with minimum requirements** concern requirements regarding stability and solidity; energy distribution installations; emergency routes and exits; fire detection and fire-fighting; ventilation; exposure to particular risks; temperature; natural and artificial lighting of workstations, rooms and traffic routes on the site; doors and gates; traffic routes – danger areas; loading bays and ramps; freedom of movement at the workstation; first aid; sanitary equipment; rest rooms and/or accommodation areas; pregnant women and nursing mothers; handicapped workers; and miscellaneous provisions.


### Key requirements of the Construction Directive

<table>
<thead>
<tr>
<th>Directive 92/57/EEC on the implementation of minimum safety and health requirements at temporary or mobile construction sites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key requirements: Scoping and definitions</strong></td>
</tr>
<tr>
<td><strong>Scope of application</strong></td>
</tr>
<tr>
<td>The Directive applies to the health and safety of workers at temporary or mobile construction sites, i.e. any construction site at which building or civil engineering works are carried out (a non-exhaustive list of works is provided in Annex I). It does not apply to drilling and extractive industries.</td>
</tr>
<tr>
<td><strong>Scope of application</strong></td>
</tr>
<tr>
<td><strong>Scope of application</strong></td>
</tr>
<tr>
<td><strong>Key requirements: Common processes and mechanisms</strong></td>
</tr>
<tr>
<td>CPM</td>
</tr>
<tr>
<td>Relevant articles</td>
</tr>
<tr>
<td><strong>Key requirements: Directive-specific provisions</strong></td>
</tr>
<tr>
<td>Appointment of coordinators</td>
</tr>
<tr>
<td>The Directive requires the client or the project supervisor to appoint one or multiple coordinators for safety and health matters for any construction site on which more than one contractor is present. The coordinator is vested with the tasks specified in Articles 5-6. The coordinator shall in particular organise the cooperation between employers and coordinate their activities with a view to protecting workers and preventing accidents and occupational health hazards.</td>
</tr>
<tr>
<td>Drawing up safety and health plan</td>
</tr>
<tr>
<td>A safety and health plan should be drawn prior to the setting up of a construction site. The plans shall be taken into account each time this appears necessary and updated accordingly.</td>
</tr>
<tr>
<td>Prior notification</td>
</tr>
<tr>
<td>The client or the project supervisor shall communicate a notice to competent authorities prior to the commencement of the work.</td>
</tr>
<tr>
<td>Employer responsibility</td>
</tr>
<tr>
<td>The implementation of coordination duties under Articles 5 and 6 does not affect the principle of employers' responsibility.</td>
</tr>
<tr>
<td>Measures in line with minimum requirements</td>
</tr>
<tr>
<td>Employers are obliged to take measures in line with the minimum requirements as specified in Annex IV.</td>
</tr>
<tr>
<td><strong>Non-key Directive-specific provisions</strong></td>
</tr>
</tbody>
</table>

The following Directive-specific provisions are not considered to constitute key requirements in the context of the evaluation:

- Provisions that do not have a direct impact in terms of limiting the safety and health risk on temporary and mobile construction sites, such as provisions of technical nature laying down the procedure for amending annexes, transposition and communication to the Commission and addressees (Articles 13-14);

- Articles that reiterate that the provisions of Directive 89/391/EEC apply (Articles 4 and 8)

- Provisions complementary to the KEs (Articles 5-6), which shall be construed together with the key requirements.
2.4 Intervention logic

Figure 2-1 illustrates the logical steps on how the Construction Directive – represented by its KRs – leads to impacts, i.e.:

- **CPMs and other KRs** are, as discussed above, the provisions of the Directive, which were identified during the analysis as those that needed to be addressed when assessing its impact. The figure attempts to illustrate that, due to the multifaceted nature of the Directive, it is not possible to identify exactly how each of the KRs, in themselves, will generate an impact. In other words, the KRs work in tandem to produce impacts and so they are analysed as such.

- **Workplace impacts** constitute the direct changes/improvements that occur at the construction sites as a result of implementing the KRs. This could, for example, be better safety and health plans or a safer working environment in general.

- **Safety and health impacts** constitute, for example, a reduction in the number of occupational accidents or diseases. These impacts occur as a result of the Directive (KRs) through the above-mentioned workplace impacts.

- **Broader impacts** constitute those that may occur more broadly speaking as a result of the above-mentioned safety and health impacts.

Impact storyline

While the assessment of the impacts of the Construction Directive are presented in the following chapters – in particular in Chapter 5 – this assessment has taken a starting point in an impact storyline. This means that the OSH experts within the evaluation team have made initial hypotheses for the intervention logics, i.e. specified the expected impacts of implementing the Directives. These expected impacts are then examined via the analysis of data gathered from statistics, studies and interviews.

Figure 2-1 shows that the additional emphasis, although minor, on the CPMs in the Construction Directive is expected to enhance the awareness among workers about the specific safety and health issues of construction sites. Furthermore, the other KRs pursue that a number of general minimum requirements are fulfilled in relation to the safety and health situation on the construction sites. This is, however, difficult to fully monitor, and in some cases it may be difficult to assess whether improvements to a particular safety and health situation are due to the general provisions of the Construction Directive or whether they are influenced by other directives, which must be complied with on construction sites.

The general nature of the workplace impact implies also that the measurable safety and health impacts will be of a general nature. In other words, we will expect to observe reductions in the number of occupational accidents, of work-related health problems, and of workers exposed to occupational risks at construction sites. It should be noted in this context that these indicator measures also will be included in the similar, but even more general, indicator measures when assessing the impacts of the Framework Directive. For this reason, it is important to reflect upon
such overlapping measures when assessing the impacts of the OSH acquis as a whole. That being said, we are, as already mentioned, dealing with an economic sector where the incidence of occupational accidents is relatively high, and so there might well be developments that differ from that of the OSH acquis as a whole.
Figure 2.1 Intervention logic for the Construction Directive

Key requirements

**CPMs**
- Information for workers
- Consultation of workers
- Appointment of coordinators
- Drawing-up safety and health plan
- Prior notification
- Employer responsibility
- Measures in line with minimum requirements

**Other KRs**
- (3.2) that is specific to a given construction site
- (4) taking account of the principles of prevention when developing the plan and time schedule
- (6b) ensuring that all workers, employers and self-employed at construction sites adhere to the plan
- (7.2) shall be given to the competent authorities in case of work scheduled for a longer period

**Workplace impacts**
- Workplace impacts are measurable changes that occur at the workplace as a result of the Directive:
  - Extent of information activities for construction site workers
  - Extent of construction site workers' consultation
  - Records of safety and health plans
  - Records of actions taken to comply with minimum requirements

**Safety and health impacts**
- Safety and health impacts are measurable changes that result from the Directive through workplace changes:
  - Reduction in the number of occupational accidents occurring at construction sites
  - Reduction in the number of work-related health problems at construction sites
  - Reduction in the number of workers exposed to occupational risks at construction sites

**Broader impacts**
- Assessed at acquis level
- Broader impacts are assessed across all Directives and include areas such as:
  - Employment growth
  - Economic growth
  - Increased productivity
  - Improved quality of products and services
  - Improved well-being and job satisfaction
2.5 Measuring impacts

To continue the impact storyline, the assessment of whether the initial impact hypotheses prove to be correct takes place by analysing impacts at three levels; namely (i) workplace impacts; (ii) safety and health impacts; and (iii) broader impacts. There are two important considerations in this regard:

1. While workplace impacts do not necessarily provide specific information on improvements concerning occupational accidents, work-related health or exposure levels, they do provide important indications of these. In other words, we assume that changes at the workplace resulting from the Construction Directive will have positive safety and health impacts.

2. As indicated in the intervention logic, the more wide-ranging effects of the Directive are assessed at the acquis level and also at the Framework Directive level.

Furthermore, the assessment of impacts requires that the addressed impact indicators are quantifiable. A set of indicators has, in this context, been developed by an OSH expert. This set represents the list of workplace as well as safety and health impacts that ideally should be considered in the evaluation of the Directive (see Figure 2-1 and Table 2-3). However, measuring the impacts of the Directive on this basis requires that the indicators used for the analysis must be quantifiable via available statistics. Table 2-4 thus shows that statistics are available for most of the indicators identified for the Construction Directive.

It should also be emphasised that assessments of the workplace impacts and the safety and health impacts within this evaluation are based on the results of existing studies and on stakeholder views gathered through interviews.

<table>
<thead>
<tr>
<th>Table 2-3</th>
<th>Impact indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workplace impacts</strong></td>
<td><strong>Safety and health impacts</strong></td>
</tr>
<tr>
<td>Extent of information activities for construction site workers</td>
<td>Reduction in the number of occupational accidents occurring at construction sites</td>
</tr>
<tr>
<td>Extent of construction site workers’ consultation</td>
<td>Reduction in the number of work-related health problems at construction sites</td>
</tr>
<tr>
<td>Records of safety and health plans</td>
<td>Reduction in the number of workers exposed to occupational risks at construction sites</td>
</tr>
<tr>
<td>Records of actions taken to comply with minimum requirements</td>
<td></td>
</tr>
</tbody>
</table>

It should also be noted that the fact that an indicator is potentially quantifiable does not necessarily mean that data exist, which fully can inform the indicator. Hence, Table 2-3 should be seen as a list of indicators for which potential statistical sources could exist.
Table 2-3 and Table 2-4 provide an overview of identified data variables and statistical sources that are expected to provide useful information on the above indicators in the evaluation of the Construction Directive.

**Table 2-4 Available statistics for impact indicators**

<table>
<thead>
<tr>
<th>Workplace impacts</th>
<th>Variable</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of information activities for construction site workers</td>
<td>Regularity of safety and health information within the construction sector</td>
<td>EU-OSHA: ESENER (2009) - ER205</td>
</tr>
<tr>
<td></td>
<td>Quality of safety and health information within the construction sector</td>
<td>Eurofound: EWCS (2010) - Q30 (Q12*, Q10**)</td>
</tr>
<tr>
<td>Extent of construction site workers' consultation</td>
<td>Presence of safety and health committee consisting of members of management and worker representatives within the construction sector</td>
<td>EU-OSHA: ESENER (2009) - ER102</td>
</tr>
<tr>
<td></td>
<td>Extent of say in decisions within the construction sector (regarding risk assessments)</td>
<td>EU-OSHA: ESENER (2009) - ER209</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety and health impacts</th>
<th>Variable</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in the number of occupational accidents occurring at construction sites</td>
<td>Number of accidents and incidence rates within the construction sector (by severity, sex, age, size of enterprise)</td>
<td>Eurostat Search Database: ESASW - hsw_acc7_work (until 2007), hsw_acc_work (from 2008)</td>
</tr>
<tr>
<td>Reduction in the number of work-related health problems at construction sites</td>
<td>Number of work-related health problems and relative prevalence rates within the construction sector (by severity, sex, age, size of enterprise)</td>
<td>Eurostat Search Database: LFS 2007 and 2013 ad hoc module - hsw_pb LFS 1999 ad hoc module - hsw_healthpb</td>
</tr>
<tr>
<td></td>
<td>Extent of work affecting health within the construction sector</td>
<td>Eurofound: EWCS (2010) - Q67 (Q33*, Q33**)</td>
</tr>
<tr>
<td></td>
<td>Number of days absent from work due to health problems within the construction sector</td>
<td>Eurofound: EWCS (2010) - Q72 (Q34-B*, Q34-B**)</td>
</tr>
<tr>
<td>Reduction in the number of workers exposed to occupational risks at construction sites</td>
<td>Share of persons reporting exposure to hazards that can adversely affect health within the construction sector (by type of health effect, sex, age)</td>
<td>Eurostat Search Database: LFS 2007 and 2013 ad hoc module - hsw_exp5</td>
</tr>
<tr>
<td></td>
<td>Extent of safety and health risks at work within the construction sector</td>
<td>Eurofound: EWCS (2010) - Q66 (Q32*, Q32**)</td>
</tr>
<tr>
<td></td>
<td>Extent of exposure to safety and health hazard types at work within the construction sector</td>
<td>Eurofound: EWCS (2010) - Q23 (Q10*, Q8**)</td>
</tr>
</tbody>
</table>

Notes: * EWCS (2005), ** EWCS (2001).
Data challenges

As indicated in Table 2-4 we do not face severe challenges regarding the availability of statistical data informing about the impacts of the Construction Directive.
3 Implementation in MSs

As part of the evaluation, we have conducted a mapping exercise of the implementation of the 24 Directives at national level in all MSs. This has been done by answering seven mapping questions. The answers for the Construction Directive are based on information collected from the 27 MSs and documentation in the evaluation's Country Summary Reports (CSRs), but also from other sources such as the NiRs.

For presentation purposes, we make use of the country codes shown in the brackets: Austria (AT), Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), the Netherlands (NL), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE), the United Kingdom (UK).

3.1 MQ1: Common Processes and Mechanisms

MQ1: Across the MSs, how are the different Common Processes and Mechanisms foreseen by the Directives put in place, and how do they operate and interact with each other?

The first mapping question focuses on the six Directive provisions presented in Section 2.3, which we have categorised as CPMs. However, the Construction Directive does not add much to the Framework Directive’s CPM requirements. It only provides a few additional requirements regarding information to workers and consultation of workers. Hence, we assess that the answers received to this evaluation question from the MS level stakeholders deal with the Construction Directive in its entirety.

Table 3-1 shows that only three MSs face observed discrepancies, none of which are considered as major in the sense that they result in the non-application or partial application of the KRs.

The CSRs indicate that in two MSs (Romania (RO) and Italy (IT)) there is a discrepancy (case of incorrect transposition) between the Directive and national
legislation, while the discrepancy in Estonia (EE) relates to the fact that the coordinators for safety and health are appointed only for the project execution stage and not for the project preparation.

Table 3.1  Observed discrepancies in national transposing legislation

<table>
<thead>
<tr>
<th>Observed discrepancies</th>
<th>No observed discrepancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT, RO, EE</td>
<td>AT, BG, CY, FI, IE, LT, LV, HU, EL, SE, SI, SK, UK, BE, CZ, DE, DK, EL, ES, FR, LU, MT, PL, PT, NL</td>
</tr>
</tbody>
</table>

Only few infringement proceedings since 1990

There have been only a few infringement proceedings\(^1\) regarding the transposition of the Construction Directive: Denmark (DK) in 2006 and 2007 where the infringements concerned non-conformity and bad application, along with Italy (IT) in 2005, Sweden (SE) in 2006, and Ireland (IE) 2008 respectively, regarding non-conformity; and the Czech Republic (CZ) in 2004 regarding non-communication.

More detailed or stringent requirements in 20 MSs

Finally, the information collected reveals that 20 MSs have implemented more detailed or stringent requirements than those specified by the formulations of the provisions in the Construction Directive. Against this background, there is no reason to question whether or not the Construction Directive has contributed to an improvement of occupational safety and health conditions in the construction companies in the MSs.

Overall MQ1 answer

With only few observed discrepancies and infringement proceedings since 1990, it must be concluded that the national transpositions of the Construction Directive has been smooth. Furthermore, most MSs have implemented more detailed or stringent requirements than those specified by the formulations of the provisions in the Construction Directive. In other words, there are no signs that their implementation has impeded improvements to occupational safety and health conditions in the MSs.

3.2  MQ2: Derogations and transitional periods

**MQ2: What derogations and transitional periods are applied or have been used under national law under several of the Directives concerned?**

**Transitional periods not relevant**

Transitional periods are not relevant in relation to the Construction Directive, as the Directive does not contain any provisions for which the MSs can apply extended deadlines.

**Derogations applied in nine MSs having an impact on effectiveness**

In terms of derogations, however, the Construction Directive contains the possibility for derogation in the second subparagraph of Article 3.2. This permits the MSs, after consulting both management and the workforce, to allow

---

\(^1\) Based on a list of infringement proceedings received by mail from DG EMPL on 10 November 2014.
derogations from the requirements to draw up a safety and health plan as referred to in the first subparagraph of Article 3.2, except when it is a question of work involving particular risks as listed in Annex II to the Directive or work for which prior notice is required as set out in Article 3.3. Table 3-2 shows that such derogations have been applied by nine MSs.

It is important to emphasise that the majority of EU stakeholder organisations, who were interviewed and who have commented on the Directive, expressed the opinion that the derogations have had some impact on the effectiveness of the Directive (see Section 5.2 for further details).

| Application of derogations | | |
|---|---|
| Derogations | No derogations |
| BE, CZ, DK, EE, ES, IT, LU, MT, SI [9] | AT, BG, CY, DE, EL, FI, FR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SK, UK [18] |

Source: Country Summary Reports.

Overall MQ2 answer

The derogations from the requirements to draw up a safety and health plan, which nine MSs applied for, are assessed to have had an impact on the effectiveness of the Construction Directive.

### 3.3 MQ3: Compliance

**MQ3:** What are the differences in approach to and degree of fulfilment of the requirements of the EU OSH Directives in private undertakings and public-sector bodies, across different sectors of economic activity and across different sizes of companies, especially for SMEs, microenterprises and self-employed?

Little information on compliance

The CSRs contain little information on compliance with the CPM provisions specified in the Construction Directive, because, as already mentioned, there are only a few requirements, i.e. those relating to the information of workers and to the consultation of workers.

Experience from producing the CSRs showed that most national authorities do not keep specific accounts of compliance regarding the single Directives. Furthermore, many national authorities were reluctant to make concrete statements about the levels of compliance during interviews, as they considered their knowledge on these specificities to be limited. While they have a general idea about the levels of compliance across all or groups of Directives, comprehensive knowledge at the individual Directive level is limited.

The limited data available from the CSRs do not point to high levels of compliance among construction companies. In contrast, the EU stakeholders interviewed, i.e.

---

2 Note that Corrigendum 2 to the Construction Directive (OJ No L 33/18) has introduced another exception related to work for which prior notice is required pursuant to paragraph 3 of Article 3.
employer or worker organisations, on average assess that their members comply with the key requirements outlined in the Construction Directive.

We have also sought to establish whether there are differences in the levels of compliance depending on size of establishments. The data gathered for the CSRs indicate that the level of compliance increases with enterprise size. This is also supported by national implementation reports and EU stakeholder interviews, where a number of MSs highlight the difficulties faced by SMEs and microenterprises in complying with the requirements. Lack of knowledge, specialised personnel or financial resources are common explanations to the challenges in implementation. A summary of main compliance issues as identified in the Commission implementation report from 2008 is given in Box 3-1 below.

**Box 3-1 Main compliance issues**

“The main problems reported by the MSs stem from the requirement to draft a safety and health plan and to designate coordinators as early as at the project preparation stage. In most national legislation, the client is responsible for prevention policy. Clients face difficulties in discharging their increased responsibilities. The designation of coordinators is still unsatisfactory or is delayed at the preparation stage, as this too is seen as an administrative burden. If the safety and health plan has not been drawn up or the coordinator has not been designated before the project execution stage, the obligation to incorporate prevention principles in project preparation has not been met.

Moreover, the various national provisions on the safety and health plan are too vague and general to enable those responsible to know what they should include in the plan. Labour inspectorates detected another serious problem, namely that some enterprises rely on standard safety plan models, which do not allow inspection of the specific working conditions of a specific site. MSs report that enterprises fail to grasp the role that the safety and health file plays in the prevention system. Another problem mentioned is the construction workers’ low rate of participation in the prevention of occupational risks through their representatives. A shortfall in training for workers, subcontractors, self-employed workers and SMEs was found.

Moreover, SMEs suffer from an excess of red tape and a lack of flexibility in national legislation. Lastly, in many MSs the coordinator’s competencies are not defined by the legislation. This creates situations where coordination cannot be effective because those who take on the role do not possess the necessary knowledge.”


As described in Table 2-2, the Construction Directive puts additional emphasis on two of the CPMs that were introduced in the Framework Directive: information of workers and consultation of workers.

Figure 3-1 shows that most workers and/or their representatives – as required by the Construction Directive – are informed about measures taken to improve safety and health on the construction sites. Furthermore, Figure 3-2 indicates that, to a large extent, the information received is considered to be informative, and so it seems to fulfil the requirement that the information must be comprehensible to the workers concerned. This assessment has remained fairly constant over the years even though the number of MSs covered by the working conditions survey has increased in the shown period.
Figure 3-1  Worker representative evaluation: Are workers in construction establishments regularly informed about safety and health at the workplace?


Figure 3-2  Quality of safety and health information (share of respondents)

Note: The data for 1995 only cover EU12.

The European Commission (2008) also finds indications that the implementation of the Directives in the MSs has raised the information levels and so awareness of safety and health matters on a large scale and prompted them to update national legislation. The major innovations mentioned for the Construction Directive are that
it makes all players, and mainly the client, responsible on the site; it requires coordination at the preparation and execution stages; and it obliges the client or project supervisor to assure that a safety and health plan is drawn up.

Finally, Figure 3-3 shows that most establishments have permanent committees or working groups consisting of members of the management and representatives of the workers dealing with safety and health. Furthermore, most worker representatives claim to have a say in the decisions on when and where risk assessments or workplace checks are carried out.

**Figure 3-3   Extent of workers’ consultation (%)**

![Figure 3-3](image)


The NIRs from Belgium, Cyprus, Germany, Hungary, Slovakia and Slovenia state that SMEs have few financial and organisational resources available. This constraint may consequently limit the SMEs’ knowledge about the legislation and its requirements and thus prevent an adequate implementation of the Directive's measures throughout the planning and execution phases. The report of Belgium e.g. states that the required risk assessments and safety instructions are often not available; that there is no project coordinator assigned; that the safety and health plan in most cases is vague and not tailor-made to the construction site in question; and that other key players, such as clients, architects etc., do not fully perform their duties.

Following the above, the reports from Belgium, Bulgaria, Cyprus, Germany, France, Hungary, Ireland, Poland, Portugal and Slovakia have all indicated a lack of legal knowledge on occupational health and safety among SMEs and, consequently, that they have difficulties interpreting and implementing the Directive's measures. The reports from Germany and Ireland also highlighted a problem for SMEs regarding the awareness and identification of adequate preventive and protective measures. Bulgaria specifically mentions that employers and workers are not aware of their rights, obligations and responsibilities. Reports...
from several other MSs also point to the lack of training programs, which would help to increase awareness. The lack of awareness and training is particularly mentioned in connection with the fast rotation of workers at construction sites. Such rotation also makes training more expensive.

Lack of coordination

Lack of proper coordination of safety and health matters is also mentioned in several of the NIRs. In Cyprus, Hungary and Italy, for example, the existence of large subcontracting chains is highlighted as posing an obstacle to effective coordination while creating difficulties when assigning responsibilities. Similar remarks apply to Malta and Greece.

Overall MQ3 answer

Overall, there appears to be good compliance with the Construction Directive provisions among the establishments in the MSs. Additionally, compliance increases with the size of the establishment. Lower compliance among the smaller establishments is partly due to that fact that many of these are sub-contracted constructions companies or even comprise self-employed workers. While it is assessed that regular training and consultation of construction workers take place, there seems to be a lack of knowledge and training on occupational safety and health – in particular within the SMEs.

3.4 MQ4: Accompanying actions

MQ4: What accompanying actions to OSH legislation have been undertaken by different actors (the Commission, the national authorities, social partners, EU-OSHA, Eurofound, etc.) to improve the level of protection of safety and health at work, and to what extent are they actually used by companies and establishments to pursue the objective of protecting the safety and health of workers? Are there any information needs that are not met?

When answering the fourth mapping question we distinguish between accompanying actions taken at MS level – mainly based on information presented in the CSRs developed within the present evaluation, and accompanying actions taken at EU level – mainly based on information obtained through desk research and interviews with EU level stakeholders.

3.4.1 Accompanying actions at MS level

We have looked into the existence of different types of accompanying actions taken at MS level to encourage the implementation of and compliance with the Construction Directive.

Table 3-3 shows that there is little evidence of any guidance documents and support tools – including IT tools – targeted at the construction companies in many MSs. Furthermore, only a few MSs make use of support tools targeted at construction companies.
There are, however, only two MSs, Germany (DE) and Latvia (LV) that report on information gaps, while ten MSs claim that this is not a problem. This also means that we have no evidence from 15 MSs on this issue.

Furthermore, the CSRs only point to four MSs – Belgium (BE), Malta (MT), Cyprus (CY) and Romania (RO), which have made use of awareness-raising campaigns targeted at the construction sector. Similarly, only three MSs – Belgium (BE), Italy (IT) and Cyprus (CY) – have made use of targeted education and training activities.

Also, the table shows that the MSs generally consider that available information and guidance are sufficient. When asked directly about whether there are gaps, few stakeholders have answered yes to this.

### 3.4.2 Accompanying actions at EU level

The European Commission (2011) has produced a non-binding guide to good practice for understanding and implementing the Construction Directive. It has the objective to guide the various stakeholders in understanding and implementing the general principles of prevention; in understanding the safety and health requirements of the Directive, including when and to what it applies, the duties and roles of stakeholders and the documentation that is required; by identifying some typical hazards and risks during construction work, in managing risks throughout the duration of construction projects, from project preparation, during construction and into the post-construction stage; and it summarises the duties of stakeholders by stages.

The EU-OSHA has also produced numerous guidance documents. It is, however, difficult to assess their use in the MSs; although it is noteworthy that our review of the NIRs has not led to emphasise such use:

- EU-OSHA (2004a) has published a report on building in safety – i.e. the prevention of risks in construction in practice. The paper is a sharing of good practice, making information available to support and promote the prevention of risks in construction work.

- EU-OSHA (2004b) is similarly an information report on achieving better safety and health in construction. The report outlines 16 cases of good practice in the construction sector. The 16 cases can be divided into three categories: design
stage, construction phase and maintenance phase. The target group is all people involved with construction work or legislation, including policy-makers, architects and engineers.

Furthermore, the EU-OSHA website\textsuperscript{3} gives access to the following guidance focusing on the construction sector:

- E-fact 70: Occupational safety and health issues associated with green building, 2013
- Factsheet 55 - Achieving better safety and health in construction, 2004
- E-fact 2 - Preventing vehicle accidents in construction, 2004
- E-fact 1 - Musculoskeletal disorders in construction, 2004
- Magazine 7 - Actions to improve safety and health in construction, 2004
- Factsheet 51 - Asbestos in construction, 2004
- Factsheet 50 - Management of noise in construction, 2004
- Factsheet 49 - Safe roof work, 2004
- Factsheet 48 - Health and safety on small construction sites, 2004
- Factsheet 36 - Accident prevention in the construction sector, 2004

A number of accompanying actions have been taken at both MS level and EU level to encourage the achievement of the safety and health targets of the Construction Directive. These include guidance documents, support tools, awareness-raising campaigns, education and training activities and financial incentives. A few stakeholders have pointed to gaps in these actions, although without providing specific recommendations.

### 3.5 MQ5: Enforcement

**MQ5**: What are the enforcement (including sanctions) and other related activities of the competent authorities at national level and how are the priorities set among the subjects covered by the Directives?

No MS has designated a specific authority responsible for the enforcement of the Construction Directive. The enforcement of the Directive typically comes under the general authority responsible for OSH inspections/enforcement. Also, MSs rarely have criminal or administrative sanctions specific to the offenses, which are committed under the legislation concerning construction sites — rather, the standard sanctions applicable in the OSH area apply in most MSs.

The CSRs point to the application of very few enforcement activities specifically related to the Construction Directive. Only Belgium (BE) and Denmark (DK) have a specific strategic/procedural focus on the Construction Directive while specific criminal or administrative sanctions are only deployed in France (FR), Italy (IT) and Romania (RO).

Overall MQ5 answer: There are very few enforcement activities specifically focusing on the provisions of the Construction Directive. In other words, the enforcement of the legislation on construction sites make use of the standard OSH sanctions applicable in the MSs.

3.6 MQ6: Vulnerable groups

**Little Directive-specific focus on vulnerable groups**

The findings from the CSRs show that most MSs have general approaches to vulnerable groups, which are not targeted at specific directives (except those directives, which are specifically designed to address vulnerable groups). In relation to the construction sector, typically migrant workers are in focus if there are specific initiatives or measures targeting vulnerable groups. However, the following provisions have been found:

- Safety instructions in the construction industry targeted to language barriers among specific groups of workers (Cyprus, CY)
- Code of conduct against the exploitation at work of children and young people in the construction field (Romania, RO)
- Foreign workers in the construction sector (Italy, IT)

Overall MQ6 answer: The limited focus on vulnerable groups employed in the construction sector is typically on migrant workers.

3.7 MQ7: SMEs and microenterprises

**Little Directive-specific focus on SMEs and microenterprises**

Similarly, the CSRs show little evidence of the use of Construction Directive-specific measures to particularly support compliance with the provisions within SMEs and microenterprises.

None of the MSs make use of Directive-specific guidance to the SMEs and microenterprises, while three – the Czech Republic (CZ), Malta (MT) and Sweden (SE) – allow exemptions. One MSs – the Czech Republic (CZ) – makes use of lighter regimes, while two – Cyprus (CY) and Poland (PL) – make use of other incentives.

It should be kept in mind that many MSs have developed various accompanying actions targeted at SMEs, which are typically of a more general nature, see e.g. Directive report on the Framework Directive (89/391/EEC). Also, it is apparent from the NIRs that many MSs have developed various initiatives of a more informal
nature to address the specific challenges of SMEs in the construction sector (which target not only the requirements of the Construction Directive, but also other OSH Directives, which are important in that sector).

Overall MQ7 answer

There is little evidence of the use of Construction Directive-specific measures to particularly support the compliance with the provisions within SMEs and microenterprises. However, there are a number of accompanying actions targeted at SMEs in general, which are considered applicable for the construction sector.
4 Assessment of relevance

In this section, we investigate the relevance of the Directive in relation to the coverage of workforce and MSs as well as the severity and extent of risks covered. We have summarised the conclusions from the five parameters used to assess relevance in the table below.

Table 4-1 Summary of the five relevance parameters

<table>
<thead>
<tr>
<th>Coverage of workforce and MSs</th>
<th>Severity and extent of risks covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of MS where the Directive is potentially relevant</td>
<td>Proportion of EU workforce to whom the Directive is potentially relevant</td>
</tr>
<tr>
<td>27</td>
<td>7.2%</td>
</tr>
</tbody>
</table>

* Few, if any of these health problems are directly addressed by the provisions of the Construction Directive.

MS relevance

It is clear that all MSs will have construction activities in some form and that the provisions of this Directive are therefore potentially applicable within all MSs.

Workforce relevance

Turning to the labour market, determination of the proportion of the labour market covered by the provisions of this Directive is therefore a matter of establishing the number of persons employed within the Construction sector. The Directive is relevant to all such workers.

LFS data documents that for 2012 a total of 215,678,600 people were employed within the EU-27 (15-74 years). Of these, 15,438,900 were employed within the construction sector. The Construction Directive can therefore be regarded as potentially relevant to 7.2% of the EU workforce. Of these, around four million – or more than 25% - were self-employed. Therefore, although not directly covered by many of the Directives, the provisions of this Directive (which focuses on coordinating activities) will be relevant to them.

4 Employment by sex, age and economic activity (from 2008 onwards, NACE Rev. 2) - 1 000 [Ifsa_egan2].
One limitation of existing statistical databases is that they do not identify the extent to which work covered by the Construction Directive is carried out by workers in the public sector, as employment statistics categorise workers by the classification of their employers. Consequently, construction workers in the public sector are classified as public sector workers, not construction sector workers. Enquiries amongst EU level stakeholders failed to provide any clearer picture of this, with their own statistics suggesting a lower figure than that indicated by the LFS data cited above. For example, FIEC data (European Construction Industry Federation) suggest that 6.4% of the population of the EU-28 were employed in the sector in 2013. Even when allowing for annual changes and the addition of data from Croatia, this percentage appears to indicate a slightly lower value. However, given the possible year-on-year variation and other uncertainties over such data, a difference of 0.6% is of little importance.

In many MSs, the situation appears to be relatively complex, with local variations in the distribution of employment between the public and private sectors, again making it very difficult to establish any form of estimate. Similarly, differences in practices between MSs in the extent to which such work is performed by public sector workers make extrapolation of data from individual MSs to the entire EU subject to considerable potential error.

4.1 EQR1: Current relevance

EQR1: To what extent do the Directives adequately address current occupational risk factors and protect the safety and health of workers?

Fatal accidents at work

The ESAW database\(^5\) records a total of 3,878 fatal accidents across the EU-27 in 2012, representing an incidence rate of 1.82 per 100,000 employed. This can be compared to the record for the construction sector with 854 accidents in the same period, equating to an incidence rate of 5.68. Thus, the rate of fatal accidents in the construction sector is more than three times that for workplaces as a whole (including that same sector).

Non-fatal accidents at work

The same ESAW database also documents non-fatal accidents at work\(^6\). In the same reporting period, a total of 3,156,456 non-fatal accidents were recorded for 2012 across the EU-27, representing an incidence rate of 1,480 per 100,000 employed. This can be compared to 417,838 (incidence rate: 2,776) for the construction sector, almost double that for all workers.

As alternative source of data, the LFS (2007) included information regarding accidents at work. Across the whole EU-27 sample, 3.0% of those questioned

\(^5\) Fatal Accidents at work by economic activity [hsw_n2_02].
\(^6\) Non-fatal accidents at work by economic activity and age [hsw_n2_03].
reported an accident at work in the past 12 months\(^7\). In contrast, 5.5% of those working in the construction sector reported having had an accident at work. Although the sample frames differ, the fact that this second source also suggests an incidence almost doubles the overall value adding credence to the findings.

**Work-related health problems**

The focus of the Construction Directive is primarily on construction site planning and infrastructure. Although some reference is made to workplace health issues such as noise and chemical exposures, the Directive places few substantive requirements on employers with respect to these. Such risks are therefore primarily addressed by other, risk-specific Directives such as those relating to noise, vibration, chemicals, asbestos and other carcinogenic materials (all of which are recognised as significant hazards in the construction sector). It is therefore difficult to attribute any specific health effects to the provisions contained within this Directive. Nevertheless, it is informative to examine the extent of health problems in general within the construction sector compared to workplaces in general.

The LFS 2007 database includes statistics relating to those who report having had what they perceive as a work-related health problem within the last 12 months\(^8\). According to these statistics, 12.8% of all respondents indicated one or more problem. In comparison, 12.3% of those working within the construction sector responded in a similar manner. This appears to suggest that, in general, workers in the construction sector consider themselves to be no more or less healthy than the wider EU-27 workforce (possibly slightly more so, but the significance of a 0.5% difference would seem minimal).

It is therefore tempting to conclude from this evidence in isolation that there are no more risks to health in the construction sector as in industry in general, or that any additional risks are well-controlled. However, this is contrary to statistics on exposure to risks, which seem to suggest that construction remains a high-risk sector. For example, in other data from the same survey\(^9\), 61.6% of the workers in the construction sector report exposure to factors, which could affect their physical well-being, compared to the overall reporting rate of 39.8% across all sectors. Risks to mental well-being appear to be lower, however, as only 22.5% of the workers in the construction sector report exposure to factors, which could affect their mental well-being (compared to 26.5% overall\(^10\)).

Similarly, data from the EWCS survey (2007) identified the construction sector as having the highest incidence of reported exposures to physical risk factors.

\(^7\) Persons reporting an accident at work in the past 12 months, by sex, age and economic activity sector - % [hsw_ac5].
\(^8\) Persons reporting one or more work-related health problems in the past 12 months, by sex, age and economic activity sector - % [hsw_pb6].
\(^9\) Persons reporting exposure to factors that can adversely affect physical well-being, by sex, age and economic activity sector - % [hsw_exp6].
\(^10\) Persons reporting exposure to factors that can adversely affect mental well-being, by sex, age and economic activity sector - % [hsw_exp5].
(chemical, biological, ergonomic, noise, temperature; etc.) of all sectors\(^{11}\). By way of comparison, across each of the categories for exposure to vibration (all the time – around 25\% of the time), workers in the construction sector constituted around 20\% of the respondents, despite only constituting 6.8\% of all respondents.

It would therefore seem that, despite no apparent difference in the level of self-reported ill-health perceived as work-related, exposures to potential risks to health continue to be high within the construction sector. In the light of this, a need remains to ensure that exposures are properly and effectively managed, suggesting the continued relevance of this Directive.

Other statistics support the contention that construction remains a high-risk sector. For example, UK statistics on mesothelioma\(^{12}\) show that, of the top ten occupational groups for mesothelioma mortality, nine of them are trades associated with the construction sector (carpenters and joiners; plumbers; heating and ventilating engineers; electricians; electrical fitters; labourers in other construction trades n.e.c.\(^{13}\); construction operatives n.e.c.; managers in construction; construction trades n.e.c.). In fact, a UK report on the wider issue of occupational cancer\(^{14}\) concluded that 56\% of cancer registrations in men are attributable to work in the construction industry (mainly mesotheliomas, lung, bladder and non-melanoma skin cancers). Although the long latency period for the development of mesothelioma and some other forms of cancer makes it difficult to evaluate current exposures, it should be noted that authoritative projections for mesothelioma deaths in the UK\(^{15}\) indicate that such deaths amongst men are expected to continue to rise until 2016 with a ‘rapid decline’ thereafter.

There is also evidence that other forms of work-related ill-health are higher in the construction sector than elsewhere. For example, a scientific paper reporting on the UK industry found that, in comparison to all other employment sectors combined, male UK construction industry workers aged under 65 years had significantly raised SRRs (Standardised Risk Ratios) for respiratory (3.8, 95\% CI 3.5 to 4.2), skin (1.6, 1.4 to 1.8) and musculoskeletal disorders (MSD; 1.9, 1.6 to 2.2)\(^{16}\).

Clearly care should be taken in extrapolating these figures to the wider EU construction sector, but they appear to provide support for the ongoing relevance of this Directive.

---

\(^{12}\) HSE (2005).
\(^{13}\) n.e.c. ‘not elsewhere classified’.
\(^{14}\) Imperial College of London et al. (2010).
\(^{15}\) HSE (2009).
Overall EQR1 answer

Although there are surveys that point to the fact that workers in the construction sectors consider themselves to be no more or no less healthy than the EU-27 workforce as a whole, there are also statistics suggesting that construction remains a high-risk sector, which supports an ongoing relevance of the Construction Directive.

4.2 EQR2: Future relevance

The construction sector is clearly influenced by the general economic climate and the level of activity and therefore employment will generally reflect this. However, construction activity can clearly be expected to continue throughout the EU.

Given its current status as one of the sectors with the highest incidence rates of accidents and injuries, and with a high level of exposure to potential workplace hazards, it is clear that the safety and health risks encountered within the sector are likely to persist for some time and that a need for regulatory control will remain.

The construction sector provides particular challenges with the predominance of SME employers. Figures from the European Construction Industry Federation suggest that around 95% of the enterprises within the sector employ fewer than 20 workers, and the European Builders Confederation suggest that the average number of workers per enterprise is four.

In addition, particularly on large construction projects, the widespread use of subcontractors makes management of safety and health issues problematic and enhances the benefits of having a designated health and safety coordinator as required by the Directive.

Many national stakeholders considered it very difficult to differentiate between the impacts and relevance of the individual directives, preferring to see them as an integrated approach under the Framework Directive. For this reason, they frequently declined to offer any Directive-specific opinions.

However, amongst those who did differentiate between the impacts and relevance of the individual directives, they unanimously agreed that the Construction Directive stays relevant at present and is expected to remain so for the immediate future. A few suggested that developments in new construction technologies might lead to a reduction in risk, but these were generally restricted to specific aspects of construction such as the use of satellite tracking in road grading and surfacing (which is not necessarily a technology widely adopted across the EU or on all such construction projects within any individual MS).

A significant number of MS stakeholders mentioned the specific difficulties in coordinating activities between different employers because of the wide use of
subcontractors, thus adding weight to the view that the provisions of the Construction Directive were, and would remain, relevant.

Similarly, a small minority of those who commented considered that there was a possible need to clarify the scope of application of the requirements of the Directive to minor works such as small-scale repairs and redecoration.

Some concerns were expressed regarding the relevance of the scope of the Directive, for example in the definition of a temporary construction site (including the comment that construction sites were, by their very nature, temporary). Although some of these did genuinely appear to relate to the scope (for example, the extent to which the Directive applied to remedial activities and small domestic projects), it appeared that, in several instances, the comments related more to how the Directive had been transposed, interpreted and applied in the individual MS, rather than any questioning of the relevance of the Directive itself. For example, stakeholders from a small number of MSs commented on how changes had been made to key definitions in translating the official (English) version of the Directive into their native language and that these changes persisted in the national legislation. In other cases, some MS stakeholders expressed the view that the strictness of the transposition of the Directive into national legislation had reduced its relevance.

All comments relating to specific risks (e.g. asbestos, chemicals, noise, and nanomaterials) are actually more correctly addressed in the risk-specific Directive and will not be commented upon here. However, a number of MS stakeholders commented on the high incidence of ill-health and injury within the construction sector in their MS, thus supporting the statistics cited earlier.

There were relatively few comments from EU-level stakeholders specific to the Construction Directive. However, industry-specific stakeholders reinforced many of the comments from MS level stakeholders regarding the relevance of this Directive. For example, the establishment of a requirement for a health and safety coordinator was seen of great value, especially on large construction sites. However, their value on small sites was questioned, mirroring concerns expressed by some MSs about the inclusion of relatively minor activities. Here, the benefits to health and safety were seen as limited and the provisions of the Directive served mainly to result in the production of paper.

Although primarily concerning the Temporary Workers Directive, the high levels of employment of such workers within the construction sector was seen as of particular concern.

The NIRs indicate a fairly widespread concern about the interpretation of the scope of the Directive, suggesting a need for clarification to ensure a consistent approach. Although conventional construction works are not seen as problematic, the degree to which the Directive applies to works such as maintenance and cleaning appears to vary and this impacts on the perceived relevance of the Directive. There would seem to be a need to explore these different elements and to develop a shared understanding and interpretation of this fundamental aspect of the Directive. Some MSs also suggested that the scope of the Directive was less
relevant to some modern systems for the design, construction and management of buildings, and there was again a feeling that a review of the scope was appropriate. A further issue raised by a small minority was that the application of the Directive created some anomalies whereby certain activities (e.g. felling trees) would come within the scope of the Directive only if they took place as part of a construction project. However, it should be noted that not all MSs shared these views and some regarded the scope as fully appropriate and (therefore) relevant.

Although a very large number of MSs provided extensive comments on the Construction Directive in their NIRs, few of these impact directly on the issue of relevance. As with comments from national stakeholders, many of the comments appeared to reflect variations in the interpretation and implementation of the Directives at MS level rather than impacting on the Directive itself. The relevance of the Directive for SMEs, however, was a common theme, with many MSs commenting on a poor awareness of health and safety in general and the relevant legislation in particular. Another general comment was that in cases where SMEs worked as subcontractors on large sites with a large main contractor, they could benefit from this and acquire a better understanding.

Overall EQR2 answer Construction activities around the existing level are expected to continue throughout the EU, and the incidence rates of occupational injuries are expected to remain relatively high. Hence, it is assessed that a specific need for regulatory control will remain within the construction sector.
5 Assessment of effectiveness

The assessment of the effectiveness of the Construction Directive takes its point of departure in the impact storyline presented in Chapter 2 of this report. On the basis of the data gathered from statistics, studies and interviews, we examine whether the initial hypotheses regarding the impacts possibly caused by the Directive can be confirmed. This is done by looking into the values of impact indicators developed as part of the elaboration of the intervention logic for the Directive, and by analysing stakeholder assessments of its effectiveness.

In practice, we present the assessment by answering the seven evaluation questions on effectiveness. Having said that, the answers to EQE5 and EQE6 regarding broader impacts are not being provided on a Directive-specific basis, but for the OSH acquis as a whole. Hence, for these two questions we refer to the answers provided in the Final Report.

5.1 EQE1: Effect on occupational safety and health

EQE1: To what extent has the Directive influenced workers' safety and health, the activities of workers' representatives, and the behaviour of establishments?

This first evaluation question on effectiveness is arguably the most important question to answer within the evaluation of the Construction Directive. In line with the intervention logic shown in Chapter 2, we present the assessed impacts by firstly looking into workplace impacts – i.e. the direct changes/improvements that occur at the workplace as a result of implementing the KRIs, and secondly by looking into the actual improvement in the safety and health situation arising from the workplace impacts.

5.1.1 Workplace impacts

A condition for the Construction Directive to have workplace impacts – such as better safety and health surveillance, organisational changes and higher awareness among workers about potential safety and health issues on construction sites – is obviously that its provisions are implemented and complied
with in the MSs. This was assessed in Chapter 3 with the overall conclusion that the Construction Directive has been implemented in all MSs and that its provisions to a large extent are complied with.

Furthermore, it is important to acknowledge that the stakeholders interviewed in the different MSs – as shown in Figure 5-1 – on average assess that the Construction Directive for the large enterprises has had high behavioural impacts at workplace level. Reasons given for this include the notion that large construction companies often have dedicated OSH experts, well-established safety and health cultures on the construction sites, and access to the necessary financial resources. Furthermore, large construction companies more often find themselves in situations where they can benefit from the requirement to coordinators on construction sites where more than one contractor is present. At the same time, the large companies are potentially more concerned about reputational impacts due to lacking safety and health conditions on the construction sites.

This assessment is much in line with the findings from the European Commission (2008) implementation report, which concluded on the basis of MS assessments that the Construction Directive has been highly beneficial in terms of improving working conditions on construction sites. The main effect of the Directive has been the positive influence on the culture of prevention in the sector causing an improvement of the on-site facilities such as hygiene, training premises, canteens, sanitary facilities and offices. Furthermore, the communication between workers at different stages has been improved.
Small workplace impacts for small construction companies

The smaller workplace impacts for the small construction companies, in particular for microenterprises, as shown in Figure 5-1 are partly a result of the fact that they often do not have the above-mentioned strength of the large enterprises. It is interesting to observe that the workers are the most pessimistic on this account, while the authorities are the most optimistic.

Hence, the smaller workplace impacts for SMEs and, in particular, microenterprises can potentially be explained by a lack of resources dedicated to safety and health in such construction companies. Furthermore, a lack of awareness of occupational safety and health has been cited as an explanation for the lower impact on behaviour in small enterprises. Finally, the Construction Directive has by some been criticised for not dealing adequately with sub-consultancy contracts, which are plentiful within the construction sector. In cases where sub-consultants are SMEs and microenterprises, this is often a large challenge.

5.1.2 Safety and health impacts

Since the previous section points towards the fact that the Construction Directive has led to improvements at the workplace level, there is a good reason to believe this has also led to positive safety and health impacts at the European construction sites.
This indication comes from Figure 5-2 and Figure 5-3 showing that the EU-15 (which is reasonably well documented) have experienced a decrease in the number of non-fatal and fatal occupational accidents within the construction sector during the period 1998-2012. Furthermore, the decrease in non-fatal accidents was higher in the construction sector than for the economy as a whole. In this context, it must be acknowledged that the Eurostat ESAW data show that the incidence rate – i.e. the number of accidents per worker – is more than twice the average incidence rate in the construction sector.

*Figure 5-2 Number of non-fatal occupational accidents, total and construction sector – EU-15*

Source: Eurostat Search Database: ESAW.

Note: Left axis: total EU-15; right axis: construction sector.
Non-fatal accidents are accidents that lead to more than three days lost.
Only data for the EU-15 are available to illustrate the long-term trend.
Evaluation of the Practical Implementation of the EU Occupational Safety and Health (OSH) Directives in EU MSs

Figure 5-3  Number of fatal occupational accidents – EU-15

Source: Eurostat Search Database: ESAW.

Figure 5-4 shows that the reduction in the number of non-fatal occupational accidents between 1998 and 2012 has mostly benefited male workers. This absolute reduction in the number of accidents does, however, come from a high level compared with that of the female workers. Actually, the percentage reduction has been larger for the female workforce (73%) than for the male workforce (51%). This significant absolute difference between male and female workers does of course imply that we in the evaluation of the effectiveness of the Construction Directive cannot avoid paying particular attention to how it has contributed to safety and health improvements for the male-dominated work functions and sector.

The reduction in occupational accidents has also mainly been for the benefit of the younger workers – i.e. those below 44 years. This development must, however, be seen in the light of an ageing workforce. Hence, when looking at the incidence rates by age groups available in the ESAW database, these have fallen at very similar rates between 1998 and 2012. In other words, there is on this basis no reason to believe that the Construction Directive has been of more benefit to some age groups than others.

That said, the aging population implies a continued need to consider that the elderly population has health conditions that are lower than the rest of the population, partly caused by many years of hard work. Nevertheless, enterprises do, as suggested in Eurofound (2012), often try to arrange work – in particular for those above 60 – so that it involves less heavy loads, fewer painful positions and lower speed. This is much in line with EU-OSHA, which for several years (e.g. EU-

17 Eurostat Search Database: ESAW does not allow this comparison over time for fatal accidents.

18 Incidence rate = number of accidents per 100,000 employed.
OSHA, 2000) has called for an increasing need for work organisation and workplace equipment corresponding to the requirements of older people, including those in need of specific safety and health measures.

**Figure 5-4 Number of non-fatal occupational accidents by sex and age – EU-15**

Source: Eurostat Search Database: ESAW.

Note: Non-fatal accidents are accidents that lead to more than three days lost.

Only data for the EU-15 are available to illustrate the long-term trend.

The European Commission (2008) evaluation also states that an assessment of construction sites reveals an uneven picture across MSs in the sense that while the implementation of the Directive has improved health and safety conditions and prevented accidents in some MSs, more needs to be done in other MSs to meet the Directive's requirements. Identified problems with compliance also suggest that there are difficulties in understanding the legislation.

From this evaluation of the implementation of the Construction Directive in 2008, it follows that the effects on accidents at work and occupational diseases in the period 1996 to 2005 have shown a gradual improvement in the incidence rate. The number of fatal accidents has decreased from 13.3 out of 100,000 workers in 1996 to 8.8 out of 100,000 workers in 2005. In the same period, the number of accidents involving more than three days' absence from work has gone down from 8,023 to 6,069 out of 100,000 workers. It is noted, however, that the rate of fatal accidents in construction is almost 2.5 times the average rate for all activities, including construction, and the rate of accidents involving an absence of more than three days from work is twice as high.

The EU stakeholder assessment of the Construction Directive is also in line with the findings from the European Commission (2008) implementation report, which for example states that safety and health measures are no longer considered solely as costs, but also as economic benefits, because they may reduce absence...
from work and ultimately increase productivity. Hence, while it – as discussed further below – may be difficult to assess the actual contribution of the Constructive Directive to the reduction of occupational ill-health on the basis of official statistics, interviews with both national and EU stakeholders point to the fact that the Directive has had a positive impact on safety and health. Furthermore, there are very notable differences among EU stakeholders in the interviewed employer and worker organisations’ assessment of this impact, with worker organisations stressing that the Directive has had a low impact, while employer organisations rate it very highly.

Among national stakeholders, there is also a strong general perception that the Directive has had an impact – i.e. around 90% of the interviewed stakeholders agree that the Directive has had a positive effect and about half of these assess that the impact have been significant.

Furthermore, Figure 5-5 shows that the perception that the Directive has had a significant impact is strongest among national employer and worker organisations, coherent with the views expressed with EU employer organisations. Hence, this is unlike the relatively low impact perceived by EU worker organisations. As not all MSs are covered in the national stakeholder interviews (on this specific Directive), it is possible that the lower level expressed by EU worker organisations reflects the situation at the broader level in the EU.
Figure 5-5  Relative score of stakeholders’ view on the Directive’s impact on workers’ safety and health

Source: MS interviews.

Note: The graph depicts the relative distribution of answers by stakeholder group, across all MSs, to the question: "How has the health and safety of workers been affected by the national legislation transposing the Directive(s), e.g. absence from work (sickness absence, disability pensioning), accidents and quality of life?"

Overall EQE1 answer

The Construction Directive is assessed to have affected the enterprises’ behaviour in terms of securing occupational safety and health – particularly that of large enterprises and, to a lesser extent, that of SMEs and microenterprises. Such low effects are due to difficulties in complying with provisions, related to a lack of financial resources and of safety and health expertise and cultures. Furthermore, the Construction Directive has by some been criticised for not dealing adequately with sub-consultancy contracts, which are plentiful within the construction sectors, and which in many cases are held by SMEs and microenterprises.

5.2 EQE2: Effect of derogations and transitional periods

**EQE2:** What are the effects on the protection of workers’ safety and health of the various derogations and transitional periods foreseen in several of the Directives concerned?

Overall EQE2 answer

Despite in-depth prior consultation of the social partners and unanimous adoption by the Council, the majority of the MSs failed to meet the transposition deadlines for the Directive, which had considerable repercussions on the levels of practical implementation at workplaces. The impact of this is yet to be determined.
5.3 EQE3: Effect of Common Processes and Mechanisms

**EQE3**: How and to what extent do the different Common Processes and Mechanisms that were mapped contribute to the effectiveness of the Directives?

Effect of all six CPMs

Although the Construction Directive in principle, as presented in Section 2.3, only puts additional emphasis on two of the CPMs: information of workers and consultation of workers, the interviewees have in practice provided their views on the effectiveness of all six CPMs, i.e. also four for which the provisions, which also apply to the construction sector, are presented in the Framework Directive.

Furthermore, it is – as presented in Section 2.4 – not possible to attribute the impact of the Directive to the specific CPMs. That being said, we have, on the basis of discussions with national and EU stakeholders, been able to investigate their views on the relative importance of the different provisions. For example, the EU stakeholders on average assess risk assessments as being of the highest relative importance, followed by the training of workers and the role of coordinators. Notably, none of the interviewees have identified the health surveillance requirement as being of importance.

The picture from national stakeholder interviews is less clear on the topic of the relative importance of the CPMs, with somewhat equal importance placed on the CPMs.
As mentioned, the Directive has, according to the European Commission (2008) evaluation, led to substantial additions to all national occupational health and safety legislation. The additions have in particular been made with respect to design and site coordination, the safety and health plan and the safety and health file. In this context, it has been suggested that the safety and health file in many cases, e.g. hospitals among many other construction projects, is as important as the safety and health plan. It is furthermore reported that the new approach to prevention – i.e. defining the obligations and responsibilities of the parties involved on the construction site – has had a major impact in improving health and safety. An assessment of the impacts of the various mechanisms is nevertheless made difficult by the fact that they work in tandem, but also because the Directive in most MSs has been transposed in a highly fragmented way.

One of the key requirements of the Directive is the appointment of coordinators for handling health and safety matters among the parties involved at the construction site. The European Commission (2008) evaluation therefore also assessed the Directive’s impact on preventing occupational health and safety risks on this basis.

Among other things, it was found that efforts of preventive health and safety measures vary considerably among different types of clients; typically, due to differences in knowledge of the legislation, allocation of resources and motivation. E.g. major clients working regularly on large sites are typically more aware of their obligations than e.g. individuals acting as clients on occasional small sites. Poor planning and time constraints were also highlighted as factors that in some cases
undermine health and safety aspects. Moreover, a need for informing, training and raising awareness among the different types of clients were also raised in some MSs for more effective implementation.

| Other roles | Similar concerns have been raised for other roles, i.e. in terms of project supervisors. Large enterprises know the requirements of the Directive well, while small and microenterprises tend not to know them, and may even be reluctant to undertake preventive measures. Also, the coordination of the implementation of the health and safety provision, which is the role of the coordinator, is deemed acceptable at large construction sites, while the Directive rarely is implemented at small and medium-sized sites. In addition, there is a general lack of training as well as a significant communication and comprehension problem among workers, which are found not to adopt a proactive attitude to prevention. |
| Safety and health plan | The European Commission (2008) highlights that the quality of the safety and health plans, stipulated by the Directive, vary from excellent to barely acceptable. In many cases, the plan is based on standard documents, resembling an administrative formality rather than measures needed to ensure safety and health. In this connection, it is nevertheless also stated that a large number of accidents occur because of poor planning and lack of foresights. |
| All provisions | The European Commission (2008) also mentions results from European inspection campaigns from 2003 and 2004 covering 15 MSs. These indicate that there is a positive correlation between the size of the construction site and the degree of compliance with the Directive as regards coordination, the safety and health plan, prior notice and the project file. Generally, large construction sites (above 50 workers) receive far better scores than small construction sites, but the degrees of compliance are nonetheless still unsatisfactory.19 This is likely to negatively affect health and safety. |
| National Implementation Reports (NIRs) | The majority of the NIRs list one or more difficulties, especially experienced by SMEs, in meeting the Directive’s requirements. These are mostly related to limited financial resources, limited knowledge of the provisions, and the fragmentation produced by sub-contracting chains, all of which are also mentioned in the European Commission (2008). In this context, it is nonetheless important to emphasise that none of the NIRs has indicated that it would be beneficial to completely change the provisions of the Directive. In order words, it is believed that the requirements to the health and safety of workers employed at temporary and mobile construction sites should be the same for large enterprises and SMEs, and that these requirements are largely adequate. Moreover, the existence of large sub-contracting chains poses difficulties to effective coordination, to assigning responsibility and to the dissemination of information. |
| Lack of financial resources | Some country reports also make recommendations for improving the implementation of the Directive. In the report from Belgium (BE), for example, it |

---

19 In 2003, 20-30% of large sites were not in compliance, whereas the corresponding figures for small sites were 40-50%. Figures from 2004 are similar, or slightly worse.
was stated that if safety and health plans were to include more details in terms of preventive measures, resources and responsibilities, SMEs would be able to draw up better proposals and ensure that the rules on competition are correctly applied. Moreover, the report from Lithuania (LT) recommended regulating the risk assessment in a way that is more suitable for construction companies, especially where works or technological processes performed by individual specialists are assessed, and especially considering that workplaces in construction are not permanent and change with varying regularity. The reports of Austria (AT), Denmark (DK), Latvia (LV), Luxembourg (LU), the United Kingdom (UK) and Romania (RO) did not provide any conclusive information.

**Overall EQE3 answer**

Although we have argued that the CPMs and the other KRs work in tandem to produce impacts, there is a tendency that EU stakeholders put relatively most importance on risk assessments as they are seen as a foundation for applying a risk prevention philosophy rather than a more reactive approach to safety and health. National stakeholders point in turn to the largest contributions coming from health surveillance and workers consultation.

### 5.4 EQE4: Effect of enforcement

**EQE4: To what extent do sanctions and other related enforcement activities contribute to the effectiveness of the Directives?**

**Enforcement of OSH acquis**

In general, the majority of stakeholders interviewed emphasised the importance of enforcement, but raised also a number of concerns about the current level of enforcement not being sufficient, and thus causing the Directive – or rather the OSH acquis – to not reach its optimal effectiveness. Hence, it must be acknowledged that it is difficult to attribute the effect of enforcement activities to the single Directives and their provisions.

In this context, the stakeholders have observed a trend of less resources being allocated to enforcement activities and expressed worry, as it is viewed as a strong motivator for employers to be in compliance with the OSH acquis as a whole, both by employer and worker organisations. This challenge from falling resources allocated to labour inspectorates has also been highlighted by a number of international organisations such as the ILO (2010) and EPSU (2012), who point to differences in resources between countries and so to possible level playing field issues.

**Effectiveness of specific enforcement measures**

During the stakeholder interviews, we have looked into which enforcement measures are the most appropriate regarding the enforcement of the Construction Directive. The EU stakeholders pointed to the fact that enforcement in general must be combined with guidance, which is envisaged to involve a classification of employers into "bad seeds", who are purposefully non-compliant and "uninformed", who are non-purposefully non-compliant. The argument is that many enterprises, especially SMEs and start-ups, are simply not aware of the rules. By combining enforcement (inspections) with guidance, it is feasible to provide a more detailed
and better suited response to those, who are lacking knowledge about what they should comply with.

The national stakeholders, as shown in Figure 5-7, have provided their views on the importance of different enforcement measures. The most striking observation is probably that the different measures are almost equally valued by the different MS stakeholders. There are of course a few differences. While fines, sanction and reporting requirements are assessed to contribute least to the effectiveness of the Construction Directive, the largest contribution seems to come from the obligations and recommendations for corrective actions.

*Figure 5-7 National stakeholder views on the importance of enforcement measures regarding their contribution to the Directive’s effectiveness*

Source: MS interviews.  
Note: Average scores, by stakeholder groups across all MSs, to the question: “Do you consider the following enforcement measures and sanctions to be effective? (Rate on a scale from 1 to 5).”

**Overall EQE4 answer**  
It is difficult to attribute the effect of enforcement activities to the Construction Directive and its provisions, as they mostly concern the OSH acquis as a whole. However, improved guidance may provide particular benefits for the small, often sub-contracting construction companies.

### 5.5 EQE5: Benefits and costs

**EQE5:** What benefits and costs arise for society and employers as a result of fulfilling the requirements of the directive?

Please see the OSH acquis level answer provided in the Final Report.
5.6 EQE6: Broader impacts

EQE6: To what extent does the Directive generate broader impacts (including side effects) in society and the economy?

Please see the OSH acquis level answer provided in the Final Report.

5.7 EQE7: Objective achievement

EQE7: To what extent are the objectives achieved and, if they are not, what could play cause could play a role? What factors have particularly contributed to the achievement of the objectives?

Although it can be argued that the Construction Directive does not contain a precise formulation of an objective, we have in Section 2.1 formulated the aim to prevent risks by establishing a chain of responsibilities linking all parties involved. Being a sector-specific Directive does not mean that it establishes minimum requirements for all potential risks occurring at temporary or mobile construction sites, instead the Directive covers risks not (or not sufficiently) covered by other directives. In short, it provides more detailed sector-specific requirements to implement the provisions of the Framework Directive.

In addition to providing protection for workers, it is also an objective of the Construction Directive to offer companies operating in the European market the possibility of working on an equal footing. In that way, it allows flexibility for MSs, hereunder to introduce derogations from the obligation to appoint one or more coordinators for safety and health matters, after consulting both management and the workforce – except where the work concerned involves particular risks. In contrast, MSs are also allowed to set higher standards than the Directive requires.

Both the EU and national stakeholders (Figure 5-8) assess that the objectives of the Construction Directive have been reached to a reasonable extent.

Some stakeholders, however, including national funds raised important caveats/queries. The fragmented and strictly administrative application of the Directives can lead to a decrease in working conditions given their inability to address broad social and environmental issues (psychosocial risks and environmental pollution). As stressed previously in the section on the relevance of the OSH framework, such diffuse risks could (and should) be covered by the existing framework, if it was applied in the holistic manner intended by the legislator.
Figure 5-8  National stakeholder views on whether the legislation transposing the Directive has fulfilled its objective (score from 1 to 5)?

Source: MS interviews.
Note: Average stakeholder scores, across all MSs, to the question: “Has the legislation transposing the Directive you are commenting on fulfilled its objectives and to what extent (rate on a scale from 1 to 5)?”

… and that a contribution to levelling the playing field

Finally, a view held across all MSs, among EU stakeholder groups, is that the Construction Directive and OSH legislation contribute to establishing a level playing field by setting common standards for safety and health. The importance of this effect has been especially highlighted in the context of the economic crisis, and how the Directive’s minimum requirements have helped to avoid social dumping.

Stakeholders from several MSs also highlighted the fact that the OSH common standards, which are intended to create a level playing field in the EU, in reality play against micro-establishments and SMEs, as these companies are exposed to the greatest financial difficulties related to the legislation, such as conducting risk assessments, replace and modernise work equipment, perform the medical examinations and so on.

Overall EQE7 answer

The brief answer to this fundamental question is that the Construction Directive has achieved its stated objective of introducing measures to encourage improvements in the safety and health at work. This answer is supported by the above answers to the other evaluations questions – i.e. that the Construction Directive overall is implemented and complied with; that it remains relevant; that it has led to positive workplace impacts as well as safety and health impacts; and that it has contributed to levelling the playing field by setting common standards for occupational safety and health in the EU.
6 Assessment of coherence

The main aim of this Directive is to ensure the coordination of health and safety at construction sites where several firms and groups of workers are present. There are no such equivalent measures in the other OSH Directives. Against this background, no major coherence issues have been identified in relation to Directive 92/57/EEC (temporary or mobile construction sites). Concerning internal coherence, the only issue identified relates to the overlap of inspection requirements on work equipment with Directive 2009/104/EC (work equipment). Regarding external coherence, the ILO Safety and Health in Construction Convention (No. 167) sets additional requirements related to inspection and reporting of occupational accidents and diseases.

6.1 EQC1: Coherence with other OSH Directives

**EJC1**: What, if any, inconsistencies, overlaps, or synergies can be identified across and between the Directives (for example, any positive interactions improving health and safety outcomes, or negative impact on the burdens of regulation)?

| Risk assessment | Directive 92/57/EEC (temporary or mobile construction sites) does not contain any risk assessment procedure and derived risk management measures. It relies on minimum requirements and control measures to avoid occupational risks at construction sites (e.g. the appointment of health and safety coordinators). This is not considered as an inconsistency, since the scope and aim of this Directive does not really entail the need for a specific risk assessment. The risk assessment is covered under the Framework Directive and the relevant daughter directives. |
| Risk management measures derived from the risk assessments | |
| Preventive and protective services | This section is not applicable, as Directive 92/57/EEC (temporary or mobile construction sites) does not require conducting a risk assessment. |
| Article 3(1) of the Directive 92/57/EEC (temporary or mobile construction sites) requires the appointment of coordinators for safety and health matters, appointed by the client or the project supervisor. The Directive differentiates between coordinator ‘at the project preparation stage’ and coordinator ‘at the project |
execution stage’ and their respective duties are determined by several provisions in the Directive. Some of these duties entail, inter alia: coordinating implementation of the general principles of prevention concerning safety and health, and drawing up or making adjustments to the safety and health plan.

The 13th recital and Article 1(3) of Directive 92/57/EEC state that the provisions of the Framework Directive are fully applicable to temporary or mobile construction sites, without prejudice to more stringent and/or specific provisions contained therein, so the requirement to appoint protective/preventive services under Article 7(1) of the Framework Directive applies in parallel to the undertakings that take part in the activities on the construction site. This cannot be seen as an overlap as the two sets of requirements are different and do not apply to the same legal persons. The coordinator, appointed by the client or project supervisor, has an overall coordination role for ‘designated workers’ or ‘preventive and protective services’ nominated by each of the contractors present on the construction site.

Information to workers

Article 11 of Directive 92/57/EEC (temporary or mobile construction sites) includes a separate provision on the requirement to provide information to workers. This article is merely a ‘without prejudice clause’ referring to Article 10 of the Framework Directive, on the basis of which workers and/or their representatives shall be informed of all the measures to be taken concerning their safety and health on the construction site.


Training of workers

Most workplace-specific directives [Directive 92/104/EEC (surface and underground mineral-extracting industries), Directive 92/91/EEC (mineral-extracting industries through drilling) and Directive 93/103/EC (work on board fishing vessels)] include additional, general requirements on training as part of the minimum safety and health requirements listed in the annex.

Directive 92/57/EEC (temporary or mobile construction sites) does not include such a specific provision or a relevant general requirement as part of the minimum safety and health requirements in the annex. However, training requirements set by risk-specific directives, e.g. Directive 2004/37/EC (carcinogens or mutagens) apply. In addition, Annex IV, Part B setting the ‘specific minimum requirements for on-site workstations’ stipulates that lifting equipment, installations, machinery and equipment, including hand tools whether power-driven or not, must be operated by workers, who have received appropriate training.

Health surveillance

Directive 92/57/EEC (temporary or mobile construction sites) does not include a provision on health surveillance and, subsequently, it does not include a requirement concerning health records. The relevant requirements are applied through the Framework Directive and the daughter directives in relation to the agents and/or other health and safety factors present on each construction site.
Directive 92/57/EC (temporary or mobile construction sites) is one of the very few daughter directives that sets specific worker consultation requirements. Article 12 provides that, in addition to Article 11 of the Framework Directive, workers’ consultation must cover the duties of coordinators (Articles 6 and 8 of this Directive) and employers obligations under Article 9 of this Directive (minimum requirements for construction sites). Such consultation requirements can be justified by the specific scope of the Directive and the occupational risks covered.

Limit values

Not applicable for this Directive.

Workers at particularly sensitive risk

Annex IV, Part A points 16 and 17 of Directive 92/57/EC (temporary or mobile construction sites), respectively, require that pregnant women and nursing mothers must be able to lie down to rest in appropriate conditions and that workplaces must be organised to take account of disabled workers, if necessary, in particular to the doors, passageways, staircases, showers, washbasins, lavatories and workstations used or occupied directly by handicapped persons. Such requirements also apply in the other workplace directives (Directive 89/654/EEC (workplace), Directive 92/104/EEC (surface and underground mineral-extracting industries) and Directive 92/91/EEC (mineral-extracting industries through drilling). Note that Directive 89/654/EEC (workplace) does not apply to Directive 92/57/EEC, so there is no overlap between these two directives. Furthermore, the potential overlaps between Directive 92/57/EEC and the mineral-extractive directives have no consequences, since they do not entail double regulation in practice20.

Other aspects

Reporting obligations

Directive 92/57/EEC requires the client of the project or the supervisor to communicate a prior notice to the national authorities before the start of the construction site. Such reporting requirement does not exist in other workplace directives, but is justified due to the specific characteristics of the construction site, in particular, the need for coordination of occupational health and safety at sites where several firms and types of workers are present.

Inspection and enforcement measures

Directive 92/57/EEC sets requirements concerning inspections of specific work equipment usually used in a construction site (scaffolding, lifting devices and accessories, cofferdams). This inspection obligation is fulfilled by the employer and it only applies to certain types of work equipment, complementing the general obligation of employers to inspect work equipment under Directive 2009/104/EC (work equipment). Work equipment is defined as ‘any machine, apparatus, tool or installation used at work’ and could therefore also cover those used on a construction site.

Hence, the requirements of the work equipment Directive to record and keep the results of inspections and keep them at the disposal of the authorities concerned

---

20 Employers will only have to apply once the similar requirement related to pregnant workers and disabled workers.
as well as to provide physical evidence that the last inspection has been carried out when work equipment is used outside the undertaking, also apply to work equipment used on construction sites. In the absence of a ‘without prejudice’ clause, this leads to an overlap as far as the work equipment covered by Directive 92/57/EEC is concerned.

Concerning enforcement measures, unlike Directive 2013/35/EU (electromagnetic fields) and Directive 2006/25/EC (artificial optical radiation), Directive 92/57/EEC does not contain any provisions requiring that MSs must provide adequate penalties in the event of infringement of the provisions of these directives. This is a potential coherence issue (see section on the Framework Directive).

**EU stakeholders’ views**

Only one stakeholder out of 23 referred to Directive 92/57/EEC in relation to potential synergies, gaps or coherence issues in general. This stakeholder indicated synergies between Directive 89/391/EEC (Framework Directive) and Directive 92/57/EEC as regards the provision of the latter to appoint a coordinator for safety and health matters. The stakeholder considers the provision to effectively contribute to raising awareness and spreading knowledge about potential hazards and occupational risks among workers.

None of the national stakeholders identified internal coherence issues related to Directive 92/57/EEC).

No MS identified internal coherence issues related to Directive 92/57/EEC.

**Overall EQC1 answer**

It is assessed that there are no internal coherence issues related to the Construction Directive.

## 6.2 EQC2: Coherence with other EU policies

**EQC2: How is the interrelation of the Directives with other measures and/or policies at European level also covering aspects related to health and safety at work, such as EU legislation in other policy areas (e.g. legislation: REACH, Cosmetics Directive, Machinery Directive, policy: Road Transport Safety, Public Health, Environment Protection), European Social Partners Agreements or ILO Conventions?**

Public procurement policy (see more details in the section below on socially responsible public procurement) includes certain considerations relevant to occupational health and safety. The legal framework in the EU is provided by the procurement Directives, namely Directive 2014/24/EU replacing Directive 2004/18/EC on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts, Directive 2014/25/EU replacing Directive 2004/17/EC coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors and Directive 2014/23/EU on the award of concession contracts.
All these directives specifically stipulate in their recitals that ‘measures aiming at the protection of the health of the staff involved in the production process, the favouring of social integration of disadvantaged persons or members of vulnerable groups amongst the persons assigned to performing the contract or training in the skills needed for the contract in question can also be the subject of award criteria or contract performance conditions provided that they relate to the works, supplies or services to be provided under the contract’. For instance, such criteria or conditions might refer, among other things, to the employment of long-term job-seekers or the implementation of training measures for the unemployed or young persons in the course of the performance of the contract to be awarded. In technical specifications, contracting authorities can provide such social requirements, which directly characterise the product or service in question, such as accessibility for persons with disabilities or design for all users. The relevant provision concerning the award criteria mentions ‘social characteristics’ as a possible criterion to be used by contracting authorities, without further detail or specific reference to occupational health and safety obligations on behalf of the tenderers.

Moreover, all EU public procurement Directives define ‘work’ as the outcome of building or civil engineering works taken as a whole, which is sufficient in itself to fulfil an economic or technical function and include an elaborate listing of construction works in their annexes. Therefore, this Framework interacts with the works carried out in construction sites.

It should be noted that the previous Directive 2004/18/EC explicitly included obligations relating to employment protection provisions and working conditions as obligations to be considered when executing the works. The new Directive 2014/24/EU does not repeat this link with employment protection and working conditions. It only sets the non-payment of taxes or social security contributions as a ground for exclusion.

The existence of the guidelines Buying Social – a guide to taking account of social considerations in public procurement21 partially addresses the consideration of occupational health and safety aspects in public procurement, albeit to a lesser extent. In order to impulse the implementation of the OHS requirements, the Commission encourages contracting authorities to include social considerations by including social policies through the implementation of socially responsible public procurement (SRPP) procedure. As regards the construction sector, the document Buying Social – a guide to taking account of social considerations in public procurement gives indicative examples of how social concerns can be included in the technical specifications of public works contracts (inter alia, compliance with certain ILO Conventions, adoption of measures aiming at avoiding accidents on the construction site, such as signposting, conditions for storage of dangerous products or routes for transport of equipment).

21 DG Employment, social affairs and equal opportunities (2010), Buying Social – a guide to taking account of social considerations in public procurement.
This section analyses policy documents that could influence the implementation of Directive 92/57/EEC setting minimum safety and health requirements at temporary or mobile constructions sites.

*Strategy for the sustainable competitiveness of the construction sector and its enterprises*  

One of the main goals of this strategy is to improve the human capital basis of the construction sector, fostering at the same time the sustainable competitiveness of the construction sector. It is acknowledged that there is a significant shortfall of qualified workers for on-site construction enterprises and, to a lesser extent, for the construction products’ industry, and that measures to promote the better functioning of the internal market are needed. This document underlines that education and training systems across Europe display great fragmentation in the degree of centralisation or decentralisation, the structure of training provision, the role of the social partners and curriculum content. It finally mentions that it is necessary to better anticipate future skills and qualification needs, to attract a sufficient number of students to relevant construction professions and to create the conditions for a better working environment, for a greater mobility of construction workers and for wider provision of cross-border services.

In order to achieve this goal, the Commission commits to support the European sectoral social partners of the construction industry to create a European sector skills council for the construction sector and to encourage them to develop, among others, other initiatives in areas such as health and safety. This strategy was accompanied by an action plan known as ‘Construction 2020’.

The High-Level Strategic Forum (HLSF), which monitors the progress made on the implementation of the Construction 2020 Action Plan, recommended among other measures that health and safety innovative practices are studied and considered in order to spread good practices in the construction sector.

The HLSF further recommends that monitoring of initiatives supporting health and safety innovation (both on legal and voluntary basis) is undertaken.

Such initiatives should therefore impact in a positive manner the implementation of the minimum safety and health requirements under Directive 92/57/EEC.

---

The ILO Construction Convention applies to all construction activities, namely building, civil engineering, and erection and dismantling work, including any process, operation or transport on a construction site, from the preparation of the site to the completion of the project. It also applies to such self-employed persons as may be specified by national laws or regulations. State parties to the Convention may, however, exempt particular branches of economic activity or particular undertakings in respect of which special problems of a substantial nature arise, on condition that a safe and healthy working environment is maintained, upon ratification and after consultation with the most representative organisations of employers and workers concerned.

This ILO Convention contains detailed safety requirements, inter alia in respect of scaffolds and ladders, lifting appliances and gear, protective equipment, work equipment, machinery and tools, which are considered equivalent to the requirements under Directive 92/57/EEC. However, this ILO Convention, unlike the Directive, contains definitions of workers and employers in the context of construction. Furthermore, there are requirements that are considered more stringent in this ILO Convention in comparison to the provisions laid down in Directive 92/57/EEC:

- The requirement to report to the competent authority within a prescribed time of occupational accidents and diseases.
- The explicit obligation of State parties to provide appropriate inspection services to supervise the application of the measures to be taken in pursuance of the Convention, and to provide these services with the resources necessary for the accomplishment of their task, or satisfy itself that appropriate inspection is carried out.

EU stakeholders’ view

No coherence issues have been identified by any stakeholders in relation to the interaction between Directive 92/57/EC and other EU policies or legislation.

National stakeholders and experts’ views

One stakeholder flagged that the interface between the Directive 2006/42/EC (machinery) and Directive 92/57/EEC led to enhanced OSH protection.

Information from the NIRs

According to one MS, consideration should be given to the interaction between the requirements in Directive 2006/42/EC (machinery) and the existing provisions in Directive 92/57/EEC on the adaptation of technical aids (e.g. plant, machinery and equipment).

Another MS stressed that Directive 92/57/EEC regarding the building of tunnels does not clearly indicate whether this activity falls within the scope of this Directive or of Directive 92/104/EEC (mineral extracting industry).
Overall EQC2 answer

Safety and health on construction sites are addressed by other EU policies, hereunder other non-OSH Directives, action plans and strategies. Furthermore, other international organisations – in particular the ILO – pursue improvements to working conditions via the Construction Convention. These different actions seem, however, to be in line with the general principles of the Framework Directive and so they do not give rise to coherence issues.
7 Conclusions and recommendations

The final chapter presents the conclusions and recommendations from the above analyses of implementation, relevance, effectiveness and coherence, respectively. Subsequently, we synthesise the presented results and perform an overall discussion of Directive-specific cross-cutting issues and key findings, which in turn feed into the overall conclusions and recommendations.

7.1 Implementation

With only few observed discrepancies and infringement proceedings since 1990, it must be concluded that the national transpositions of the Construction Directive have been smooth. Furthermore, most MSs have implemented more detailed or stringent requirements than those specified by the formulations of the provisions in the Construction Directive. Hence, there are no signs that their implementation has impeded improvements to occupational safety and health conditions on construction sites in the MSs.

Derogations from the requirements to draw up a safety and health plan are applied in nine MSs. According to most of the EU stakeholder organisations, who have commented on the Construction Directive, this may have had some adverse impact on its effectiveness.

There seems overall to be good compliance with the Construction Directive provisions among the establishments in the MSs, and it seems that compliance increases with the size of the establishment. Lower compliance among the small establishments is partly due to the fact that many of these are sub-contracted constructions companies, many of which are SMEs or even comprise self-employed workers. While it is assessed that regular training and consultation of construction workers take place, there seems to be a lack of knowledge and training on occupational safety and health – again, in particular within the SMEs.

A number of accompanying actions have been taken at both MS level and EU level to encourage the achievement of the safety and health targets of the Construction Directive. These include guidance documents, support tools, awareness-raising campaigns, education and training activities and financial incentives. A few
stakeholders have pointed to gaps in these actions, although without providing specific recommendations.

Furthermore, there are very few enforcement activities specifically focusing on the provisions of the Construction Directives. In other words, the enforcement of the legislation on construction sites makes use of the standard OSH sanctions applicable in the MSs.

There is little specific focus on vulnerable groups in the Construction Directive. Such limited focus is typically on migrant workers.

Similarly, there is only little evidence of the use of Construction Directive-specific measures to particularly support the compliance with the provisions within SMEs and microenterprises. There are a number of accompanying actions, however, targeted at SMEs in general that are considered applicable for the construction sector.

7.2 Relevance

Although there are surveys that point to the fact that workers in the construction sector consider themselves to be no more or no less healthy than the EU-27 workforce as a whole, there are also statistics that suggest that the construction sector remains a high-risk sector, which supports the ongoing relevance of the Construction Directive. Furthermore, according to Eurostat, ESAW, in 2012 the economic sector had the highest incidence rate of non-fatal accidents, and it became second – after mining and quarrying – regarding fatal accidents.

Construction activities around the existing level are expected to continue throughout the EU, and the incidence rates of occupational injuries are expected to remain relatively high. Hence, it is assessed that a specific need for regulatory control will remain within the construction sector.

7.3 Effectiveness

The Construction Directive is assessed to have affected the enterprises' behaviour in terms of securing occupational safety and health – particularly the behaviour of large enterprises and less so for the SMEs and microenterprises. Such lower effects are due to difficulties in complying with provisions, related to a lack of financial resources and of safety and health expertise and cultures. Furthermore, the Construction Directive has by some been criticised for not dealing adequately with sub-consultancy contracts, which are plentiful within the construction sector, and which in many cases are held by SMEs and microenterprises.

Despite in-depth prior consultation of the social partners and unanimous adoption by the Council, the majority of the MSs failed to meet the transposition deadlines of the Directive, which had considerable repercussions on the levels of practical implementation at workplaces. The impact of this is yet to be determined.
Although we have argued that the CPMs and the other KRIs work in tandem to produce impacts, there is a tendency that EU stakeholders attach most importance to risk assessments, as these are often seen as a foundation for applying a risk prevention philosophy rather than a more reactive approach to safety and health. National stakeholders point in turn to the largest contributions coming from health surveillance and workers' consultation.

It is difficult to attribute the effect of enforcement activities to the Construction Directive and its provisions, as they mostly concern the OSH acquis as a whole. That said, improved guidance may provide particular benefits for the small, often sub-contracting construction companies.

The brief answer to this fundamental question is that the Construction Directive has achieved its stated objective of introducing measures to encourage improvements of the safety and health at work. This answer is supported by the above answers to the other evaluations questions – i.e. that the Construction Directive overall is implemented and complied with; that it remains relevant; that it has led to positive workplace impacts as well as safety and health impacts; and that it has contributed to levelling the playing field by setting common standards for occupational safety and health in the EU.

7.4 Coherence

It is assessed that there are no significant internal coherence issues related to the Construction Directive. The only issue identified relates to the overlap of inspection requirements on work equipment with Directive 2009/104/EC (work equipment).

Safety and health on construction sites are addressed by other EU policies, hereunder other non-OSH Directives, action plans and strategies. Furthermore, other international organisations – in particular the ILO – pursue improvements to construction site working conditions. For example, the ILO Safety and Health in Construction Convention (No. 167) sets additional requirements related to inspection and reporting of occupational accidents and diseases.

7.5 Overall discussion

The above conclusions reveal that the Construction Directive has been well-implemented in the MSs, that it remains relevant, has been effective, and has not given rise to significant coherence issues. On the basis of the answers to the evaluation questions, the Construction Directive is there to stay.

We have in the analyses several times discussed the possible need to address the safety and health of vulnerable groups within SMEs and microenterprises. This discussion has also included the issue of whether such increased targeting can be accommodated within the present structure of the OSH acquis and within the Construction Directive, hereunder increasing the focus on sub-contracting construction companies.
Furthermore, since SMEs represent more than 99% of all enterprises in Europe, it is not straightforward how such targeting can be increased. This said, the microenterprises may increase their compliance with provisions if better advised to do so. Actually, adopting a "think small first" principle could also be beneficial for large companies. In other words: smarter regulation rather than more regulation.

7.6 Overall conclusion and recommendations

The above discussion does not alter the overall conclusion that the Construction Directive has fulfilled its objectives. This discussion does, however, give rise to a few recommendations:

Overall conclusion

The Construction Directive has had an important role within the OSH acquis in addressing risks specific or most widespread for construction sites. Hence, it accompanies the Framework Directive by focusing on a number of specific acute as well as long-term risks by introducing a number of minimum requirements of which some are prescriptive while others can be argued to be goal-oriented.

Hence, we recommend to maintain a Construction Directive in the future. It could be considered, though, to include a 'without prejudice clause' in Directive 2009/104/EC (work equipment) to ensure that equipment inspected under Directive 92/57/EEC (e.g. scaffolding) is not subject to other inspection requirements under Directive 2009/104/EC. A strategy to further enhance synergies could include the promotion of safety and health education, and training and capacity building programmes within the construction sector. Such programmes could specifically target safety and health coordinators on construction sites.

Many construction activities, hereunder on large construction sites, are as already mentioned carried out by small, often sub-contracted construction companies or even by self-employed workers. Such small construction companies are, in our analysis, found to have a relatively low level of knowledge and training on occupational safety and health matters.

Hence, we recommend that there will be an increased emphasis on the safety and health within SMEs and microenterprises in a future revised Construction Directive. Furthermore, unless the focus on vulnerable groups in general is increased, i.e. in the Framework Directive, there might be a need to highlight, which work functions that are particularly dangerous for e.g. less mobile workers and so should be avoided. However, this goal could also be pursued by improving advice on how to comply with the present provisions.

Finally, other international organisations – in particular the ILO – pursue improvements to construction site working conditions. For example, the ILO Safety and Health in Construction Convention (No. 167) sets additional requirements related to inspection and reporting of occupational accidents and diseases.
Hence, there could be a need for reviewing the scope of application and relevant definitions of the Construction Directive in the light of the ILO Convention. Furthermore, it could be considered to include a requirement on reporting of occupational accidents and diseases, and consider specifying requirements relevant to inspections by national authorities.
Appendix A  References


