

# OHS certification and legal compliance management in France: a quantitative survey

Thomas Audiffren<sup>a</sup>, Jean-Marc Rallo<sup>b</sup>, Franck Guarnieri<sup>a</sup>

<sup>a</sup> MINES ParisTech, Center for research on Risks and Crises, Sophia Antipolis, France

<sup>b</sup> PREVENTEO, Le Cannet, France

---

---

**Abstract:** Management of legal compliance in the field of Occupational Health and Safety (OHS) has become a significant policy management challenge for French companies. Pushed to take action as a result of pressure that is as much socio-economic as legal or even moral, practical difficulties in the implementation of compliance management tools remain. In practice, whether it is the determination of the applicable legal requirements, the assessment of compliance with these requirements or the management of action plans, the methodological and technological difficulties are multiple. Standards, such as OHSAS 18001, attempt to provide solutions that improve management of OHS legal compliance through integration into a broader management system. Moreover, as standards offer a way to certify the quality of these systems they have a particular role to play in improving companies' awareness of OHS legislation.

In order to clearly identify the obstacles encountered by OHS professionals, a wide-ranging quantitative survey of 820 OHS professionals was carried out in 2011. It had two principal objectives. The first was to study business practices in the area of regulatory monitoring and the assessment of legal compliance in the OHS domain. The second was to highlight the positive and/or negative relationships that may exist between the processes of compliance management and certification.

This article consists of four parts. The first two describe the challenges presented by the development of the quantitative survey and the methodology used in its implementation. The third and fourth parts present the principal results.

**Keywords:** Occupational health and safety, quantitative survey, management of legal compliance, business certification

## 1. INTRODUCTION

As a result of both socio-economic and legal or even moral constraints, French companies have had to develop increasingly complex policies for the prevention of occupational risks. The deployment of a legal compliance management system (CMS) [1] seems unavoidable for the implementation of such policies. Indeed, international standards (e.g. OHSAS 18001) require companies seeking to be certified to be able to manage the applicable regulations in the field of Occupational Health and Safety (OHS). This phenomenon is reinforced by increasingly severe judicial decisions [2].

However, the implementation of an effective and relevant CMS is relatively difficult and involves the mobilization of internal human resources [3]. Among these resources, OHS professionals are key actors. In the period 2008 – 2011 the Centre for Research on Risks and Crises (CRC) of MINES ParisTech in France carried out an initial quantitative survey of OHS professionals and occupational risk prevention policies [4]. This was followed by a second

quantitative survey, which was deployed in partnership with two private sector French companies, PREVENTEO and AFNOR. This new survey focused on a detailed analysis of legal compliance management practices related to Health, Safety and Environment (HSE). This article provides a summary of the results of this second investigation.

It is split into three parts. The first section briefly describes the questionnaire methodology (part 2). We go on to highlight a typology of companies according to their compliance management practices (part 3). This section then describes in detail the results associated with two distinct business practices: regulatory monitoring and compliance assessment. Finally, the article looks at the descriptive elements of the survey and focuses on the positive and negative relationships between the certification process and the management of HSE legal compliance (part 4).

## **2. METHODOLOGY**

The quantitative survey involved more than 800 OHS professionals and its execution was divided into four distinct phases. The following sections describe in detail each phase of the investigation.

### *2.1 Phase 1: Planning*

The starting point for the investigation was a planning phase. This was based on a literature review of the concepts of “OHS professional” and “prevention policy”. The key purpose was to identify the major issues and main themes to be addressed. In the context of the investigation, the first aim was to demonstrate the difficulties companies faced in the deployment of a legal Compliance Management System. Secondly, we sought to identify any positive and negative relationships between the implementation of a certification process and compliance management. Based on these two aspects, we decided to split the survey into three parts. The first looked at the process of regulatory monitoring, the second concerned the actual assessment of compliance and the third looked at the contributions and limitations of the certification process.

### *2.2 Phase 2: Preparation of the questionnaire*

The second phase, preparation of the questionnaire, was based on the upstream work carried out in phase 1. An initial prototype was drawn up in collaboration with a working group from MINES ParisTech who also carried out an internal validation. It should be noted that this step brought to light some specific issues, which were not ultimately included in the final questionnaire (for example, it was decided not to include a test of the knowledge of participants). Following several rounds of validation and correction, the prototype was sent to an OHS expert and other experts working in industry for in-depth validation. The final version was then calibrated by an expert in statistics. This aim of this last step was simply to reformulate the questionnaire to facilitate statistical processing. In practice, these changes concerned the form of certain questions (frequency, evaluation of human resources used, seniority, etc.), its organisation into sections and the addition of comments to be used by questionnaire administrators (“researcher comments”). The final questionnaire consisted of 64 questions.

### *2.3 Phase 3: Administration*

Before large-scale deployment to the full set of OHS professionals the questionnaire was tested by telephone on a sample of ten OHS professionals. This step led to some final adjustments in the wording of the survey in order to facilitate its administration (for example, some researcher comments were modified). The final version of the questionnaire was then

administered by telephone to 820 OHS professionals between early March and late April 2011. Interviews lasted an average of 30 minutes (relatively long for this type of investigation). The questionnaire was administered to OHS professionals representative of companies with at least fifty employees in the industrial and (79%) and construction (21%) sectors. It was more important that the sample was representative than that it covered all sectors (e.g. service sector companies were not included).

#### 2.4 Phase 4: Processing and presentation of results

The raw data from the telephone survey was processed as the initial data was not particularly useful in itself. Several statistical techniques were used such as frequency distribution tables, cross tabulation, Multiple Correspondence Analysis (MCA) [5] and k-means classification [6]. Frequency distribution tables are particularly useful for carrying out a frequency analysis, i.e. the number of responses corresponding to a particular modality of a variable (e.g. whether case law is taken into account as part of regulatory monitoring). Cross tabulation is an effective way to summarise interrelations between two qualitative variables and to study potential interactions between them.

This qualitative processing of data enriched the results leading to the development of a typology of OHS professionals. This typology is presented in the next section.

### 3. COMPANY TYPOLOGY

Here we present the results of the survey of business practices related to the management of legal compliance in the HSE domain. The first section presents a typology of companies with regard to these practices (3.1). The following two sections (3.2 and 3.3) describe in detail the practices of companies with respect to regulatory monitoring and compliance assessment.

#### 3.1 Company types

The quantitative survey revealed six types of businesses, which are shown in Table 1.

**Table 1 - Types of companies**

<b>Type 1</b>	Company has significant expertise in compliance management
<b>Type 2</b>	Company uses specialised software
<b>Type 3</b>	Company uses software-based office tools
<b>Type 4</b>	Company simply carries out regulatory monitoring
<b>Type 5</b>	Company carries out compliance monitoring which is outdated
<b>Type 6</b>	Company does not carry out compliance monitoring

Type 1 companies are relatively large (200–500 employees), certified, operate on the European or global market and implement a highly sophisticated CMS. They use both specialised software and internal expertise, and take a proactive approach to legislation (e.g. they anticipate changes in the legal framework). Type 2 companies are very similar to type 1. However, they are distinguished by a much greater reliance on software tools and their internal expertise (command of techniques for monitoring and assessment of compliance) is much less developed. Type 3 and 4 companies are much smaller (an average of 50–200 employees), and their regulatory monitoring activities are based on the use of free or inexpensive tools (subscriptions to legal monitoring services provided by specialised publishers). Moreover, they depend heavily upon good practice guides and recommendations provided by official bodies. The compliance assessments carried out by type 3 companies are unstructured and conducted using standard office tools (Word, Excel, etc.) or repositories in paper format. Type 4 companies are characterised by the virtual absence of a systematic

compliance assessment. Finally, type 5 and 6 companies are small (50–99 salaried employees). Type 5 companies do not carry out any regulatory monitoring but nevertheless conduct occasional compliance assessments on the basis of internal legal standards that may or may not be current. Type 6 companies have no interest in the question of HSE legal compliance management. They do not carry out either any regulatory monitoring or a compliance assessment. This typology clearly shows that business practices are very heterogeneous and in part, a function of the size of the organisation.

### *3.2 Business practices related to regulatory monitoring*

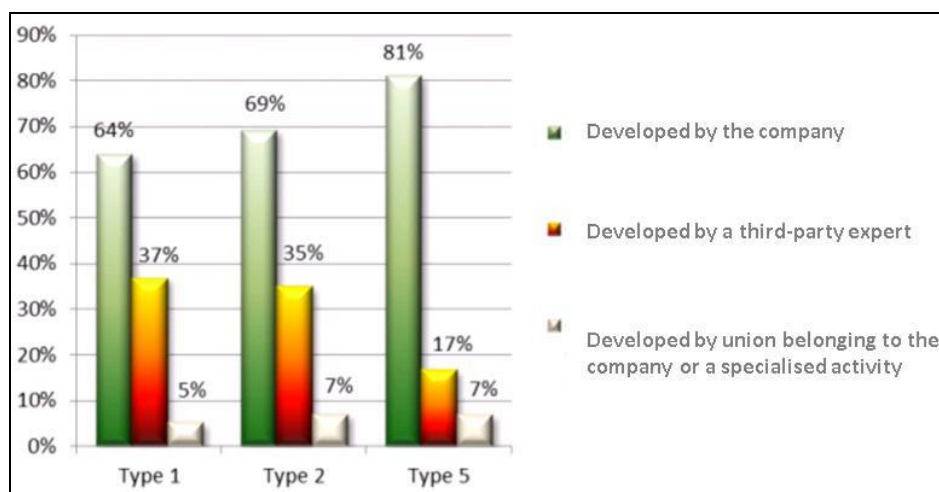
The purpose of regulatory monitoring is to identify the law that is applicable to the company and to monitor any changes to it. The first point to note is that regulatory monitoring is carried out by 75% of respondents. However, a detailed examination of the results shows that this percentage is made up of 100% for business types 1, 2, 3 and 4, while types 5 and 6 never do any monitoring. The quality of monitoring is also very heterogeneous. In the survey context, quality was assessed by several variables. These included the diversity of sources of legislation taken into account, tools used, whether monitoring was proactive and the frequency of implementation. On this last point, we note that in the best cases monitoring was carried out on a daily or monthly basis (primarily in type 1 and 2 companies) and that it was more often carried out on a quarterly or annual basis (for 15% of type 3 companies). Among the sources of legislation, the French Official Journal published on the Internet was widely cited by OHS professionals (65%), while its paper version was almost never used (less than 2%), unlike other codes and official texts where the paper version was often consulted (64%). A little over half of companies (56%) used a monitoring tool provided by an external supplier. The survey also demonstrated that only 37% of firms took case law into account in their regulatory monitoring.

The results of the survey tell us a little more about the regulatory monitoring practices of companies and how it is done. It is clear that there are wide disparities in the quality of monitoring. The same phenomenon is seen in the assessment of compliance with HSE legislation.

### *3.3 Business practices related to the assessment of legal compliance*

The survey revealed that the implementation of a compliance assessment is far less systematic than regulatory monitoring. Only 58% of respondents carried out such an assessment, and in particular, none of these companies were of types 3, 4 or 6. Type 5 businesses are therefore completely atypical in that they carry out compliance assessments although the practice does not necessarily lead to regulatory monitoring (identification of the applicable legislation). With respect to the objectives of the compliance assessment, responses were very similar to those given for regulatory monitoring. As for the frequency of the compliance assessment, it seems that most are carried out on an annual basis (37%) and, in some cases, quarterly (20%) or monthly (15%).

As for the type of standards that form the basis for the compliance assessment, it is clear that they are most often developed internally (69%). The use of standards developed by third-party experts, trade unions or specialised activities only accounts for 38% of practices. This result, however, varies between different types of companies. Figure 1 shows the disparities between them.



**Figure 1 - Typology and design of standards used to assess compliance levels with HSE legislation**

Another point to note is that the use of classical, desktop-based tools (Word, Excel, etc.) is almost systematic (80% of respondents). However, in practice, they are extremely ill-suited to the purpose of obtaining and reporting results that are homogenous or that may need to be consolidated (e.g. a company spread over many sites). The use of paper is rare (12%) as is the use of an assessment questionnaire administered using software (18%).

To determine the quality of assessment, OHS professionals were also asked whether the results of compliance assessments were compared with those of the occupational risk assessment. The responses showed that this comparison is systematic in 42% of cases and rare or absent in only 10% of cases.

The survey finally looked at the question of the preparation and monitoring of action plans aimed at achieving compliance and the various modalities for reporting results. Regarding action plans, results suggested that the preparation of an action is systematic in just over half of companies (52%). Monitoring of action plans is ongoing in only 3% of cases. Another point to note is that a combination of graphs, tables and text to present results is only seen in 10% of cases.

#### **4. POSITIVE AND NEGATIVE RELATIONS BETWEEN CERTIFICATION AND LEGAL COMPLIANCE MANAGEMENT**

Here we focus on the positive and negative relations that exist between the development of a certification audit processes on the one hand, and the management of HSE legal compliance on the other.

##### *4.1 Positive relationships*

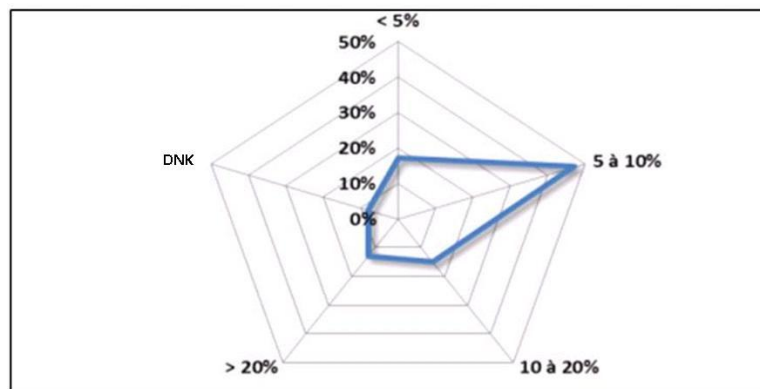
Achieving certification would initially appear to be a structural factor associated with improvements in the quality of company practices related to compliance management. The survey revealed that the rate of HSE certification is higher (over 50%) in type 1 and 2 firms. It is only 23–25% for types 3, 4 and 5 and 10% for type 6 firms. However, the positive impact of certification on compliance management must be qualified for two main reasons.

The first lies in the formulation of the questions contained in the survey, which did not make it possible to determine whether achieving certification brought about improved compliance practices or, whether, on the contrary, the development of these practices motivated

companies to seek certification (e.g. OHSAS 18001129). The second lies in the fact that the survey revealed that certification is far from being the only structural factor to explain the development of best practice. Other important aspects include company size [7], the market in which it operates (national, European or global) and the level of regulation applicable to the sector (the extent of regulatory constraints). In general, it is interesting to note that the development of the certification process in companies also has a beneficial effect on relationships with business partners (suppliers, subcontractors, etc.). However, this is much less true for relationships with public authorities (e.g. inspection bodies). Finally, 86% of respondents believed that obtaining good results in legal compliance were essential to obtaining HSE certification.

#### 4.2 Negative relationships

This last point – the need to have a good knowledge of legal compliance in order to gain certification – highlights the ambivalent relationship between the process of certification and compliance management. This is demonstrated by the fact that 78% of OHS professionals agreed that it was quite possible to be in non-compliance with legislation while at the same time being HSE certified. Although this result must be nuanced in as much as it did not relate to serious non-compliance it has the benefit that it clearly shows the distinction between the theory of certification and its actual implementation. This aspect was clearly highlighted by another result from the survey. While legal compliance constitutes the first requirement for a certified HSE management system, the time given to it in the certification audit seems derisory. It appears that in almost two-thirds of cases (65%), the time given to compliance management is less than 10% of the total time allocated for the certification audit. Moreover, the time allocated does not exceed 20% of the time given to the audit in 12% of these cases. This result is shown in detail in Figure 2.



**Figure 2 - Time allocated to the compliance assessment as a percentage of the total time taken for certification audit**

In view of these figures, it seems clear that a check of HSE legal compliance is far from being the main purpose of a certification audit. This raises the question of what the most appropriate framework for conducting compliance assessments is. Numerous authors have questioned the independence of auditors [8]. In practice, it has been shown that even if they are accredited by COFRAC (*Comité français d'accréditation*, the French Accreditation Committee) they are indirectly paid by the companies they certify. This was underlined by another finding; 70% of respondents know that the agencies responsible for certification also offer consulting and management services, therefore playing the roles of both judge and interested party. This finding is surely more important in practice as 15% of respondents say they do not know if this is the case (they answer “don’t know” to the question).

Our results show that although there is a generally positive influence on the development of a Compliance Management System, the certification process offers little support to such systems. In practice, it is possible for a company to be certified while at the same time being in non-compliance with the applicable legislation. This may be partly explained either by the lack of independence of certification bodies or by the derisory amount of time spent on checking legal compliance in the HSE certification audit. It seems necessary for businesses to implement an HSE legal compliance management system internally rather than relying solely on the certification process.

## **5. CONCLUSION**

Although this article only offers a very partial summary of the quantitative survey, it nevertheless shed light on various important issues.

The survey showed that there are various types of business that can be differentiated depending on the quality of their regulatory monitoring, compliance assessment and management of action plans. These practices are extremely heterogeneous and appear to be based on imperfect and inappropriate tools or methodologies. Regardless of the method used to assess the legal context of the company, however often assessments are carried out or whatever the tools used (mostly traditional office tools), practices in most companies are still inadequate. This emphasises the great need for a structured CMS. In turn, this change implies the need for specialised methodological, human and functional resources (e.g. software).

In addition the study is a blow to accepted ideas concerning the certification process. It teaches us that the assumption that these processes contribute to the development of a CMS should be revisited. It is quite possible for a company to be certified while at the same time being in non-compliance with applicable legislation – notably because of the lack of auditor independence. The phenomenon is amplified by the derisory amount of time allocated to checking legal compliance in the certification audit. These findings invite companies to develop internal systems for compliance management based on both the expertise of OSH professionals, monitoring and specialised compliance tracking tools (e.g. software). The need to develop good practice is all the more important given the powerful national and transnational legal constraints imposed on companies in sectors such as the environment, food safety or the management of industrial safety in general [9].

## **REFERENCES**

- [1] Audiffren T, Contribution à la maîtrise des conformités légales en santé et sécurité au travail, Doctoral thesis. MINES ParisTech, Center for research on Risks and Crises (CRC), December 2012.
- [2] Audiffren T, Rallo, JM, Guarnieri F, The contribution of case law to compliance management in Occupational Health and Safety (OHS) in France, ESREL Conference 2012, Helsinki, Finland, June 2012.
- [3] Cambon J, Guarnieri F, Groeneweg J, Towards a new tool for measuring Safety Management Systems performance, Proceedings 2nd Symposium on Resilience Engineering, 2006, 2nd Symposium on Resilience Engineering (2006-11-08), Edited by Presses des Mines (France).
- [4] Guarnieri F, Miotti H, Martin C, Besnard D, Rallo JM, Occupational safety and health in France: Practitioners and policy, Edited by AFNOR Group, November 2010.

[5] Greenacre MJ, Correspondence Analysis in Practice, 2<sup>nd</sup> edition, Academic Press, London, 2007.

[6] Arabie P, Hubert LJ, De Soete G, Clustering and Classification, World Scientific, Singapore, 1999.

[7] Guarnieri F, Martin C, Pratiques et prévention des risques professionnels dans les PME-PMI, Editions Lavoisier, Paris, 2008.

[8] Lepage C, Bien gérer l'environnement, une chance pour l'entreprise, Le moniteur, Collection Actualité Juridique, 1999.

[9] Bourreau L, Audiffren T, Rallo JM, Guarnieri F, Industrial maintenance in the gas sector: the contribution of knowledge bases to compliance evaluation, ESREL Conference 2012, Helsinki, Finland, June 2012.