

Do we need more than one form of Certification for Health and Safety Management Systems? An Examination from the Irish Construction Perspective

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Safety Management Systems are a vital component and a legal obligation for organisations across industries in many countries worldwide. Safety Management Systems have existed in various forms for over 20 years. Most Contractors implement a Health and Safety Management System in accordance with the procedures set out of a particular certification scheme, as that scheme meets the legislative requirements of an employer. This paper reports and reflects on the findings from a recent research project that focussed on the two forms of certification schemes available in Ireland namely, Safe-T-Cert and OHSAS 18001, as implemented by designated safety award winning construction professionals in Ireland and explores the particular benefits and drawbacks of each system and how their suitability meets the requirements of different sized construction companies. Through semi-structured interviews undertaken with the Accredited Certifying Bodies; Contractors and Independent Health and Safety Consultants the paper highlights in particular a comprehensive representation of what Health and Safety Management Systems are, what is involved in the certification process and how they contribute to success. The key findings outlined in this paper provide insight into organisational success in the field of Health and Safety Management and Certification; it also highlights some of the advantages and drawbacks that can influence Contractors when seeking certain forms of Certification.

Keywords: Health and Safety, Procedures, Safety Management Systems, Safety Certification

Introduction

Safety and health principles are universal, but how much action is needed will depend on the size of the organisation, the hazards presented by its activities, the physical characteristics of the organisation, products or services, and the adequacy of its existing arrangements. “There are many obstacles to the achievement of good standards. The pressure of production or performance targets, financial constraints and the complexity of the organization are typical example of such obstacles” (Hughes & Ferrett, 2011). Safety Management Systems are a vital component and a legal obligation for many organisations, irrespective of their industry. Health and Safety legislation typically requires employers to adopt lawful principles of providing a preventative approach to work related accidents (Kinsella, 2012). Procedures and rules form the core component of Safety Management Systems (Mohamed, 2002) and within a legal framework, an effective methodology to manage hazard identification and to assess suitable preventative measures in the workplace is to implement a Safety Management System. Most Contractors implement a Health and Safety Management System in accordance with the procedures set out of a particular Certification Scheme, as that scheme meets these legislative requirements for the employer.

Organisations have implemented Safety Management Systems for a long time but very little academic, peer reviewed studies have been carried out on the suitability of accredited systems (Borys, 2009). The lack of studies on the suitability of these Health and Safety Certifications emphasises a critical need to examine specific organisations that have implemented such accredited Safety Management Systems with the view to identify and share the key characteristics of their success or draw backs within the broader construction industry.

The primary aim of the original research was to examine the Safe-T-Cert and OHSAS 18001 certification schemes for Health and Safety Management Systems and critically analyse both certification schemes through semi-structured interviews. The purpose of this paper is to reflect on the recent case study research and provide an in-depth examination of an accredited certified Health and Safety Management System within a medium sized

construction company in Ireland. The effectiveness and suitability of the chosen certification scheme for Health and Safety is analysed.

Safety Management Systems

SHWWA 2005

The Safety, Health and Welfare at Work Act 2005 represent a modernisation of our occupational health and safety laws and it sets the scene for achieving further improvements in the national record on safety and health over the next few decades. Duties of the Employer under the 2005 Act: Under Section 8 of the 2005 Act the employer shall ensure, as far as is reasonably practicable, the safety, health and welfare at work of his or her employees. Section 20 of the 2005 Act states that every employer shall prepare, or cause to be prepared, a written statement (to be known and referred to in this Act as a “safety statement”), based on the identification of the hazards and the risk assessment carried out under Section 19, specifying the manner in which the safety, health and welfare at work of his or her employees shall be secured and managed. The 2005 Act has a number of significant changes made although it could not be described as a complete departure of its predecessor. The main striking features of the 2005 Act include the following:

- A definition of “competent person” and “reasonably practicable”;
- An increase in the explicit duties and responsibilities of both employees and employers;
- Provision for testing employees for intoxicants;
- Specific provision regarding the responsibilities of designers, manufacturers and importers;
- New duties for persons who commission, procure, design, or construct places of work;
- A reduction in the onus on small business and the farming sector regarding safety statements;
- Joint safety and health agreements;
- A new dispute resolution mechanism for dealing with disputes between employers and employees concerning health and safety matters;
- Expanded provisions concerning responsibilities of directors and managers;
- Evidentiary changes for the prosecution of directors and persons significantly influencing the management of a company; and
- A strengthening of the enforcement powers for non-compliance (increased penalties and also on-the-spot fines)”

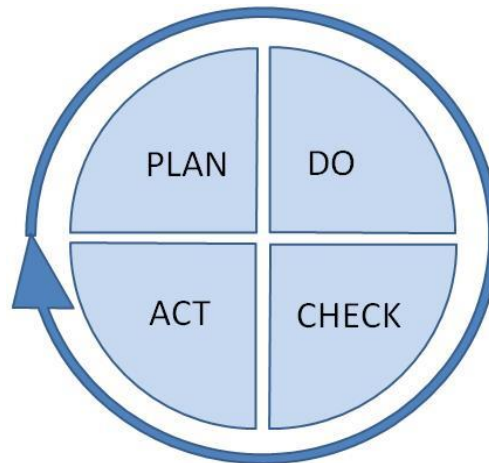
OHSAS

OHSAS 18001:2007 has been developed for the management of Occupational Health and Safety across all industries. In 1999 the first version of the management system was released by the Occupational Health and Safety Advisory Services Group, as there was a need for one standardized internationally recognised system. OHSAS 18001 is recognised internationally and is viewed as the standard within organisations certification of a Health and Safety Management System. “OHSAS 18001 is an international occupational health and safety management system specification. OHSAS comprises of two parts, 18001 and 18002, and embraces a number of other publications. It is intended to help an organization to control and manage its occupational health and safety risks.” (Sadiq, 2012)

OHSAS 18001 is designed on the principle of the Plan-Do-Check-Act (PDCA) cycle. Planning for hazard identification, risk assessment and determination of controls is a core requirement of an OH&S system. The standard makes it clear that the requirements of occupational health and safety apply to all activities and all personnel who work for, or on behalf of, the organization (Sadiq, 2012)

Figure 1.1 illustrates the PDCA cycle and is detailed by the National Standards authority of Ireland. The four elements that make up OHSAS 18001 are explained in detail.

Figure 1.1 OHSAS PDCA Cycle



Plan

The planning stage of the process requires the organization to:

- Devise an OH&S policy
- Plan for hazard identification, risk assessment and determination of controls
- Identify relevant legal requirements
- Plan for emergencies and responses
- Manage change effectively
- Devise procedures for performance measuring, monitoring and improvement
- Provide and ensure the appropriate use of safety equipment
- Train in order to introduce an OH&S culture and establish the importance of organization's safety statement, policies and objectives
- Consult employees and communicate

Do

In order to ensure smooth implementation a lead senior manager should be in charge of the new OH&S system and at the same time each element of the process should have an 'owner' or a person that looks after that part of the system. This ensures the appropriate structure at your organization and effectively minimizes risk. It is advisable to start the implementation by breaking the system down into specific elements rather than tackling it as a whole. Concentrating on specific elements in a logical order creates a solid foundation for the whole system to work efficiently. Another important aspect of health and safety is having employees do the jobs that are suited to their competencies. A matrix should be created showing all groups of personnel, their required competencies, training and status of each. These formal procedures should instil the required awareness within your organization.

Check

The third step of the PDCA cycle consists of the following:

- Conducting internal audits
- Evaluation of legal compliance
- Identifying non-conformities and addressing them
- Thorough analysis of incidents and incidental data
- Measuring performance and monitoring

Act

The final step is the management review, it is a vital part of the continuous improvement process and so the standard itself outlines what should be included in such a review. Management review is done by the senior management and involves reviewing the suitability, adequacy and effectiveness of the system. It should also include assessing opportunities for improvement and the necessity to change the OH&S policy and the OH&S objectives. If changes are needed, the senior management should also provide the necessary resources for their implementation. Providing resources is a way of presenting commitment to the new health and safety system (National Standards Authority of Ireland, 2012)

Safe-T-Cert

Safe-T-Cert has been developed for the management of Occupational Health and Safety in the construction industry. The scheme was set up in 2000 by the Construction industry Federation (CIF) and the Construction Employers Federation (CEF) and is designed for use in organisations in Ireland and the UK.

Fundamental Elements of Safe-T-Cert

Safe-T-Cert is a certification scheme designed for certifying the Safety Management Systems of contractors working in the construction industry. The Scheme's objective is to improve health and safety management by providing objective standards and certifying those contractors whose safety management systems have been assessed, and can demonstrate that they; Meet the basic requirements for training and competence; Implement an occupational health and safety management system which meets the requirements of Safe-T-Cert standard – incorporating continual improvement; Address relevant national legislation. (Safe-T-Cert, 2012) In order to meet the criteria for certification under the Safe-T-Cert certification scheme the ILO-OSH guidelines and best practice requirements must be adhered to. "It was developed from the 18001/2 documentation but enhanced specifically for the construction industry. It is based on 'best practice' requirements for international and national bodies, including ILO guidelines" (Construction Industry Federation, 2015) In order to register with Safe-T-Cert for certification a number of documents must be prepared. The primary documents include: Company Health and Safety Statement; Duties and Qualifications of Staff; Risk Assessment Procedure; Proof of Insurances – Employer / Public Liability; Training Policy and Plan; Assessment Procedure for appointment of Sub-Contractors and Site inspection procedure (Safe-T-Cert, 2012)

Study Design

The primary aim of the original research was to examine the Safe-T-Cert and OHSAS 18001 certification schemes for Health and Safety Management Systems and critically analyse both certification schemes through semi-structured interviews. The purpose of this paper is to reflect on the recent case study research and provide an in-depth examination of an accredited certified Health and Safety Management System within a medium sized construction company in Ireland. The effectiveness and suitability of the chosen certification scheme for Health and Safety is analysed.

A qualitative research methodology was chosen due to the attitudinal and exploratory nature of the objectives. The chosen methodology enables the opinions and attitudes of the research sample to be determined and allows for the examination of the accredited certified Safety Management Systems. There is limited peer reviewed research information on the Certification of Health and Safety Management Systems thus the importance of an exploratory and attitudinal method of data collection.

In order to obtain data that could be accurately processed, three sets of semi-structured interviews were used and the interviewees grouped into three categories based on their profession and the information they would provide to the study. Category A – Accredited Certifiers; Category B – Senior Management in Certified Organisations; Category C – Independent Consultants. The interviewees in Category A are all critical to the study. There were two interviewees in this category. The participants in this category were selected for participation on the basis of the following criteria: Senior member of the selected certification scheme; Relevant experience working with construction companies; Must be familiar with both OHSAS 18001 and Safe-T-Cert schemes In Category B, there were three interviewees selected. The category B interviews were structured so that the information obtained would either coincide or contradict what was said in the Category A interviews. The participants in this category were selected using the following criteria: Senior member of management in a construction company; Construction company must be either OHSAS 18001 or Safe-T-Cert certified; Have more than five years' experience in the construction industry There were two interviewees selected for interview in Category C. The interviews in category C were structured so that the information obtained would be unbiased and would give a true reflection of how both the OHSAS 18001 and Safe-T-Cert schemes perform in Industry. The participants in this category were selected using the following criteria: Unaffiliated with either OHSAS 18001 or Safe-T-Cert; Practicing consultant with experience working with Construction Companies; Have more than five years' experience in Health and Safety Consultation

According to Polanyi (2009), there are two types of knowledge: explicit and tacit knowledge. Explicit knowledge can be articulated and recorded. However, tacit knowledge cannot be operationalised in this manner and is displayed or manifested in what people do (Tsoukas 2003). The qualitative aspect of the study enhances the particular topics through a detailed inquiry process and analysis of the unstructured information. In addition, the chosen questionnaire - semi structured interview methodology, enables to compare and contrast the findings and expand on the knowledge over time. This paper focuses on some key areas, which include: advantages of choosing a certification scheme; shortcomings of using other certification schemes; incentives for companies when choosing a scheme; what elements within a Health and Safety Management System are a company advised to have in place when seeking Certification in Ireland and what the future of certification schemes in Ireland is.

Knowledge is a known source of organisational advantage in projects and this has led to a great deal of interest in how organisations create, transfer and apply knowledge (Sole and Edmondson, 2002). To achieve a comprehensive examination of the Midland Construction, Accredited Safety Management System, a case study was carried out. Case study research excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. Yin defines the case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context (Yin, 1984). Research has found that nearly 95% of the Irish construction industry is made up of small to medium enterprises, (Carey, 2015). A case study was undertaken of a certified Health and Safety Management System. The case study will identify how the selected company –Midland Construction, operate their system in accordance with Safe-T-Cert. This will also identify how effective certification is. The case study chosen aims to be a true reflection of how certified small to medium construction companies operate the accredited certified Health and Safety Management System.

The aim of the case study was to gain detailed knowledge of the precise procedures that the company follows in order to achieve the high accredited certification for Health and Safety. Furthermore, the subject matter experts' experience, expertise and reflection also contains valuable tacit knowledge that should be captured and utilised to assess the effectiveness and suitability of the Safety Management System and facilitate continuous improvement

In terms of the limitation of this research, the research sample could be considered small, since the undertaken research study was particularly focused and exploratory in nature. The opinions of the subject matter expert professionals may therefore not be a full representative reflection of the views or opinions of the entire construction population. In addition, some sensitivity in relation to specific Health and Safety related issues could lead to ambiguities in the research findings.

Analysis and Findings

The primary aim of the original research was to examine the Safe-T-Cert and OHSAS 18001 certification schemes for Health and Safety Management Systems and critically analyse both certification schemes through semi-structured interviews

Opinions from Independent Consultants

The interviewees in Category C were asked about their views on OHSAS 18001 as a certification scheme for Health and Safety Management System's in Irish Construction Companies and to identify the benefits and drawbacks of the scheme in their view. The founder of First Safety Management Consultants stated that he recently has been involved with implementing OHSAS 18001 into a company and found a significant drawback to the certification scheme. He stated that "due to the nature of the work undertaken within the company's operations, there are constant changes on-site" and this has led to "it taking almost two years to prepare this company for OHSAS 18001 Certification and it is still ongoing". In his view this is a major drawback to the scheme. Also when asked what a company looks for when selecting a certification scheme he stated that "when I explain the requirements of both Safe-T-Cert and OHSAS 18001, 90% of the time, clients will opt for Sate-T-Cert as they feel that the cost and drain on resources by implementing OHSAS 18001 would be too much for their company".

Practicing Health and Safety independent Consultant, when asked about the selection of the OHSAS 18001 certification scheme said that the main consideration a company would take into account would be its “reputation”. This confirms and supports what was found in the Category A interviews as it was stated that “international recognition” is the primary factor Construction Companies considered prior to implementing OHSAS 18001.

Industry on OHSAS 18001

The findings from interviewees in Category B were asked why OHSAS 18001 was selected as the certification scheme for the company’s Health and Safety Management System and to identify the benefits and drawbacks to the scheme in their view. According to EHS Advisor it was stated that “international recognition” was the deciding factor in the selection of a certification scheme but also recognised “cost, efficiency and functionality” as three other factors considered by the company prior to the selection of OHSAS 18001. When asked on the benefits and drawbacks he stated that being able to create a “structured approach to health and safety management” was a main benefit, and that the system “must be kept live and relevant, which can be a challenge” as a drawback.

Furthermore, EHSQ Manager at the firm agreed that “international recognition” was the deciding factor in the selection of a certification scheme as the company deals with blue chip clients, but stated that “scoring high in pre-qualifications” was another factor considered prior to the selection of OHSAS 18001. When asked on the benefits of OHSAS 18001 he stated that this “scoring high in pre-qualifications” was the main one and that there were no drawbacks to the certification scheme.

From these interviews, it is clear that international recognition is the primary reason why OHSAS 18001 was selected as the certification scheme for Walls Construction’s Health and Safety Management System. Along with this, cost, efficiency, functionality and scoring high in pre-qualifications were four other factors considered prior to implementing the system. The concept of creating a structured approach to Health and Safety Management and obtaining high scores in pre-qualifications are identified as the main benefits to the company, but that maintenance and the resources required to keep their Health and Safety Management System up to the standard of OHSAS 18001 was considered a drawback.

Industry on Safe-T-Cert

Through case study research, a Safe-T-Cert certified company was interviewed to determine why the company selected the certification scheme for their Health and Safety Management System. As part of this, it identified the benefits and drawbacks to the scheme based on experience. When asked what was the deciding factor in the selection of a certification scheme it was stated “we wanted a recognised system that gave us a high score in the health and safety section” of prequalification’s. But also went on to state that “from my point of view, the most important factor is the ability to easily control operations in relation to health and safety”. The company’s Health and Safety Management System is now “structured” and “easy to operate” and in his view these are the main benefits of Safe-T-Cert certification. When asked to identify drawbacks of the certification scheme, the company believed that there were none. From interview, clearly recognition was the primary factor considered when Safe-T-Cert was selected as the certification scheme for this case study Construction’s Health and Safety Management System. The main benefits to the company of having Safe-T-Cert is that their Health and Safety Management is easily benchmarked through this structured approach as it can be measured, tested and audited.

Independent Consultants on Safe-T-Cert

The findings from interviewees in Category C were also interviewed about their views on Safe-T-Cert as a certification scheme for a Health and Safety Management System. When asked about the benefits and drawbacks of Safe-T-Cert certification, the finds showed that “Safe-T-Cert is a well-structured, lean system that is easy to operate” also “once that system is in place (Safe-T-Cert), sometimes organisations go for OHSAS 18001 to score higher in pre-qualifications more so than for the benefits it adds to their organization”. However it was found that “an apple for apple detailed comparison” had not been done but it is suggested that “marketing” may be a main benefit to Safe-T-Cert certification.

Conclusion and Further Research

The Safe-T-Cert and OHSAS 18001 certification schemes both have limitations due to their design yet there is a need for a certification scheme that is structured specifically for Health and Safety Management Systems in the Irish

Construction industry. The Safe-T-Cert certification scheme is specifically designed for the small to medium contractor and is only recognised in Ireland and the United Kingdom. A company with a Health and Safety Management System structured under the scheme would not meet the pre-qualification requirements of international and blue chip organisations. OHSAS 18001, although it claims to be suitable for implementation in all size companies, however it has been identified that due to the requirements for a constant resource to maintain the system it can put a strain on a small to medium sized construction company. It is noted that OHSAS 18001 is suitable for implementation in all industries to ensure accident and ill-health prevention in all places of work, and so is not designed for operation in the construction industry specifically and could not be classed as lean.

In conclusion, from the research conducted it is clear that both certification schemes are suited to different size construction companies. The NSAI advertise OHSAS 18001 to be suitable for organisations of all size. Although the system itself is very comprehensive and covers all aspects of Occupational Health and Safety within the workplace, the requirements it puts on the small construction company for a constant resource is overwhelming and therefore their Health and Safety Management System is extremely difficult to maintain. However, it is very suitable for large construction companies, as its integration with management systems under the ISO 9001 and ISO 14001 standards can be easily adopted. There are over 50 construction companies certified to OHSAS 18001 in the Irish Construction Industry and are primarily of medium to large in size. The international recognition of OHSAS 18001 is a major benefit and a contractor certified to this standard can easily tender for contracts internationally.

Safe-T-Cert was specifically developed for the small to medium construction company. The focus of the certification scheme is to enable smaller contractors to qualify easily in pre-qualifications for construction contracts. The system is lean and efficient and can easily be implemented into an organization without the assistance of external consultants. There are over 1000 companies certified by Safe-T-Cert between Ireland and the United Kingdom and this primarily consists of small to medium contractors. The certification scheme is not suited to larger contractors (due to its recognition in Ireland and the United Kingdom only) who wish to tender for construction contracts internationally and it does not have the same level of recognition as OHSAS 18001.

In 2007 the Occupational Health and Safety Advisory Services Group put forward OHSAS 18001 to become an ISO standard. Due to concerns from the ILO the certification scheme did not get approval and was released under OHSAS 18001:2007 (McKeown, 2015) In conjunction with the ILO-OSH guidelines, an ISO project committee - ISO PC 283, are now developing a new standard, ISO 45001, based on OHSAS 18001:2007, it will be due for release in October 2016 as ISO 45001:2016 (BSI Group, 2015) This new standard is expected to present a number of changes. The standard will not be an update or revision of the OHSAS 18001 scheme, but a standalone certification scheme for Health and Safety Management Systems. The structure of the new standard will be set out under these headings:

- Scope
- Normative references
- Terms and definitions
- Context of the organisation
- Leadership
- Planning
- Support
- Operation
- Performance evaluation
- Improvement

“The ISO 45001 standard will utilize the same common structure, definitions and core text being used for the present revisions of ISO 14001 and ISO 9001, the environmental and quality management system standards. Which is in line with what is called “Annex SL” the rules governing the development of all ISO management standards.” (Harris, 2013). Since this new standard is superseding OHSAS 18001, certified organisations will have to adapt to the new system. The changeover procedure has yet to be released so organisations that are certified are waiting for a guideline to be released.

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