

Technical University of Denmark



Certification of OHS management in a Nordic context

Hendriksen, Kåre; Jørgensen, Kirsten; Jørgensen, Ulrik

Published in:
Proceedings of the CERVA Conference

Publication date:
2009

[Link back to DTU Orbit](#)

Citation (APA):
Hendriksen, K., Jørgensen, K., & Jørgensen, U. (2009). Certification of OHS management in a Nordic context. In Proceedings of the CERVA Conference

DTU Library

Technical Information Center of Denmark

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Certification of OHS management in a Nordic context

By Kåre Hendriksen,^a Kirsten Jørgensen and Ulrik Jørgensen, Department of Management Engineering, Technical University of Denmark

Abstract

The Nordic countries have introduced a broad perspective on OHS covering work-caused afflictions and the psychosocial working conditions, and absence due to illness etc. in addition to the traditional focus on prevention of technical accident risks. This understanding of OHS is defined in an interaction between stakeholders including researchers, OHS professionals, and the labour market organisations and has to a large degree been reflected in the Nordic countries OHS legislation.

In the last decade the use of OHS management systems has been taken up in Danish legislation as a complement to the traditional command and control regulation. This has triggered a debate on how OHS management systems operate and impact the working environment. This article presents a study of how OHS management systems in the form of OHSAS 18001 is constructed and how they reflect existing regulatory practices and their intended impacts based mainly on experiences from Denmark. This included a critical review of how legal requirements and the involvement of stakeholders is phrased and handled within the prescribed management systems.

OHSAS 18001 is based on the logic and structure in the quality standard ISO 9001 despite the different focus on the material conditions for safety and the physical and chemical working environment not defined within the standards framework. The standard implies the existence of 'objective' OHS criteria's that can be verified and measured. At the same time the standard leaves it to the organization's management to decide which elements of OHS performance they commit to while the only explicit OHS demand is to comply with legal requirements. Additionally the certification is covered by the accreditation standard requirements of confidentiality, where as the validity of a certificate end up being hidden for the involved stakeholders. The consequences of these foundational elements of the existing management standard are analysed and exemplified.

The Nordic Minister Council has funded the project, *OHS Certification as Control Instrument and Control Strategy*, which together with earlier studies of the working and impact of environmental management systems has provided the basis for this article.

Prologue

On 26 October 2009, an employee lost his hand while working at an unprotected machine a few weeks after the Danish employer had received an OHSAS 18001 certification.¹ The [certifying authority-certification body](#) had not discovered during their audit that the organizations occupational health and safety (OHS) management system neither ensured elementary protection in the concrete work environment nor had it established any preventive safety and OHS culture. Immediately after the accident, the controlling Danish Working Environment Authority issued an indictment and transferred the case to the police and thus the court, with the charge of not complying with the law. The organizations OHS system did not live up to the requirements in the OHSAS 18001 standard to ensure compliance with the requirements in existing laws, which also include the decisions, regulations and instructions formulated with regard to the legislation.

^a Kåre Hendriksen has formerly been leading assessor at the Danish accrediting authority, DANAK, working with o.a. accrediting certification bodies for OHSAS 18001.

If this were the only case in which auditors, in their control samples had not been sufficiently thorough in their control of the management procedures necessary to prevent such accidents and ensure that an organizations^b machine park complies with the legal requirements, it could be disregarded. This is not the case, however, since there have been many similar examples.

1 Introduction

The widespread expectation exists that organizations that apply for OHSAS 18001 certification are among the best with regard to OHS performance. Positive examples do also exist, where OHSAS 18001 have contributed to optimizing organizations' OHS efforts, thus contributing to accident prevention, wear and tear on employees, disabilities caused by work etc.²⁻³, while at the same time optimizing productivity and cost-effectiveness⁴. This has been documented in several scientific studies showing the impact of OHS management systems for the improvement of the working environment⁵. Such organizations experience that certification and audits by certification bodies contribute to developing and maintaining the management system and help maintain focus on both the system and OHS performance. The certificate can also provide market benefits and a positive signal, for example in relation to recruiting employees. Often, employees from such organizations state that the OHS management system and certification together have contributed to strengthening and systematizing employee participation and improving their job satisfaction. But this does not imply the conclusion that the demands in OHSAS automatically provides a good management system, which is what we question and demonstrate in this article.

There are also examples, however, where the OHS management system and certification have not contributed to optimizing the organizations' OHS performance⁶⁻⁷ and where employee's experiences that they have loosed influence on OHS⁸⁻¹⁰. Often inspection authorities are giving injunctions or react in other ways to certified organizations. Therefore, for many years, the effect of introducing working environment systems has been discussed. It is still not especially well illuminated, which has not prevented OHS certification from being integrated into the Danish OHS legislation. To clarify the validity of an OHS certificate as well as the interaction between OHS certification and legislation, Nordic Minister Council has funded the project, *OHS Certification as Control Instrument and Control Strategy*,¹¹ on which this article is based, together with earlier studies of e.g. environment management systems.

Comment [k1]: Måske skal det allerede her nævnes, at fritagelsen for tilsyn blev indført allerede i 2001, da erfaringerne med certificering på arbejdsmiljøområdet var meget nye.

2 Goals and methods for the Nordic project

The aim of the Nordic project was through a dialog among stakeholders to identify how OHS certification and legislation on the working environment with their different frames of reference concerning focus and purpose¹² interact in practice in each of the Nordic countries. In addition the aim was to asses the strengths and weaknesses of OHS certification with respect to its ability to deliver a well defined OHS performance in relation to its feasibility as a legal inspection component. As OHSAS 18001 is the most used OHS standard in the Nordic countries that can be certified, we have focused especially on this standard.

At the start of the project Denmark was the only country that partly has been introducing OHS certification as a substitute for the inspections carried out by public authorities¹³ and at the same time the Nordic country with relatively most certified organisations. Since then Sweden is considering to implement a similar system.

^b OHSAS 18001 definition of 'organization', that is used in this article: "company, corporation, firm, enterprise, authority or institution or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration".

As a start a screening of relevant literature was done. Compared to the interest given to OHS certification in recent year it is remarkable how relatively few peer-reviewed articles have analysed the impact of these certificates on OHS performance. En stor del af artiklerne er baseret på studier af en eller enkelte oftest større virksomheder, og deres vurdering af OHS performance er oftest positiv.¹⁴ Studier, der er baseret på flere virksomheder, ender ud med forskellige vurderinger.^{15 16}

Projektets interessenttilgangen og økonomiske rammer indebar, at der ikke var mulighed for at gennemføre egentlige casestudier. Samtidig så projektgruppen en række metodiske udfordringer ved at basere en vurdering på sammenlignende casestudier, herunder hvad der i givet fald skal være referencegruppen? Fordi det er en udbredt forventning, at de virksomheder, der søger at blive arbejdsmiljøcertificeret, er blandt de bedste, hvad angår OHS performance ville den relevante referencegruppe være virksomheder af samme størrelse, fra samme branche og med en høj OHS performance, der har besluttet ikke at lade sig arbejdsmiljøcertificere. Men erfaringerne viser, at der blandt de certificerede virksomheder findes flere, der ikke har en god performans og som ikke er i overensstemmelse med gældende lovkra. Spørgsmålet er så, hvad der skal være referencegruppen til de certificerede virksomheder. Hvis der kun vælges proaktive virksomheder med en høj arbejdsmiljøpræstation, kan et sammenlignende studie falde ud til, at de arbejdsmiljøcertificerede virksomheder har en dårligere performans, hvilket formodentlig ikke vil være en korrekt konklusion. Hvis der derimod vælges referencegruppe blandt alle virksomheder inden for den pågældende branche, vil undersøgelsen formodentlig ende ud med, at de certificerede virksomheder har en bedre performans, og ud fra det vil det (måske fejlagtigt) kunne tolkes, at arbejdsmiljøcertificering er med til at højne performansen. Resultatet af et sammenlignende studie vil altså i høj grad være afhængig af valget af referencegruppe.

Et andet problem er, at de certificerede virksomheder, der ikke har en god performans, og som ikke overholder lovkra, formodentlig vil afvise at deltage i et sammenlignende studie, hvilket igen kan skævvride studiets resultat. Endeligt er der den helt afgørende udfordring, at certificeringsorganernes auditrapporter og dermed de certificerede virksomheders OHS performance er underlagt fortrolighed.

Projektet har gennemført samtaler og/eller interviews med godt 50 interessenter med relation til certificeringsprocessen fra certificeringsorganer, tilsynsmyndigheder, certificerede virksomheder, rådgivere etc. Det er kombineret med personlig erfaring fra overvågning af certificeringsorganernes auditering i forbindelse med akkreditering (godkendelse) af certificeringsorganerne til at auditere efter OHSAS 18001. Med udgangspunkt heri og litteraturscreeningen blev der udarbejdet et notat med en sammenligning af de enkelte nordiske landes arbejdsmiljølovgivning med kravlementerne i OHSAS 18001, der dokumenterer, at alle substantielle systemkrav også er omfattet af lovkra. Endvidere indeholdt notatet en oversigt overudvalgte problemfelter eller 'Hot spots' i forhold til OHSAS 18001.

Finally the project organized a workshop based on a preliminary analysis of experiences and problems connected with OHS certification. Selected interested parties from the Nordic countries were invited to attend the workshop, representing authorities, companies, certifying bodies and OHS consultants, in order to ensure broad participation. The workshop was organized so as to provide a 'free space', where everyone could speak openly about their experiences without being quoted. Although the workshop participants agreed about the existence and relevance of the issues raised there was no agreement that all these problems could be dealt with or precisely how this could be accomplished.

3 The implementation of OHS certification

The article presents and discuss selected aspects of how OHS certification system operate and are implemented based on a screening of literature, input provided by the participants in the stakeholder

dialogue, as well as previous studies of how management systems operate. Among the stakeholders a common view was that OHS management is a needed tool. Consequently the articles focus is on the challenges and potential weaknesses to be improved in OHSAS 18001.

3.1 ~~Management defines~~ Management defines what is OHS performance

The OHS standard, OHSAS 18001, like the environmental standard ISO 14001, is based in its logic and structure on the quality standard, ISO 9001. The difference is that the quality standard leaves it completely to the organization to determine the quality level, thus making it possible for the demands for quality performance to be static over time. Both the OHS (OHSAS 18001) and the environment (ISO 14001) standards, on the other hand, contain a demand for performance that refers to concrete conditions, views of the other interested parties, and conditions that are regulated by legislation, as well as a demand for continual improvements.

The basic idea of the quality standard ISO 9001 is that the organization itself defines which quality requirements it wishes to fulfil – which is meaningful precisely in relation to quality. The mechanism at work here is that market forces regulate which quality that is in demand, and thus which organizations will eventually survive. In this context, ISO 9001 certification ensures that quality lives up to the organizations own requirement specifications. Then, it is up to customers to decide whether they will buy the cheaper product from a supplier that, through ISO 9001 certification, guarantees that 90 percent of the delivered products live up to the specifications, or whether they will buy from a more expensive supplier that has set its quality level at 99.9 percent.

In relation to environment, and especially OHS, market forces have only very indirect influence. In the western world, there are a few firms and final customers that demand products and services from suppliers that can document high OHS performance throughout the whole production chain, regardless of whether they must pay a higher price, but the market's general competition parameters are price and quality and there is no clear causality between price, productivity and quality on the one hand, and OHS performance on the other. Therefore is OHS performance not an unambiguous competition parameter. The OHSAS 18001 standard's only explicit OHS demand is that the organizations management, in its OHS policies, shall obligate itself to *"at least comply with applicable legal requirements and with other requirements to which the organization subscribes that relate to its OHS hazards"*, and that OHS policies shall be *"available to all interested parties"*.^c The standard criteria regarding is that the choice of goals should be based on risks in the organizations *"technological options, its financial, operational and business requirements, and the views of relevant interested"*^d which to a large extent is defined as an internal matter only of concern to the firm's management. In relation to consideration for the financial, operational and business demands, it is still possible not to give priority to the most serious and most important. Similarly, it is to a great extent up to the organizations management to define which interested parties are relevant and to what extent their views should be taken into consideration.

OHSAS 18001 standard's remaining requirements define how the organizations OHS management system shall be developed and established, and which procedures are necessary to ensure the necessary control of the OHS and thereby the organizations OHS performance. In other words, the OHSAS 18001 contains criteria for an OHS management system, and let it be stated clearly – a good OHS management system – but it is the organization management itself that defines how these criteria shall be achieved within the legal framework.

Consequently the single company's OHS performance is completely dependent of the priorities made by its top management and the resources they have dedicated to changing the managerial culture, the involvement of employees, and the anchoring of the OHS management system in the

^c OHSAS 18001: 4.2 OHS policy.

^d OHSAS 18001:2007 4.3.3 Objectives and programme(s)

organisation. If these priorities have not been made management systems tend to end up as monstrous ‘paper tigers’ emphasising the accounting procedures and not improvements in the working environment.^{17 18 19}

3.2 *The certification system’s confidentiality culture*

As an extension of the certification of a management system, the OHS policy has to be public, but the organizations priorities in relation to the standard as well as the certification body’s audits are confidential. This is not only a consequence of the fact that it is the organization itself that decides whether it wishes to be certified; it is also part of the confidentiality culture and structure that is incorporated into both the certifying practice and the accrediting standard (ISO 17021),[°] which requires confidentiality of the certifying body with regard to all information about the client (the certified organization), just as the accrediting body must keep all information about its clients (the certifying bodies) confidential. Confidentiality means that both the quality of the certifying body’s audits and the level of OHS performance in the certified organizations, and thereby the validity of a certificate, are hidden behind the formal facade of the existence of a certificate.

3.3 *OHS concept develops but is not clearly defined*

As a result of complying with relevant legal requirements is the only explicit demand of OHSAS 18001 with regard to OHS performance, the individual country’s OHS legislation and the national interpretation and enforcement of this legislation comprise a central key to understanding the standard and its effect.

The OHS concept in among others the Nordic countries has changed radically over time from a narrow focus on prevention of technical accident risks and the resulting machine safeguards, safety measures against falling from heights etc. over the inclusion of risks from work-caused afflictions resulting from monotonous repetitive work, noise, heavy lifting, exposure to chemicals etc. to the present inclusion of the psychosocial working conditions, absence due to illness, and continued employment of sick employees or employees with reduced working capability etc.

In a similar way, the Nordic countries’ OHS legislation has developed, but it is characteristic of the legislation that it has consistently lagged behind the development and expansion of the gradually and broadly enlarged OHS concept. Thus, OHS legislation reflects a political compromise that takes into consideration the various interested parties and interests, with such societal goals as:

- To protect labour power in the society (and thereby protect societal value) against accidents and disabilities,
- To prevent societal costs resulting from accidents and disabilities, where due to the Nordic welfare model, these costs to a great extent end up as a strain on the state budget,
- To protect individuals against accidents and disabilities.

In order to fulfil these societal goals, there is a long tradition to develop OHS legislation through close dialogue between the authorities and the parties involved in the labour market. Therefore, the Nordic countries’ OHS legislation is framework legislation with parliamentary approval of the general legal basis, while the OHS authorities fill out the framework by issuing a long series of executive orders, which thereby become part of this legal basis. Acknowledgement that dialogue between employer and employee is necessary is rooted in the legislation, where, it is required that all organizations over a certain size establish formal forums for dialogue, and employees have the right to elect safety representatives who are protected (to a certain extent) against being fired etc.

[°] EN ISO/IEC 17021: 2006: Conformity assessment – Requirements for bodies preceding audit and certification of management systems (4.6 Confidentiality)

In addition to the research environment, another central interested party and actor in expanding the OHS concept is the occupational health services and other OHS counselling, which do not participate in the same way as the parties involved in the labour market in formal hearings in connection with the work of drafting OHS legislation, but they do contribute to generating and disseminating knowledge.

The OHS concept is thus dynamic and under constant development, and there are often divergences between central interested parties', like researchers and consultants, understanding of the OHS concept and the relevant legislation. Thus, the requirement that the certified organizations shall comply with relevant legal requirements becomes partly reactive, because it does not ensure that the organization has a good OHS performance in accordance with either research-based knowledge regarding exposure or best practice, newest technology etc. for solving or preventing OHS challenges.

Implementation of an OHS management system that reflects the holistic OHS concept entails interaction between many different OHS complexities, and often requires the assistance of experts and interested parties to chart and analyse and develop preventive initiatives. The standard contains no requirement to involve this partly external network.²⁰ On the contrary, the accrediting standard ISO 17021^f implies that the certifying body may not provide counselling, thereby reducing transfer of knowledge and thus value creation in connection with an audit.

3.4 Significant national differences in OHS legislation

OHS legislation in different countries demonstrates essential differences. Whereas e.g. the Nordic countries' OHS legislation regulates in detail and reflects some of the most holistic OHS concepts, the OHS legislation in other countries reflects a far more traditional and narrow OHS concept with focus primarily on preventing technical accident risks.

There are also very great differences in how OHS legislation is interpreted and enforced in different countries. This only influences the situation in the Nordic countries indirectly, but it demonstrates another problem with OHSAS 18001, since outside parties might easily believe that it requires a definite acceptable or at least minimum level for certified organizations' actual OHS conditions. In some third world countries, there is a tendency for OHS legislation to be comparable to that of western countries, while in connection with implementation, the legislation is interpreted as close to a description of best practice, and enforcement by the authorities lies far from the wording of the legislation. This creates significant latitude for the certifying bodies when they audit whether an organization fulfils the standard's requirements to comply with relevant laws. Should auditing be based on the wording in the legislation or enforcement practices?

Since, interpretation and enforcement of OHS legislation in the Nordic countries are restrictive, the standard's demand to comply with relevant legal requirements can seem unnecessary. In practice this demand is significant because organizations would otherwise be completely free to choose the areas in which they should concentrate their efforts.

Due to the great national differences in legislation, interpretation and enforcement, comparisons cannot be made between certified organizations' OHS performance in different countries. This means that one of the important arguments for the OHSAS 18001 standard – the wish to be able to document OHS performance throughout the whole chain of production, which involves doing business globally with certified sub-contractors – becomes meaningless. To document a good OHS performance throughout the whole chain of production, it is necessary to gather substantial supplementary information from the other links in the chain with regard to their specific efforts in the OHS area.

^f EN ISO/ENC: 17021:2006 (Management of impartiality 5.2.7)

3.5 *Difficulties in measuring OHS*

OHSAS 18001 is based on an understanding of OHS that focuses on safety and the traditional physical and chemical working environment, and assumes that an 'objective' OHS exists that can be verified and measured at a given point in time, but the question is: To what extent is this possible?

In the material area, there are some aspects where it is possible to evaluate directly whether conditions comply with legal requirements. Does the machine have the compulsory protective and emergency stop facilities? Is the machine checked according to the instructions? Does the scaffolding have the compulsory railings? The expectation in such areas is that compulsory measures can prevent accidents caused by technical accident risks.

The problem is that accidents often occur as a result of a chain of simultaneous actions that develop out of the interaction between people, working conditions and organization, where there is no single cause. Accident prevention requires, among other things, analysis of potential risks and the possibilities for the occurrence of actions or chains of actions that can lead to an accident in every form of activity that is carried out in the daily work. Prevention is therefore based on both an enhanced risk consciousness and a safety culture on the part of both employees and management.²¹ It is therefore necessary for accident prevention to reach beyond mere compliance with individual legal requirements.

In relation to occupational disabilities due to long-term exposure to monotonous repetitive work or to chemicals or biological agents etc, there is an individual and personal dosage-response issue; some people can tolerate more than others. It is possible to measure whether a given exposure level is complied with legal requirements, but as described, the exposure level expresses a political compromise, shown by the fact that exposure levels in the same area differ from one country to another, just as organic solvents are not recognized to be dangerous in several Southern European countries. This means that a proactive organization that wishes to prevent occupational disabilities must chart employees' exposure and reactions. In this regard, the organization must draw on its network of OHS experts and then set its own exposure level, which on the basis of documented knowledge makes it feasible that harmful exposure will not occur. OHSAS 18001 does not assume this logic, and it is very rarely required during the certifying authority's auditing.

With regard to the psychosocial work environment and other 'soft' parameters, the lack of a dosage-response context is even clearer. While one employee can have a good relationship with the boss and consider the psychosocial environment as a whole to be good, another employee can experience the relationship with the same boss to be so stressful that it triggers a mental breakdown. OHSAS 18001 contains no instruments for auditing such factors, and in practice, real auditing of the psychosocial work environment is extremely rare. The only place the psychosocial environment is mentioned in OHSAS 18001 is under 'Terms and Definitions', where 3.8 defines *ill health* as "*identifiable, adverse physical or mental condition arising from and/or made worse by a work activity and/or work related situation*".

The OHS is thus not an objective concept and can far from always be precisely measured or verified.

3.6 *Employee participation*

OHSAS 18001 will in relation to many countries strengthen employee participation, but also makes an interpretation possible that conflict with several western countries concept of democracy, since "*workers shall be informed about their participation arrangements, including who is their*

representative(s) on OHS matters".^g Thus, it allows management to decide who should represent the employees.

In relation to Nordic traditions and legislation the interpretation of wordings like "*appropriate involvement in hazard identification, risk assessment and determination of controls*" and "*appropriate involvement in incident investigation*"^h leads to a watering down of the intentions in existing legislation, because it is management that defines what is meant to be 'appropriate'. As already stated, employees in several certified organizations experience that their influence has been reduced as a result of certification,²² because OHS has been moved from line management into an independent human relations department and the safety committee and safety organization have been reduced to 'orientation groups'. At a conference on the impact of OHS certification on the working environment organised by The Danish Confederation of Trade Unions June 2010, several of the participating, elected OHS representatives from different public and private companies also sounded this experience.

In addition, the standard contains no demand or references to employees' right to decide who they wish to consult for an evaluation of working environment conditions, since "*the organization shall ensure that, when appropriate, relevant external interested parties are consulted about pertinent OHS matters*".ⁱ It is thus left to management to decide whether and, if so, who shall be consulted.

This can in time contribute to undermining the acceptance of consultations with among others trade unions, and for countries without this tradition, it can cement employees' lack of the right to seek external guidance. Employees' lacking right to choose whom they will consult can make their real participation in relation to the actual OHS impossible, since without sufficient knowledge, it is not possible to judge whether a work situation contains risks for accidents or disabilities. Thus, the problem continues to be that management defines what OHS is, as well as which improvements shall eventually be carried out.

3.7 Certified organizations' compliance with legal requirements

Because the validity of an OHSAS 18001 certificate is not publicly accessible due to confidentiality clauses, nor is known for example by employees, the control carried out by the authority is one of the few instruments for judging to what extent the certified organizations are complying with legal requirements.

The Danish Working Environment Authority normally initiates a control of an organization's OHS with a screening, and if this reveals conditions that do not comply with legal requirements, the organization is subjected to an 'adapted inspection', in which the conditions that were found during the screening are more systematically investigated and controlled. In Denmark, organizations that have been certified under OHSAS 18001 are exempted from screening²³. This implies that the Danish Working Environment Authority only visits the certified organizations if it receives a report of, for example, an occupational accident or disability, or in connection with thematic campaigns. The grounds for exempting certified organizations from screening are partly the expectation that they comply with legal requirements and that it can therefore be advantageous to use resources for other inspection of other companies, and partly to create an incentive to promote OHS certification.

In spite of the limited frequency of inspection of certified organizations, the Danish Working Environment Authority has given many injunctions and other reactions through the years to certified organizations in all branches. For example, in the fall of 2003, the Danish Working Environment Authority inspected 28 out of the 148 organizations certified at that time. Of the 28 organizations, only eight were found to comply with legal requirements. The following reactions

^g OHSAS 18001 (4.4.3.2 Participation and consultation)

^h OHSAS 18001 (4.4.3.2 Participation and consultation)

ⁱ OHSAS 18001 4.4.3.2 Participation and consultation b)

Comment [k2]: Skal vi her nævne nyliberalismens ønske om deregulering og selvkontrol?

were given to the 20 other organizations: 9 injunctions, 11 reports of important problems, 42 immediate orders, 5 prohibitions, 19 instructions, 8 referrals to legal action^j.^{24 25} In a single day in 2006, the Danish Working Environment Authority issued 14 immediate orders, thereby causing the temporary closure of construction sites of four large OHSAS 18001 certified contractors.^k One of the contractors also received an order to pay an authorized consultant over a longer period of time to help prevent occupational accidents. A few days later, another one of the four contractors received a prohibition against continuing work on a construction site as a result of a fatal accident.

It is not only the construction industry that receives injunctions. Many injunctions were also given, for example, to certified municipalities and social and health and elder care institutions, and this tendency has not changed over time. In 2008, the Danish Working Environment Authority issued 75 injunctions to the 125 certified sites,^l that were visited, which gives an average of 0.6 injunctions to those visited, while some received more than one injunction. Compared with the Authority's control of all Danish organizations in 2008, the figures are 30,200 injunctions to 38,500 visited sites or an average of almost 0.8 injunctions per visit, with some sites also receiving more than one and even many injunctions (10 is not abnormal) while a large group received none.^m²⁶

While the only explicit concrete demand in OHSAS 18001 is that a workplace must comply with the relevant legal requirements for the working environment it is noteworthy that the average number of injunctions per visit to certified sites lies so relatively close to the average number of injunctions for the total number of sites visited in 2008. It would be expected that there would be significantly fewer injunctions issued to certified sites.

We have no knowledge of the OHS performance at the remaining certified sites, which comprise the largest group. Several interested parties with direct relation to the certification process, though, acknowledge that conditions not complying with legal requirements often are found.

Under any circumstance the Danish control data documents that there is no clear connection between being OHSAS 18001 certified and compliance with the relevant legal requirements. It can be claimed that compliance with legal requirements can be a challenge due to the relatively high degree of detail regulation, but the Danish Working Environment Authority findings show that a very large share of Danish workplaces (sites) have no violations of the law, and as already stated, it should be expected that those that are certified would be among the best.

3.8 Auditing practice – substance and problem areas

In general, the certifying bodies' auditing reflects the quality management's system thinking. Therefore, a central element is the paperwork connected with procedures and system requirements, while random checks (of a representative group) are only made of organizations' actual working environment with primary focus on whether the system is well implemented and the procedures adequate. It is symptomatic that in making random checks the auditing team focuses on direct visual material OHS conditions, such as whether a machine has the required protective and emergency stop equipment, whether warehouses etc. have markings for pedestrians and vehicles, whether lifting equipment is inspected according to instructions, whether an office workplace is

^j An immediate order means that conditions must be changed, possibly temporarily, before work continues; a prohibition means that work must stop immediately, and that it may not be resumed before it can be carried out in full compliance with the legal requirements.

^k Several immediate orders can be issued at the same construction site.

^l In the article is used the term 'site', which cover 'enterprise entity'. According to IAF MD 1;2007 Mandatory Document for the Certification of Multiple Sites Based on Sampling point 1.2., "A site is a permanent location where an organization carries out work or a service".

^m In Denmark in March 2010, there were a total of 124,000 organizations with employees that had a total of 159,000 permanent production units (sites) (in addition there are temporary production units (sites) such as constructions sites). The total Danish work force is approximately 2.2 million. As of October 1, 2009, 355 OHS certificates were issued, covering about 2,200 permanent sites.

ergonomically correct, whether there is a workplace user manual for chemicals etc. These are of course relevant focus areas in relation to reducing risk, preventing technical accident and physical/ergonomic/chemical impacts that can lead to illness and disability, but they far from cover the total complexity of the work environment. This form of audit also neglects the fact that both occupational accidents and disabilities are consequences of a combination of many actions and causes on which the preventive effort must be based, such as the safety culture, working conditions, organization of work and management culture etc.²⁷

More complex conditions that can induce long-term effects or harm, e.g. monotonous repetitive work, often require longer monitoring and/or measurement. But auditing is often reduced to considering whether the organization can document that it takes such conditions into consideration. Evaluations of whether the organizations analyses are valid are rarely made on a serious professional basis, and demands are almost never made for accredited measurements of noise, effect of ventilation systems, compliance with exposure levels for chemical and biological substances etc. Just as audits rarely consider whether potential substitutions are being used.

To the extent that random checks do reveal OHS conditions that do not comply with legal requirements, this is considered a symptom of either errors/weaknesses in the system or lacking implementation. If the audit team decides that the conditions are serious, the organization is given a nonconformity report that only can be terminated, if the organization makes a system correction within a certain period of time. Several serious non-conformities are required before an auditing team will determine that the system is not functioning or is not well implemented, and suspend the certificate on this basis. No clear guidelines exist regarding when a certificate should be suspended.

All informants agree that the psychosocial working condition is a field that is rarely audited, and that the auditing team almost never has the necessary competence within this area. Meaningless situations therefore, occur, such as when an auditor asks an employee about the psychosocial working condition while the boss is present. There are also examples where the Danish Working Environment Authority, shortly after the certifying body's audit, has issued an injunction regarding the psychosocial working conditions.

The informants also point out that OHSAS 18001 and other OHS standards do not contain relevant demand specifications for auditing the psychosocial working conditions and other 'soft' areas, which presently have a central position in the broader understanding of OHS and have been giving special attention in the Nordic countries. Psychosocial working conditions and similar complex and diffuse 'soft' areas are not objectively measurable, and no clear dosage-response exists. The psychosocial working conditions is constructed partly in the interaction between the individual employee's resources and effects of the workplace, factors that cannot be audited using an 'objective' OHS standard approach. In spite of this, an OHSAS 18001 certificate implicitly means that the certified organizations OHS is good and complies with the legal requirements – also in relation to the psychosocial and other 'soft' areas.

Criticism is raised from several sources pointing at a lack of necessary competences within auditing teams from certifying bodies in relation to organizations' actual OHS. The leading auditors' core competence is usually system auditing, and if an OHS specialist should accompany the leading auditor, the specialist will rarely cover the whole complexity of the OHS. It is very seldom that more than one specialist participates in the auditing team.

Thus, situations often seem to arise in which the standard contains insufficiently relevant requirement specifications combined with insufficient competence in the auditing team. There is also a tendency for the certifying body to allocate too little time for the audit in relation to the relevant guidelines.

3.9 *Central conclusions from the Nordic project*

It was defined as the aim of the Nordic project to develop a set of recommendations on how to reach a more levelled performance among certified companies (organisations). In addition to advice on how the interaction between OHS certification and regulation could be optimised. This resulted in the following core recommendations:

- Measures should be taken to create more transparency in the certifications process. This implies that company audit reports must be public available, that OHS authorities can ask for access to documents from the certification process, as well as organising frequent meeting supporting the exchange of experience between the stakeholders.
- A set of guidelines for the interpretation of OHSAS 18001 supporting the compliance within the national context in which the management systems is operating, including a more precise interpretation of what is implied in complying with legal requirement and the content of a proper audit.
- Mandatory training programs must be established for OHS auditors to build awareness on how e.g. legal requirements, employee involvement, as well as psychosocial aspects of OHS can be included.
- That OHS certification is not used as a substitute for OHS inspections by public authorities but is included as criteria in the prioritisation and focus of these.

Comment [k3]: Det skal være interessenter som At, arbejdsmedicinere, fagforening etc.

4 **Conclusion**

A systematic OHS system can undoubtedly contribute to optimizing an organizations internal efforts and OHS performance if it sufficient anchored in the organization and based on and allows positive employee participation, and it can contribute to preventing both occupational accidents and disabilities. The research-based studies of one or several organizations that have willingly participated as cases in research projects also support this conclusion.

It is, however, not so clear to what extent OHSAS 18001 and the certification process contribute to promoting good OHS performance, or whether an organization that practises a non-certified OHS system can benefit just as well or better.

Throughout the ten years that OHSAS 18001 has been approved as an OHS standard in Denmark, several episodes have occurred indicating that a certified organization does not automatically obtain a good OHS as these during this period have received many injunctions from the Danish Working Environment Authority. But the bad examples have been hidden behind the confidentiality of the certification system and at the same time been apprehended as 'isolated cases'.

Apparently, all interested parties have been caught in a dilemma. On the one hand, they have had personal knowledge about many organizations where OHS management and certification has been a really good instrument. On the other hand, they have also knowledge of cases where an organization has been certified even though the system has not been anchored in a satisfactory way in the organization and OHS conditions were unacceptable. Some of the interested parties have a direct business and thus economic interest in the certification system being as widespread as possible, and they have been able to refer to the standard's demand for confidentiality. Others, such as the trade unions have through their participation in negotiations on OHS regulation supported the system. The consequence is that the 'isolated' bad cases have been played down. The problem is, however, that no one has a real picture of the number of 'isolated' bad cases! Thus, more research is necessary in this area.

One of the central questions is whether a standard, such as ISO 9001, taking the outset in market forces as the regulatory mechanism, can be translated for use in an area such as OHS not operating

unambiguously through market mechanism. In addition demands on employee participation and the use of complex knowledge of material issues and organizational conditions are conditional for a good OHS. The framework for a good OHS performance depends on interactions between many external interested parties and in its nature can lead to conflicts. It is also therefore that national regulation is an expression of compromise and varies greatly from nation to nation.

OHSAS 18001 leaves it to the individual organization management to utilize the national frame of reference and define which elements they will include in their OHS policy and thus which OHS performance they will be obligated to achieve. It is also left to the organization management to define which external interested parties they will include or refer to, and to what extent employees should be involved. This does not necessarily harmonize with the understanding of good OHS efforts, and thus the assumption that only the best and most proactive organizations are certified becomes short-circuited, because almost all organizations that present a written OHS management system can be certified if they will obligate themselves to comply with relevant national legal requirements.

Another central question is whether the certification bodies audit teams had the sufficient competences to audit the complexity of an organization, and whether the OHSAS 18001 standard can cover and handle the 'soft issues' such as psychosocial working conditions. This also raise the dilemma that an organization is free to choose the certification body they prefer, and a core parameter can be the price and thereby the quality and depth of the audits. There has been cases where an organization has changed the certification body based on discontented with their restrictive interpretation of the standard and especially the demand of legal compliance and chosen a less restrictive certification body.

OHSAS 18001 is not conceived as a verification of an organizations compliance with relevant legal requirements, but as a structure of management instruments that make up a certifying OHS management system. Since the standard does not contain other explicit demands for OHS performance, and the validity of a certificate functions in the dark behind the confidentiality tied to the certification system, compliance with legal requirement becomes one of the few evaluation parameters that the external actors can use to judge a certificate's validity.

References

¹ Fyns Stiftstidende 29 January 2010

² Bottani, Elonora et al.: Safety management systems: Performance differences between adopters and non-adopters: Safety Science vol. 47, 2009

³ Rocha, Robson SØ; Hohnen, Pernille: Ledelse af arbejdsmiljø – certificering i praksis [Management of working environment – certification in practice]; Nyt Teknisk Forlag, 2010

⁴ Rocha, Robson SØ; Hohnen, Pernille: Ledelse af arbejdsmiljø – certificering i praksis [Management of working environment – certification in practice]; Nyt Teknisk Forlag, 2010 Bunn, W. B. & D.B. Pikelný, T. Slavin, S. Paralkar: Health, Safety, and Productivity in a Manufacturing Environment: Journal of Occupational Environmental Medicine, 2001

⁵ Glendon et al 1997 taken from Glendon A.I., Clarke S.G., McKenna E.F., 2007, Human Safety and Risk Management, second edition, Taylor & Francis

⁶ Ibid. 4

⁷ Else, D. & P. Beaumont: Expect the Worst, Achieve the Best. Proceedings of the First National Conference, University of Western Sydney, Australia, 2000

⁸ Rimmer, Malcolm: Occupational sefatu and health management systems in Australia: barriers to success: Policy and Practice in Health and Safety vol. 1, no. 2, 2003

⁹ Baird, David: The implementation of a health and safety management systems and its interaction with organizational/safety culture: an industrial case study: Policy and Practice in Health and Safety, vol. 3 nr. 1, 2005

¹⁰ Robinson, A. & C. Smallman: The contemporary British workplace: a safer and healthier place?: Work, Employment and Society, 2006

Formatted: English (U.S.)

Formatted: English (U.S.)

Formatted: English (U.S.)

Formatted: English (U.S.)

Formatted: English (U.S.)

Formatted: English (U.S.)

Formatted: English (U.S.)

-
- ¹¹ Hendriksen, Kåre et al.: Arbejdsmiljøcertificering som tilsynsredskab og –strategi [OHS certification as control instrument and control strategy]; Nordic Minister Council; 2010
- ¹² Hendriksen, Kåre et al.: Interaction between working environment regulation and working environment certification in the Nordic countries: Safety Science vol. xx, 2010
- ¹³ Working Environment Authority's circular no. 87 of 31 January 2005: Circular on recognition of DS/OHSAS 18001 etc. as documentation for a good working environment.
- ¹⁴ Robson, Lydia S et. al.: The effectiveness of occupational health and safety management system interventions: A systematic review: Safety Science vol. 45, 2007
- ¹⁵ Ibid. 2
- ¹⁶ Ibid. 5
- ¹⁷ Frick, Kaj; Wren, John: Reviewing Occupational health and Safety Management – Multiple Roots, Diverse perspectives and Ambiguous Outcomes: in Systematic Occupational Health and Safety Management; Frick, K. et al.: Pergamon, Oxford 2000
- ¹⁸ Ibid. 8
- ¹⁹ Ibid. 9
- ²⁰ Jørgensen, Ulrik: The 'hidden' networks' of practice in ISO 14001; Greening of Industry Conference, October 2003
- ²¹ Jørgensen, Kirsten et al.: Risikovurdering og forebyggelse af arbejdsulykker [Risk evaluation and prevention of work accidents]; DTU Management; 2010
- ²² Ibid. 8
- ²³ Ibid. 13
- ²⁴ Beskæftigelsesminister Claus Hjort Frederiksen's supplerende svar på spørgsmål 556 i Folketinget [Employment Minister Claus Hjort Frederiksen's supplementary answer to question 556 in Parliament]; 28 January 2004
- ²⁵ Vedsmand, Lars: Certificerede firmaer med store arbejdsmiljøproblemer [Certified firms with large working environment problems]; BAT Cartel's member magazine BAT Nyt No. 2, February 2004
- ²⁶ Data udskrevet fra Arbejdstilsynets 'DataWarehouse' 12. april 2010
- ²⁷ ~~Jørgensen, Kirsten et al.: Risikovurdering og forebyggelse af arbejdsulykker [Risk evaluation and prevention of work accidents]; DTU Management; 2010~~[\[ibid. 18\]](#)