

Relations industrielles Industrial Relations



Regulating Systematic Occupational Health and Safety Management Comparing the Norwegian and Australian Experience La régulation de la gestion systématique de la santé et de la sécurité au travail Une comparaison de l'expérience australienne et norvégienne Regular la gestión sistemática de la salud y seguridad ocupacional Comparación de las experiencias noruega y australiana

Per Øystein Saksvik et Michael Quinlan

Volume 58, numéro 1, hiver 2003

URI : <https://id.erudit.org/iderudit/007368ar>

DOI : <https://doi.org/10.7202/007368ar>

[Aller au sommaire du numéro](#)

Éditeur(s)

Département des relations industrielles de l'Université Laval

ISSN

0034-379X (imprimé)

1703-8138 (numérique)

[Découvrir la revue](#)

Citer cet article

Saksvik, P. & Quinlan, M. (2003). Regulating Systematic Occupational Health and Safety Management: Comparing the Norwegian and Australian Experience. *Relations industrielles / Industrial Relations*, 58(1), 33–59. <https://doi.org/10.7202/007368ar>

Résumé de l'article

La promotion de la gestion systématique de la santé et de la sécurité au travail (SOHSM) représente un réalignement significatif, quoique plutôt récent, d'une stratégie de régulation qui a été envisagée par plusieurs, sinon la plupart, des pays industrialisés (et aussi par quelques pays en voie de développement). Cependant, jusqu'ici, ce glissement a fait l'objet de peu d'évaluation critique au plan de ses origines et de ses implications, et on ne sait pas dans quelle mesure l'expérience de ces arrangements différent d'un pays à un autre. Cet essai se veut le départ d'un processus visant à apporter une réponse à ces questions en comparant les origines et la nature des régimes SOHSM en Norvège et en Australie. En ce faisant, ce travail identifie et analyse les défis majeurs qui se présentent à cette approche de la gestion systématique de la santé et de la sécurité occupacionales. Avant d'analyser ce développement dans les deux pays, il s'avère important de décrire en quoi consiste ce glissement vers une approche plus systématique et pourquoi ceci a été retenu comme une stratégie principale de régulation dans plusieurs pays industrialisés.

Le développement qui a pris racine dans des normes prescriptives en matière de SOHSM peut être perçu comme étant le cumul d'une troisième vague de réglementation qui prit son essor au début des années 1970 et qui associait des mécanismes de participation des travailleurs avec un mouvement vers des normes partielles d'autorégulation. Les questions de recherche qu'on se posait étaient les suivantes : comment la gestion systématique de la santé et de la sécurité au travail a-t-elle été façonnée par les systèmes de relations industrielles des deux pays ? Sur quel type de système de gestion de la SOHSM s'appuie-t-il ? Comment le SOHSM a-t-il été mis en oeuvre dans les deux pays ? Est-ce que le SOHSM est compatible avec d'autres développements dans les domaines de l'organisation du travail et dans les affaires en général ?

Méthodologie. Cet essai utilise comme base l'analyse et la synthèse de la recherche disponible et du matériel publié. À cela s'ajoute notre propre recherche conduite en Norvège et en Australie au cours de la dernière décennie. Ce travail a fait appel à des enquêtes réalisées chez les gestionnaires et sur les lieux de travail. De plus, des entrevues semi-structurées ont été conduites auprès de décideurs, de dirigeants, de permanents syndicaux et des études détaillées de documents de politiques gouvernementales et de rapports ont été effectuées. Les deux auteurs ont participé au développement et à la mise en oeuvre de la gestion systématique de la santé et de la sécurité au travail aux niveaux de l'administration et des lieux de travail.

Analyse des systèmes de relations industrielles. L'importance des systèmes de relations industrielles en matière de santé et sécurité au travail se situe à deux niveaux : premièrement, l'envergure de la négociation collective, l'encouragement ordonné à la syndicalisation (ou l'inverse) et les mécanismes de participation influenceront le SOHSM, même lorsque la législation sur un environnement de travail au plan de la santé et de la sécurité occupacionales prévoit déjà une structure parallèle favorisant la participation des travailleurs à la prise de décision; deuxièmement, des normes minimales de travail intégrées aux systèmes de relations industrielles, en particulier, à la gestion systématique de la santé et de la sécurité au travail. L'orientation récente des développements en matière de politique de relations industrielles va dans le même sens que celle qu'on observe aux États-Unis et en Grande-Bretagne, c'est-à-dire dans le sens d'un accroissement du rôle des ententes sur la base de l'établissement (incluant les contrats individuels de travail et des accords en l'absence d'un syndicat). À cela s'ajoute le déclin correspondant du rôle des tribunaux, des sentences et des syndicats; s'ajoute également l'éloignement du modèle scandinave (où la centralisation, l'apport des syndicats demeurent encore significatifs) dont la Norvège constitue un exemple.

Le SOHSM servant de base au développement de systèmes de gestion efficace. L'approche systématique est un élément fondamental des législations propres à la Norvège et à l'Australie. Ce qui la distingue des autres approches réside dans le fait qu'elle ne se centre pas uniquement sur la conformité à des normes prescriptives relatives à un éventail de situations de risque. L'encadrement législatif vise plutôt à assurer que les employeurs vont mettre sur pied un ensemble cohérent de structures et de procédures pour identifier, évaluer et contrôler tous les risques importants en matière de santé et de sécurité. Au même moment, les avantages potentiels de cette approche en termes de flexibilité, d'amplitude et d'une préoccupation pour le processus (pas uniquement pour les résultats) comportent aussi des risques de confusion ou d'abus qu'on pourrait attribuer à la grande marge de manoeuvre dont disposent les employeurs au moment de décider de la forme de conformité à assurer et à leur influence dans la conception et la mise en oeuvre du système. Le problème de la grande influence des dirigeants dans la conception et l'implantation d'une gestion systématique de la santé et de la sécurité au travail n'est pas particulier à la Norvège, ni à l'Australie. On l'a déjà repéré dans d'autres pays au point de questionner même la valeur du concept de « systèmes ». Une question importante consiste à se demander dans quelle mesure les agences d'OHS en Norvège (avec son approche de collaboration plus marquée au plan des traditions de vie ouvrière) et en Australie ont réussi à mettre en place un agenda plus global, lorsqu'on le compare à d'autres pays tels que le Canada et les États-Unis reconnus pour leur approche plus volontariste. C'est là une question qui implique une recherche plus détaillée.

Des stratégies d'implantation. En Norvège, un modèle de mise en oeuvre a été incorporé à la législation révisée de 1997 par le biais d'une méthode générale de participation fondée sur les cinq points suivants : la préparation, l'information, l'évaluation, la définition de priorités et l'implantation. En Australie, on assiste à la mise en oeuvre d'un système un peu plus hybride, dont des modèles initiés par l'Etat et des modèles purement volontaires retenus par des entreprises ou encouragés par des conseillers. En général, on ne retrouve pas dans ces modèles les évaluations basées sur des données comme c'est le cas en Norvège. En tout et pour tout, nous avons noté que dans ces deux pays le processus de mise en oeuvre souffre d'une conformité aux règles, d'une surveillance inadéquate de la part des inspecteurs, ces derniers accordent trop leur confiance en des initiatives patronales, et également d'une contribution insuffisante de la part des travailleurs et de leurs représentants.

La cohérence entre le SOHSM et l'évolution des affaires en général. Un des défis majeurs que l'approche SOHSM doit relever consiste dans la montée de la précarité de l'emploi et des aménagements ponctuels du travail, la croissance de la petite entreprise et la présence de lieux de travail désorganisés (due en partie à des facteurs déjà mentionnés et aussi aux restructurations ou à la réduction de la taille des établissements). Le développement des aménagements temporaires du travail et celui de la petite entreprise entraînent de sérieux problèmes, parce qu'ils semblent réduire chez les employeurs leur capacité et leur intérêt à mettre en oeuvre une gestion systématique de la santé et de la sécurité au travail. La Norvège et l'Australie offrent deux exemples où le législateur s'est attaqué à ce problème, quoique les corrections apportées demeurent sensiblement limitées pour le moment.

Conclusions et implications. La tendance vers l'adoption d'une gestion systématique de la santé et de la sécurité représente un glissement important de la stratégie réglementaire, sans pour autant devenir un sujet de recherche poussé, encore moins l'objet de comparaisons. En se fondant sur la documentation disponible, notre étude a mis à jour bien des similitudes et également des différences importantes entre les deux pays sous observation. Pour être efficace, une telle gestion nécessite un mécanisme indépendant de révision aussi bien qu'une contribution au plan de la conception et des boucles de rétroaction. Les organismes d'inspection des États ne disposent pas suffisamment de ressources pour s'acquitter de la première tâche et ils sont en pratique tenus à l'écart des deux derniers rôles. Le niveau d'implication des travailleurs demeure un sérieux problème dans les deux pays. Des modifications au climat des relations patronales-syndicales dans les deux pays en sont la cause, même si le glissement au plan de la réglementation et au plan institutionnel a été plus prononcé en Australie. Il est possible qu'une différence importante et évidente entre les deux pays se situe au niveau de la mise en oeuvre, là où l'absence d'un modèle uniforme implique qu'il est plus difficile en Australie de s'entendre sur des normes. Le problème de la sur-conformité à la règle ou le fait que les procédures ne se traduisent pas dans la pratique quotidienne se présente comme un défi important au moment de la mise en oeuvre d'une approche systématique dans les deux pays au sujet du SOHSM, cela soulève des questions cruciales à la fois en termes d'une recherche des façons de corriger cette limite et en termes d'une supériorité observée de gestion de la conformité des systèmes plutôt que la conformité aux normes spécifiques du système de santé et de sécurité. Si l'on ne réussit pas à relever ces défis, l'approche d'une gestion systématique peut être discréditée dans le futur. La manière dont une approche relativement sévère en matière de SOHSM peut survivre dans un contexte d'aménagement du travail constamment changeant apparaît aussi comme un sérieux défi. Ce sont là des sujets qui bénéficieraient d'une recherche comparative impliquant une étude sur le terrain.

Tous droits réservés © Département des relations industrielles de l'Université Laval, 2003

Ce document est protégé par la loi sur le droit d'auteur. L'utilisation des services d'Érudit (y compris la reproduction) est assujettie à sa politique d'utilisation que vous pouvez consulter en ligne.

<https://apropos.erudit.org/fr/usagers/politique-dutilisation/>

Érudit

Cet article est diffusé et préservé par Érudit.

Érudit est un consortium interuniversitaire sans but lucratif composé de l'Université de Montréal, l'Université Laval et l'Université du Québec à Montréal. Il a pour mission la promotion et la valorisation de la recherche.

<https://www.erudit.org/fr/>

Regulating Systematic Occupational Health and Safety Management

Comparing the Norwegian and Australian Experience

PER ØYSTEIN SAKSVIK
MICHAEL QUINLAN

The promotion of systematic occupational health and safety management (SOHSM) represents a comparatively recent but significant realignment of regulatory strategy that has been embraced by many, if not most, industrialized countries. As yet there has been little critical evaluation of the origins and implications of this shift, and to what extent the experience of these measures differs between countries. This article seeks to start the process of answering these questions by comparing SOHSM in Norway and Australia. We identified a number of common challenges (problems of “paper” compliance, limited union input and the growth of precarious employment). In particular, the article highlights the interdependence of OHS and industrial relations regulatory regimes and argues the move away from inclusive collectivist regimes places significant constraints on independent vetting of SOHSM—a crucial element in their effectiveness.

In the last decade, the concepts of systematic occupational health and safety management (SOHSM) and OHS management systems (often confused with SOHSM but best viewed as a wide array of programmatic measures employers may adopt voluntarily or in an effort to meet SOHSM requirements) have achieved wide acceptance internationally amongst

-
- SAKSVIK, P. Ø., Norwegian University of Science and Technology, Department of Psychology, Trondheim, Norway, per.saksvik@svt.ntnu.no
 - QUINLAN, M., The University of New South Wales, School of Industrial Relations and Organisational Behaviour, Sydney, Australia, m.quinlan@unsw.edu.au

regulators/policy makers, large employers, academics and other interested parties. In many industrialized countries regulators have progressively shifted statutory and policy reliance away from prescriptive standards towards more broadly framed process or performance-based standards and the largely parallel attempt to persuade employers to implement “system-based” internal controls on OHS.

The development of SOHSM can be seen as the culmination of the third-wave of OHS regulation commencing in the 1970s and affecting most industrialized countries, which combined participatory mechanisms for workers with a move to process standards/partial self-regulation (Brooks 2001; Tucker 1995). From a policymaker’s perspective, SOHSM has a number of attractions. First, the system concept connotes a more comprehensive, proactive and adaptive approach to hazard identification and management, and it has been seen as a means of achieving increased employer involvement in OHS. Second, monitoring systems compliance rather than compliance with an array specific OHS standards (pertaining to plant, equipment, training, etc.) has been seen to offer the prospect for more strategic, effective and cost efficient use of inspectoral resources. Third, it provided governments with a new remedy as a response to media coverage/community pressure associated with catastrophic incidents or concerns at the failure of key OHS indicators (mortality, absence and long-term disability) to improve over time.

Beyond these generalizations it needs to be stressed that there are significant inter-country differences in the measures used to promote SOHSM and the environment where these policies are implemented. The objective of this paper is to shed light on these aspects, as well major challenges confronting this approach, by comparing the origins, nature and implementation of new OHS regimes in Australia and Norway.

Detailed comparisons of the implementation of SOHSM in two or more countries are relatively uncommon (for one instance, see Nichols and Tucker 2000) although they afford opportunities to make more meaningful generalizations about this policy shift. Further, there are a number of good reasons for comparing Norway and Australia. First, SOHSM is a comparatively recent development but both countries were among the first to move down this path, enabling us to examine both the origins and impact of this shift. Second, the countries adopted different methods of implementation. Norway mandated SOHSM while in Australia governments largely opted for a hybrid mixture of voluntarism and regulatory agency “persuasion.” Third, both countries have strong social democratic traditions but over the past 20 years there has been a significant decline in union density and collective employment regulation, especially in Australia. Fourth, the applicability of SOHSM to small business and in the context of a shift to

contingent work arrangements has been seen as problematic (Quinlan and Mayhew 2000). While precarious employment is growing in both countries, it is more extensive in Australia, now accounting for over 40% of the workforce (Burgess and de Ruyter 2000). Thus, the comparison provides an opportunity to assess the impact of the labour market, broader regulatory and institutional context where SOHSM is introduced (for a recent discussion of the importance of contextual factors see Frick et al. 2000).

The key research questions we sought to address were:

- (1) How has SOHSM been shaped by the industrial relations regimes of the two countries?
- (2) What kind of management system is supported by SOHSM?
- (3) How has SOHSM been implemented in the two countries?
- (4) Is SOHSM compatible with other developments in work organization and business?

METHODS

This paper is based on an examination and synthesis of published material along with our own research undertaken in Norway and Australia over the past decade (e.g., Nytrø and Saksvik 2001; Saksvik, Nytrø and Torvatn 2003; Frick et al. 2000; Quinlan 1999, 2002). This research has entailed management/workplace surveys and semi-structured interviews with a large number of regulators, managers and union officials, as well as detailed reviews of government policy documents and reports. Both authors have also been involved in policy development and implementation of SOHSM at the government and at the workplace level.

The analysis was undertaken as a form of conceptual ordering (Rubin and Rubin 1995) based on written material (books, papers, reports, etc.) and discussions. We first examined each country's history and statutory framework and policy reliance and then made comparisons in order to select concepts or categories of common interest. The selection was based on several criteria: (1) major similarities (international trends) compared to typical local (national) variations in development, (2) association to industrial relations traditions, (3) present development in working life in general with a possible impact on SOHSM.

Following a short overview of the development of SOHSM in each country, the major categories that came out of our analysis will be discussed.

THE DEVELOPMENT OF SOHSM IN NORWAY

In Norway, regulators opted to mandate a systematic approach. An Internal Control (IC) Regulation was introduced in 1992 that owed much to previous experience in the oil industry and also to the Norwegian working life democratization movement which had started in the 1960s. Internal control of systematic OHS-work in the Norwegian offshore oil industry became a precursor to the onshore system and laid the groundwork for developing a uniform nationwide regulatory system with an integrated control methodology based on system thinking (Lindöe and Hansen 2000). The immediate impetus for this was a horrific oil rig disaster in March 1980 when the “Alexander Kielland” platform collapsed during a storm, killing 123 workers.

A more problematic source of inspiration for the move to SOHSM in Norway was adoption of systems concepts in related areas of management, most notably Total Quality Management. It could be argued that the adoption of system principles within Internal Control can be linked to the use of these concepts in related areas of business and environmental control, most notably Total Quality Management (TQM)—a prominent feature of the offshore oil industry—and ISO 9000 standards. The integration of TQM and IC within some enterprises may be seen as supporting this interpretation. However, this interpretation is problematic as there are important differences in both the origins of and the systems concepts found in TQM, ISO 9000 and IC (not the least being in terms of processes and worker input). Notwithstanding this qualification, the applicability or value of systems concepts to OHS has been the subject of critical debate with some observers arguing that these concepts translate into a “top-down” approach that disempowers workers (Nielsen 2000) or that the use of system terminology simply amounts to the insertion of “management-speak” into OHS (Nichols and Tucker 2000).

Developing systematic OHSM is problematic. One apparent problem is the difficulty of persuading management to implement change and processes that actually achieve what the IC documentation purports to show. An analogous problem has been identified in the TQM literature where management dedication and visible efforts to implement new routines are often emphasized. The failure rate for TQM efforts is high, and, according to Spector and Beer (1994), most of these failures can be attributed to management’s half-hearted dedication and not having fully understood the dynamics of organizational change they are attempting to unleash. Some caution is needed in relation to this analogy since there are significant differences between IC and TQM. TQM is a managerial technique incorporating a diverse range of practices while IC is a regulatory intervention

predicated on a context of worker benefit and involvement which is at best a tangential/subsidiary element in TQM (see also Gustavsen's view on participation as a functional necessity). Compared to other systems, it makes a difference that the Norwegian "Internal Control System" includes the external environment. That affects the content of the regulation, the stakeholders involved and the implementation process in Norway and it may be relevant in a comparison with other countries, but this aspect is not further discussed here.

The other "source" of the Norwegian regulation can be found in the democratic tradition where participation from and co-operation between the parties is emphasized. Participation and co-operation between the working life parties has a strong tradition in the Scandinavian countries and the regulation partly reflects this. The tradition was mainly developed in the organizational change and development sector, and it has focused on the importance of collective participation and involvement from all parties in order to bring about positive changes. The underlying argument is that an effective intervention should be based on participation, dialogue, and workplace democracy (Elden 1983; Gustavsen and Hunnius 1981; Gustavsen 1985, 1992; Thorsrud and Emery 1970). The main perspective is that change and improvement are facilitated and that the best results are obtained when employees participate in the change process. Gustavsen's ideas on why participation improves the change process involved the creation of conditions so that employees could engage themselves in their work and become creative and productive, without threats to their health, with good social relations, democratic leaders and a flattening of organizational hierarchies.

THE DEVELOPMENT OF SOHSM IN AUSTRALIA

In the more complex federal political structure of Australia, state, territory and national agencies all pursued an approach of promoting SOHSM using a hybrid mixture of regulatory mandate and incentives to promote the "voluntary" adoption of OHSM systems by employers. While clearly influenced by developments in other countries, SOHSM grew from a somewhat contradictory amalgam of factors. One factor was significant reforms to OHS legislation in the 1980s. Moving away from a complete reliance on prescriptive standards, the new laws included broad general duties that required employers (and other parties such as contractors, designers, suppliers and manufacturers) to maintain a safe system of work. The impetus for a systematic approach was reinforced by parallel regulatory developments in other areas such as environmental law, concepts such as due diligence, and the "systems" framework of international standards,

most notably ISO 9000 and 14000 (Redlinger and Levine 1996; Winder, Gardner and Trethewy 2001: 67). In 1997 Australia and New Zealand became among the first countries to develop a guidance standard on OHSM systems (AS/NZS 4804, 1997 [guidelines]), with a certification standard (AS/NZS 4801) being issued three years later (Winder, Gardner and Trethewy 2001: 72). While voluntary, Australian Standards carry some weight. The 1997 standard was developed with employer support (Quinlan 1999)—a stark contrast to employers stalling a comparable ISO standard around the same time.

Historically contingent factors promoted a climate of collaboration. From the early 1980s until 1996, state and more especially federal Labor governments pursued tripartism, and a policy agenda that included the promotion of “best practice” in terms of quality, productivity collaborative employment practices, self-regulation and OHS is “good for business.” Systematic OHSM, by offering a method of synthesizing a number of these objectives, fit neatly into this agenda. The election of conservative governments in many states (since reversed) and on the federal level in the 1990s weakened tripartism but not the momentum to promote SOHSM within regulatory agencies. Systematic OHSM fitted the self-regulatory conservative policy agenda and OHSM systems were also proving increasingly popular among large employers.

In the hybrid of regulated “voluntarism,” state and federal agencies did not prescribe (at least not in detail) but strongly sponsored (via a mix of incentives) a systematic approach. Agencies supplied self-audit tools or system models/procedures while compliance programs increasingly targeted “system” offences. These regulatory initiatives reinforced a pre-existing trend for medium to large organizations to voluntarily adopt OHSM systems. Another important contributor to promoting a “systems” approach in Australia was OHS consultants and bodies such as the National Safety Council of Australia and its five-star program (Shaw and Blewett 2000: 457–473). The capacity of consultants to implement change was enhanced by their status as independent brokers (some enjoy respect in union circles) while also being well attuned to the government compliance imperatives and experienced in combining re-structuring/productivity improvements with OHS.

Ironically, the relatively continuous evolution from prescriptive standards to process standards and a hybrid system of SOHSM in Australia was partly due to the fact that major reforms to OHS legislation were enacted around a decade behind those in the U.S.A. and northern Europe. By the 1980s system and internal responsibility concepts were exerting an influence in policy circles. By way of contrast, the U.K. blueprint for legislative reform a decade earlier (the Robens Report, 1972) advocated

self-regulation but made only ambiguous reference to internal responsibility systems as a way of achieving this. Progression to systems concepts by U.K. regulators was more spasmodic and arguably lagged behind Australia. Historically, greater levels of government activism in Australia (including the more “managed” approach to neo-liberal policy reforms in the 1980s and 1990s) may also have contributed to this difference.

It needs to be stressed that the adoption of SOHSM by particular countries has been shaped by a number of other factors. The European Union (see Brooks 2001) introduced a Directive (1989/391/EEC) requiring employers to undertake risk assessment and to secure employee involvement in the collection of data for this process. However, implementation of the Directive varies widely among member states. In the U.S.A., reform of OHS legislation in 1970 remained largely wedded to prescriptive standards. Experiments with OHSM (voluntary guidelines for OHS programs) began in 1989 but both this and attempts to introduce process standards (as evidenced by the abandoned federal ergonomics standard) remain highly contested.

COMPARING THE CONTEXT AND APPLICATION OF SOHSM IN NORWAY AND AUSTRALIA

In keeping with research questions posed at the outset, to compare the experience of Norway and Australia we need to evaluate the impact of important contextual factors and most notably the industrial relations climate/regime of each country, the perspectives behind new regulations; different implementation strategies; and the relationship to business developments more generally. In the following sections we will deal with each of these four aspects in turn. We will end this discussion by identifying what appears to be some common challenges countries face when developing and implementing OHS-systems.

Industrial Relations Regimes

The importance of industrial relations regimes for SOHSM is twofold. First, the extent of collective negotiation, regulatory promotion of unions (or the reverse) and participatory mechanisms will influence meaningful SOHSM even where OHS/work environment laws set up a parallel structure for worker involvement in decision-making. For example, in Australia and many western European countries, unions provide essential logistical support for health and safety representatives and other participatory mechanisms that shape OHSM and they also provide an independent agency for vetting “systems.” Second, minimum labour standards enshrined in

industrial relations regimes (wages, hours, absence of dispersion/equity, etc.) provide an essential support for OHS standards generally and for OHSM in particular. For example, workers paid extremely low wage rates (either because standards are too low or not enforced) may cut corners on safety or work long hours thereby undermining OHS standards. It may be difficult to speak meaningfully of SOHSM in industries that are sweated or where a large contingent workforce is employed (Quinlan and Mayhew 2000). In both cases we are concerned with comparing Australia and Norway, with placing these countries in broader context.

Scandinavian countries have a tradition of cooperation, both between the work life partners and between the government and the enterprises, often referred to as "The Scandinavian Model." The main characteristics of this model are: (1) strong and centralized unions; (2) regulation oriented governing authorities; (3) a close connection between the unions and the governing authorities; (4) and an extensive formal agreement between the work life partners (Hammer, Ingebrigtsen and Karlsen 1994). This cooperation is largely tripartite, through the role the authorities play in setting the agenda for central and local negotiations. The most important aspect of the Scandinavian model may, however, be the values connected to it at the society level, often referred to as "power distance," which is found to be low in Scandinavia compared to other countries (Hofstede 1991). This is of fundamental importance for all kinds of negotiations, including OHS. Norway is a homogenous society with very little regional variation. Even at the enterprise level the IR-system has a common core consisting of: (1) a strong tradition for negotiation and high union membership density; (2) stable relationships and a low conflict level; (3) an ability for local flexible problem solving through different forms of participation and cooperation (Hammer, Ingebrigtsen and Karlsen 1994).

By way of contrast, Australian industrial relations have undergone significant change in recent years. For much of the 20th century this regime entailed a pervasive system of state/federal tribunals and mandated minimum employment conditions (covering a very wide range of issues and known as awards) covering particular occupations or industries (workplace/employer specific agreements occupied a residual role). While unions and employers could and often did negotiate directly, this occurred in a context where there was ready recourse to conciliation or compulsory arbitration if issues could not be settled or if employers refused to bargain. Tribunal award determinations rather than legislation formed the basis for minimum labour standards (pertaining to wages, hours, holiday and other leave entitlements along with many other matters), giving rise to what has been termed a wage-earner welfare state. The system relied heavily on employer and more especially union organization. The degree of state involvement

and centralization of bargaining in Australia was in some respects closer to the Scandinavian model of industrial relations than to the voluntarist regimes adopted in the U.S.A. and U.K. although it was marked by less employer/union collaboration. An Accord reached between unions and a federal Labor government (1983–1996) was an attempt to achieve centralized bargaining over the social-wage and a level of capital/labour co-operation explicitly modelled on Scandinavia.

From the early 1990s onwards, this regime underwent significant changes (especially at the federal level) increasing the role of enterprise-based agreements (including individual contracts and non-union negotiated agreements) and marked by a corresponding decline in the role of tribunals, awards and unions. The incoming conservative federal government (1996 onwards) pursued a neo-liberal reform agenda and eschewed tripartism (the tripartite National Occupational Health and Safety Commission survived but was substantially downsized). The decline of union membership (translating into more non-union or weakly organized workplaces and fewer effective workplace OHS committees and employee representatives) and tripartite collaboration have reduced the role workers have been able to play in terms of vetting systematic OHSM. In sum, the recent trajectory of industrial relations policy development in Australia has been toward those found in the U.S.A. and U.K., and away from the Scandinavian model.

The Role of Management

The Norwegian regulation states that management is responsible for developing the OHSM system but is also required to consult with workers and unions in undertaking this task. In our evaluations (Nytrø, Saksvik and Torvatn 1998; Saksvik, Nytrø and Torvatn 2003), we found that professional training of managers in OHS-matters was essential if they are to undertake these tasks effectively (general management competence may also be relevant but was not addressed in these studies).

In Australia the general duty provisions in OHS legislation also place primary responsibility on management including specific reference to maintaining “a safe system of work.” Unlike Norway, until 2001, no Australian jurisdiction had explicitly mandated SOHSM even though such a requirement might be “read” into the general duty provisions. Nonetheless, in the 1990s, government agencies in virtually all jurisdictions developed specific self-audit systems (like SafetyMAP in Victoria), produced guidance material or in other ways (via compliance policies and prosecutions) promoted SOHSM. Lagging behind these developments, in 2001, the most populous state, New South Wales (NSW) introduced a risk

assessment regulation mandating SOHSM (in terms of risk assessment, control and worker consultation) along lines similar to those existing in the European Union (Walters and Jensen 2000; Jamieson and Westcott 2001: 183–184). Small employers were given a two-year period to meet the new standard. The NSW regulation is not as prescriptive as the Norwegian approach although, ironically, its attempt to closely specify the responsibility of various parties has caused confusion, with some employers citing it to highlight the OHS responsibilities of middle managers and workers without acknowledging their own over-arching legal obligations (Quinlan 2002). The NSW initiative has not been followed by other Australian jurisdictions. However, the guidance material/audit tools and compliance strategies (including prosecutions) adopted by these jurisdictions have progressively reinforced the need for employers to undertake risk assessment and have an OHSMS in place.

Worker Involvement in SOHSM

Norwegian and Australian regulations (see WorkCover NSW 2001a) and guidance material both enunciate the importance of worker involvement in SOHSM. Australian OHS statutes provide for workplace committees and employee health and safety representatives (HSRs) at least in medium to large employers. The NSW risk assessment regulation (2001) entails explicit consultation requirements. There are well over 50,000 HSRs and a national workplace survey found workplace OHS committees were the single most important source of worker involvement in Australia (Moorehead et al. 1997: 453). Participative mechanisms are even more pervasive in Norway. In Australia, health and safety representatives are mainly confined to large unionized workplaces whereas a recent Norwegian survey found that 64% of enterprises had an OHS representative (Nytrø, Saksvik and Torvatn 1998).

In practice, formal requirements overstate worker influence. Unions have labelled the provisions on participation as inadequate. It also appears that inspectorates seldom monitor employer compliance with them (Gallagher, Underhill and Rimmer 2001: 20–23; Quinlan 2002). Available evidence indicates HSRs and committees have played a limited role in SOHSM via consultation or general pressuring of management to improve OHS (Chapman 2001; Christodolou 2002). A recent ACTU (2001) study found that 40% of HSRs surveyed said employers only consulted them on OHS when asked, while 16% reported being bullied or intimidated by management for raising OHS issues. Evidence also suggests little effort has been made to ensure workers or supervisors get information and training to facilitate their participation (Bottomley 1999: 13–14).

The Norwegian framework is more conducive to worker involvement but even here SOHSM remains a largely top-down process. In Norway, the mandated model is explicitly tripartite and workers and their representatives have clear rights although in practice these rights are not always exercised. The Australian hybrid approach has promoted a largely bipartite model (i.e., agency and employer) of OHSM. Worker involvement is less clearly articulated and has been undermined by inadequate enforcement and the erosion of collective industrial relations. At the same time, even in Norway, worker involvement is generally restricted to helping to vet systems rather than active engagement in their design and operation (Norwegian Labour Inspectorate 2001).

Overall, worker involvement is problematic in both countries. Unions provide logistical support to formal OHS participatory mechanisms such as HSRs (Walters and Frick 2000) and also provide a channel for worker representation and meaningful negotiations over OHS (Landsbergis et al. 1995). Despite this, it has long been noted that OHS interventions are individualized or rely on very circumscribed forms of collective activity (Lerner 1982; Reynolds and Shapiro 1991). In part, this reflects a longstanding, artificial and historically contingent separation (in terms of state regulation and workplace practice) between industrial relations and OHS found in most, if not all, industrialized countries. This separation—whose origins and maintenance Carson and Henenberg (1988) argue can only be explained in ideological terms—has crucial significance for SOHSM because it inhibits collective worker input into OHS. What is especially striking about the SOHSM models in developed countries such as Australia (and Britain) is the marginal role accorded to legislatively mandated workplace committees and HSRs, despite recurring union calls for greater worker involvement.

SOHSM and the Scope of Management Systems

The key objective of SOHSM in both Norway and Australia is to promote and monitor programs of internal responsibility for OHS on the part of employers. Employers are being asked to move from policies that were often little more than ad hoc solutions to an array of known hazards to a more articulated set of structures and procedures for identifying, assessing, and controlling OHS risks (Quinlan 1999). This approach has also been defined in terms of having system objectives, specifications, designated relationships to other systems (such as management) and maintenance requirements (Gallagher, Underhill and Rimmer 2001: 4).

There is considerable debate over what constitutes the core components of systematic OHSM. One way of portraying this debate is in terms

of the breadth of causal factors addressed (see Frick et al. 2000), ranging from broad perspectives that include work organization, through technological perspectives (emphasizing physical characteristics of the work environment) and finally behavioural perspectives (where interventions target individual worker behaviour). In both Norway and Australia OHS regulators give formal recognition to work organization (including worker involvement) as well as safe plant/equipment and trained personnel—unlike the behaviourist “system” models promoted by consultants and companies, especially in the U.S.A.

At the same time, the focus management “systems” has raised concerns that SOHSM is both inherently authoritarian (acting as a barrier to genuine worker involvement notwithstanding regulatory requirements), and that management’s dominant role in design and implementation could have other adverse effects such as effectively narrowing system components.

The top-down approach with delimited worker input may be conducive to confusion, mixed responses and outright suspicion on the part of workers, depending on the past history of the enterprise/workplace and a variety of other factors. For example, a history of mistrust may give rise to employee concerns that managers have ulterior motives for implementing OHSMS, such as reducing workers’ compensation or sickness absenteeism claims (but not the actual incidence of these problems). This may be why many enterprises seem to find it difficult to engage in SOHSM on a participative basis. On the other hand, even “top-down” strategies may gain results because of the effort put into producing process guidelines in workplaces where co-operative procedures are well established. Even so, building a widespread climate of cooperation amongst enterprises requires both time and an appropriate regulatory framework. Hence, caution is required in extrapolating the experience of a country like Norway to others.

Turning to management’s dominance of system design and implementation, it can be noted that approaches which emphasize behaviour control and largely ignore physical plant/technology or work organization issues (such as the use of subcontractors or workload changes) are likely to prove more attractive because these approaches do not challenge existing authority structures and require minimal changes to existing work processes. In both Norway and Australia there is some evidence that the focus on the responsibility of management has translated into a bias towards individualized OHS-interventions, notwithstanding regulators’ goals (Chapman 2001; Christodolou 2002; Saksvik, Nytrø and Torvatn 2003). This problem has been identified in other countries, leading to a questioning of the value of the systems concept (Nichols and Tucker 2000). Nichols (1998) argues the rise of OHSM “systems” simply represents the introduction of “management-speak” into all areas of social policy discourse including OHS

(and including other terms like “continuous improvement” and “stakeholders”).

The extent to which OHS agencies in Norway and Australia have succeeded in implementing a more holistic SOHSM agenda, in comparison to countries like Canada and the U.S.A. that pursued a more voluntarist approach, require detailed investigation.

IMPLEMENTATION STRATEGIES

In Norway an implementation model was integrated in the revised regulation of 1997. However, as in Sweden (where the implementation model was incorporated in non-binding guidance material accompanying the regulation), the mandatory status of this model is somewhat ambiguous because authorities integrated the text of the revised regulation with recommendations into a brochure. Leaving this issue aside, advice for implementing IC entails a general participatory method based on five steps—preparation, information, assessment, making priorities, and implementation (Nytrø and Saksvik 2001). In keeping with the regulation, the implementation process places employee involvement and management initiatives as fundamental elements.

When these steps have been successfully implemented it is expected that the organization will have established a continuous OHSM process. In other words, establishing an IC system should not be regarded as a one-off project within the company but rather as an ongoing project that handles OHS issues. This is done through continuous improvement (and learning) in small steps that involve all employees and emphasize process as well as content, design as well as dialogue. In this sense, the implementation of the Norwegian regulation draws on elements of action research (Greenwood and Levin 1998) and action science (Argyris, Putnam and McLain Smith 1990).

In Scandinavian countries, there has been an ongoing debate as to whether the assessment stage is the ultimate step in the process for achieving employee involvement and for avoiding the “top-down” strategy the Norwegian regulation sometimes is accused of, especially when compared with the Danish approach that more closely follows the EU Directive by placing an emphasis on risk assessment (Nielsen 2000; Jensen 2002). A possible advantage of the Danish/EU strategy is the need to secure employee involvement in the collection of data, which makes it easier for workers to evaluate if employers are undertaking assessment tasks (Jensen 2002). The Danish approach uses the capacity and willingness of the employer to comply with this as the main criteria for evaluating the process in each enterprise. The Norwegian (and Swedish) systems are more

complicated given the emphasis on subsequent steps that have to be administered from the top. Even so, Danish research indicates that while large firms (though not small ones) appear to comply the objectives of the risk assessment requirement are not being fully realized (Jensen 2002).

Notwithstanding its limitations, there is evidence the Norwegian “top-down” regulatory strategy has affected change, probably due to the attention given to shop floor processes in the regulation guidelines and also due to the established climate of collaboration within many Norwegian companies. The Norwegian SOHSM regulation calls for employee/manager participation during the assessment and following stages (i.e., making priorities and devising appropriate improvements). In one study we found problems arose where enterprise managers tried to short-circuit processes down in the regulation and secure improvements before undertaking sufficient risk assessment, discussing priorities or formulating an action plan (Saksvik, Nytrø and Torvatn 2003). We know from earlier case studies that it is a strong industrial tradition “to act when and where it burns.” However, without a prioritization and plan, important problems can be ignored and there is also the risk of treating symptoms rather than causes. Case studies undertaken by other researchers reinforce this picture of qualified success. Lindoe and Hansen (2000: 437) found Internal Control had been adopted by large operators in the offshore oil and aluminum industries but there was a mismatch between the capacity of small to medium-sized firms to comply with IC requirements. Similarly, reviewing available evidence Gaupset (2000: 329) concluded that in the seven years following the regulation, about half of Norwegian enterprises had adopted IC in some form but the transformation of formal procedures into action remained a major challenge.

In Australia similar problems can be identified although generalizations are more difficult due to the hybrid nature of the system and a lack of systematic survey-based assessments. Case studies by Gallagher (2000) indicated that as far as assessing SOHSM in Australia, much the same criteria apply as have been identified in Norway. Ironically, most systematic assessment has focused on special interventions to address challenges to SOHSM in particularly problematic areas, most notably subcontracting and small business in the building and construction industry.

In New South Wales, the OHS Agency (WorkCover NSW) facilitated a memorandum of understanding (MOU) involving the 17 largest construction firms, unions and itself establishing a framework for enhancing OHSM, including setting minimum standards for all subcontractors. Implementation was supported by targeted enforcement and management system audits. Later analysis (WorkCover NSW 2001b: 7) revealed that signatories experienced a 25% improvement in OHS management methods and a 32%

decline in workers' compensation claims (almost four times the industry average) between 1998 and 2000. The assessment (WorkCover NSW 2001b: 8–9) identified a number of ongoing problems including work being awarded to cheap but poor OHS performing subcontractors, unrealistic work scheduling and a mismatch between formal documentary compliance and practice

In another state, Queensland, a similar initiative entailed the tripartite Building Workplace Health and Safety Industry Committee supporting the introduction of a scheme requiring all contractors and subcontractors (including small builders) to develop a “workplace health and safety plan” prior to commencing a project. As in NSW, the inspectorate undertook targeted auditing and the initiative was also subject to two independent reviews. The first (Mayhew et al. 1997) found plans were being implemented and had led to improvements in legal awareness, hazard reduction strategies and more frequent use of OHS checklists (though the take up was most pronounced amongst firms in close contact with industry associations and the inspectorate). A follow up study (Johnstone 1999: 33–38, 100–110) also endorsed the scheme but found compliance with plan requirements was lowest amongst small operators. Some inspectors lacked training or preferred the “old” prescriptive standards, and many operators had adopted a “tick and flick” approach to implementation. The Queensland government responded by simplifying requirements for small builders while simultaneously placing more stringent responsibilities on large contractors (Quinlan 2002: 243).

Despite attempts to extend the MOU scheme to other industries (such as hospitality), just how generalizable this scheme is without a high level of enterprise, union and regulatory involvement remains unclear.

The diversity of options available under Australia's hybrid system has contributed to a number of problems. First, some employers have bought OHSM “system” packages “off the shelf” with insufficient regard to the embedded presumptions (about causation and interventions) or the need to adapt them to their organization. While mass marketing of OHSM packages is common in many countries (even those with mandated SOHSM like Sweden and Norway) there is scope for a more diverse array of packages (including narrow behaviourist models) in countries where there is less regulatory direction in SOHSM. The implications of this warrant research. Second, while SOHSM in Australia purports to deal with both health and safety in practice the focus is on the latter. In Norway (and Sweden and Denmark) IC/risk assessment must include health although, again, implementation problems are not uncommon. Third, other recurring SOHSM problems in Australia include poor system design (only adopting features seen as “non-threatening” by management, over-emphasizing individual

behaviour and downplaying work organization) and reliance on a narrow set of audit tools or performance indicators open manipulation like lost time injury (Gallagher, Underhill and Rimmer 2001: vii). A common result is “paper” compliance with a flawed systems model. Finally, for all the concerns with a “top down” approach in Norway, Australian case studies (Chapman 2001; Christodolou 2002) suggest limited worker/union involvement in SOHSM (especially the critical risk assessment and system vetting stages).

It is by no means clear that regulators have targeted these problems although compliance programs are becoming more astute. An explosion killing two workers and injuring others at Esso’s Longford gas facility in Victoria in 1998 highlighted a number of limitations just identified. As a self-insurer, Esso had to meet the equivalent of SafetyMAP. The U.S.-parent derived 11-point Operations Integrity Management System at the plant made no reference to work organization or worker input. The resulting Royal Commission found that these omissions, and not inappropriate action by an operator as inferred by Esso, significantly contributed to the incident—a view echoed by the presiding judge in ensuing court proceedings (Hopkins 2000 and Jones 2001). However, there is also a serious question as to why government inspections failed to identify these deficiencies. It appears agencies are often satisfied with the fact that the employer has a system, rather than asking questions about its effectiveness until a serious incident such as Longford occurs. This has been identified as a major problem in Norway too. The shift from detailed specification inspections to systems inspections in Norway has led to much debate over the appropriate criteria for determining systems control, and also to the recognition that it is easier to assess noise levels than systems quality.

Implementation in both countries suffers from paper compliance, insufficient inspectoral oversight, over-reliance on management and inadequate worker input. Systematic OHSM has been seen as potentially freeing up inspectoral resources by internalizing management control. Even ignoring research which questions these savings (Needleman 2000), it should be acknowledged that the move from prescriptive standards entails significant training and logistical demands. In Norway around 250 inspectors cover 240,000 enterprises (of whom 14,784 received an inspection in 2000) while Australia with just over four times the population has around 850 inspectors. Even given the fact that well over 90% of enterprises in both countries are small, existing agency resources appear insufficient to perform routine inspections, let alone ensure systematic OHSM measures are implemented. These issues require detailed investigation. We are not claiming the Norwegian and Australian experience is identical. Implementation in Australia remains more problematic due to multiple

regulatory regimes and SOHSM models, comparatively fewer inspectoral resources and weaker levels of worker representation.

THE RELATIONSHIP BETWEEN SOHSM AND OTHER DEVELOPMENTS

In addition to the issues already discussed, our review identified a number of developments affecting SOHSM not only in Norway and Australia but also in other industrialized countries. Most notable here were the growth of precarious employment and small business, and the potential for contradictory logics behind organizational interventions.

Organizational restructuring and the growth of precarious employment and small business pose a number of threats to SOHSM (Gallagher, Underhill and Rimmer 2001:31–38; Quinlan and Mayhew 2000: 197). First, these changes reduce the proportion of the workforce directly employed by large organizations where SOHSM is most easily applied (Gallagher, Underhill and Rimmer 2001: viii; Walters 2001) and creates enclaves of workers on large work sites (such as subcontractors and leased workers) whose incorporation into OHSM is problematic. Downsizing can also affect SOHSM by removing experienced and knowledgeable staff (Winder, Gardner and Trethewey 2001: 76). The applicability of SOHSM to small employers has been seriously questioned notwithstanding some successful measures in the European Union, Australia and elsewhere (Gunningham and Johnstone 1999; Walters 2001). Second, the changes increase the number of workers in isolated and inadequately planned work settings (such as homes) and encourage potentially dangerous forms of work disorganization (such as under-qualified workers, or workers competing for jobs). Third, frequent job/occupation changes associated with the growth of precarious employment make it more difficult to detect/address insidious health risks such as exposure to hazardous substances. Fourth, these changes place additional demands on inspectorates and weaken compliance incentives among some employers. Fifth, these changes have weakened the level/quality of worker input, including the capacity of unions to vet OHSM performance.

Regulators have attempted to address these problems (see our earlier discussion and Einarsson 1998) and large employers, for example, have increasingly incorporated contractor provisions into their OHSM program. Such measures, while worthwhile, hardly scratch the surface of the problems just identified. While “the strategic management systems approach” is a common operational mode in larger organizations, this is not the case with most small and medium-sized enterprises (SME’s). Many smaller

enterprises lack either the resources or the competence to conduct assessments of their work environment or ready access to remedies.

These problems aside, SOHSM is being implemented alongside other organizational interventions, whose underlying logic may be incompatible with it. For example, health promotion activities by organizations may be primarily concerned with cutting costs, limiting employee participation in problem solving, and shifting attention away from organizational and environmental factors toward individual attitudes and behaviour (Bohle and Quinlan 2000). Generally, managers prefer individual level interventions such as employee assistance programs and stress management training and are less likely to support organizational changes aimed at reducing the organizational sources of stress (Murphy 1988; Reynolds and Briner 1994). They avoid issues concerning power, autonomy, and work organization, factors critical in understanding the development of occupational illness (Bohle and Quinlan 2000). Therefore, primary prevention strategies may reach limited support at the shop floor level even if it is emphasized that the work situation itself should be the initial focus of concern (Burke 1993; Hurrell and Murphy 1996).

CONCLUSION

In concluding this article we will address the most critical aspects regarding our research questions as well as identifying areas for future research. First, in assessing the nature and effectiveness of the systems approach, we found many similarities between Norway and Australia. Despite the different regulatory mechanism for implementing SOHSM this is not surprising because policymakers in both countries have drawn on the same international perspectives and standards such as ISO 9000 and 14000. We have also underlined the significant role management plays, both as formally specified in the regulations, and even more substantially in practice. In order to be effective, SOHSM requires independent vetting as well as design input and feedback loops. Government inspectorates lack the resources to perform the first task and, in practice, are excluded from the latter two roles. The Longford incident highlights the potential consequences of this deficiency even where an apparently detailed system is in place.

A not unrelated deficiency in SOHSM, which was identified in both countries, pertains to worker involvement. While Norwegian regulation accords a higher priority to employee involvement than equivalent Australian laws (including the 2001 NSW Risk Regulation), giving effect to this objective has proved difficult in both countries. Changes in the industrial relations climate have contributed, although the regulatory and

institution shift has been more pronounced in Australia. Whether the substantive differences in industrial relations and the labour market (see below) have more subtle effects on the implementation of SOHSM requires more detailed investigation. The importance of worker participation in resolving OHS problems has been identified in disaster inquiries, even in the U.S.A. where legislation does little to promote this (see US Chemical Safety and Hazards Investigation Board 1998:4). The Norwegian and Australian experience is therefore reflective of a broader issue concerning OHS management.

In terms of the question posed about the implementation process in both countries, we identified an apparently significant difference regarding the absence of uniform implementation model in Australia. However, the significance of this should not be exaggerated. With the partial exception of the NSW Risk Assessment Regulation, there is much similarity in the implementation strategies of the different Australian jurisdictions. Further, mandating a uniform implementation process does not guarantee that this will in fact occur and the issue of uniformity is also debated in Norway and other Scandinavian countries.

More important perhaps, were our findings relating to the effectiveness of implementation processes in ensuring that SOHSM achieved its objectives. In this regard we found that paper compliance, or the documentation of procedures not translating into actual practice, represented a serious limitation in both countries. This raises critical questions about SOHSM, not just in terms of devising ways of addressing this limitation but regarding the alleged superiority of monitoring systems compliance rather than compliance with specific OHS standards. Unless these concerns are addressed, the SOHSM approach could be discredited in the future. Instances such as Longford where the existence of a system had little effect in preventing a disaster highlight the need for worker involvement to promote two way communication and ameliorate the “top down” bias in systems, and to address changes to work organization (as a result of downsizing, outsourcing and the like). Whether, this balance can be achieved in practice is a moot point for future research.

Following on from the last point, the growth of contingent work arrangements and small business constitutes a serious impediment to SOHSM. Both Norway and Australia provide instances where these challenges have been met, and indeed incorporated into SOHSM, but whether such interventions can be generalized is open to question (especially in the context of limited inspectorate resources). The logic behind organizational interventions when work is being increasingly individualized also requires critical attention. The capacity of a relatively rigid SOHSM model to adapt to increasingly fractured and changing work arrangements represents a

question that would benefit from further and more detailed field-work based comparative research.

■ REFERENCES

- ACTU. 2001. *Pilot Survey of Health and Safety Representatives: A Report to the National Occupational Health and Safety Commission*. Melbourne: Australian Council of Trade Unions.
- ARGYRIS, C., R. PUTNAM and D. McLAIN SMITH. 1990. *Action Science*. Oxford: Jossey-Bass Publishers.
- AS/NZS 4804. 1997. *Occupational Health and Safety Management Systems: General Guidelines on Principles, Systems and Supporting Techniques*. Standards Australia, Sydney and Standards New Zealand.
- AS/NZS 4801. 2000. *Occupational Health and Safety Management Systems: Certification*. Standards Australia, Sydney and Standards New Zealand.
- BOHLE, P. and M. QUINLAN. 2000. *Managing Occupational Health and Safety: A Multidisciplinary Perspective*. Melbourne: Macmillan.
- BOTTOMLEY, B. 1999. *Occupational Health and Safety Management Systems: Strategic Issues*. Sydney: National Occupational Health and Safety Commission.
- BRINER, R. B. and S. REYNOLDS. 1999. "The Costs, Benefits, and Limitations of Organizational Level Stress Interventions." *Journal of Organizational Behavior*, Vol. 20, No. 5, 647–664.
- BROOKS, A. 2001. "System Standard and Performance Standard Regulation of Occupational Health and Safety: A Comparison of the European Union and Australian Approaches." *Journal of Industrial Relations*, Vol. 43, No. 3, 361–386.
- BURGESS, J. and A. de RUYTER. 2000. "Declining Job Quality in Australia: Another Hidden Cost of Unemployment." *Economic and Labour Relations Review*, Vol. 11, No. 2, 246–269.
- BURKE, R. J. 1993. "Organisational-Level Interventions to Reduce Occupational Stressors." *Work and Stress*, Vol. 7, No. 1, 77–87.
- CARSON, W. G. and C. HENENBERG. 1988. "The Political Economy of Legislative Change: Making Sense of Victoria's New Occupational Health and Safety Legislation." *Law in Context*, Vol. 6, No. 1, 1–19.
- CHAPMAN, K. 2001. "The Occupational Health and Safety Management System: A Tool of the Trade Enabling Change... or is it?" Unpublished BA honours thesis, University of New South Wales.
- CHRISTODOLOU, A. 2002. "The Development and Implementation of Systematic Occupational Health and Safety Management at Qantas Airways." Unpublished B.Soc Sc honours thesis, University of New South Wales.
- EINARSSON, S. 1998. "The Relationship between Construction Contractors and their Clients in the Petrochemical and Related Industries." *Safety Science Monitor*, Vol. 5, No. 2, 1–19.

- ELDEN, M. 1983. "Democratization and Participative Research in Developing Local Theory." *Journal of Occupational Behavior*, Vol. 4, 21–33.
- FRICK, K., P. L. JENSEN, M. QUINLAN and T. WILTHAGEN, eds. 2000. *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. Oxford: Pergamon.
- GALLAGHER, C. 2000. "Occupational Health and Safety Management Systems: Types and Effectiveness." Unpublished PhD thesis, Deakin University, Melbourne.
- GALLAGHER, C., E. UNDERHILL and M. RIMMER. 2001. *Occupational Health and Safety Management Systems: A Review of their Effectiveness in Securing Health and Safe Workplaces*. Sydney: National Occupational Health and Safety Commission.
- GAUPSET, S. 2000. "The Norwegian Internal Control Reform: An Unrealized Potential?" *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. K. Frick, P. L. Jensen, M. Quinlan and T. Wilthagen, eds. Oxford: Pergamon, 329–348.
- GREENWOOD, D. J. and M. LEVIN. 1998. *Introduction to Action Research*. Thousand Oaks, Calif.: Sage Publications.
- GUNNINGHAM, N. and R. JOHNSTONE. 1999. *Regulating Workplace Safety: Systems and Sanctions*. Oxford: Oxford University Press.
- GUSTAVSEN, B. and G. HUNNIUS. 1981. *New Patterns of Work Reform: The Case of Norway*. Oslo: University Press.
- GUSTAVSEN, B. 1985. "Workplace Reform and Democratic Dialogue." *Economic and Industrial Democracy*, Vol. 6, 461–479.
- GUSTAVSEN, B. 1992. *Dialogue and Development*. Assen/Maastricht: Van Gorcum.
- HAMMER, T., B. INGEBRIGTSEN and J. I. KARLSEN. 1994. "Organizational Renewal: The Management of Large-Scale Organizational Change in Norwegian Firms." CAHRS, Working Paper 94–21, Cornell University.
- HOFSTEDE, G. 1991. *Cultures and Organizations. Software of the Mind*. London: McGraw-Hill.
- HOPKINS, A. 2000. *Lessons from Longford*. Sydney: CCH.
- HURRELL, J. J. and L. R. MURPHY. 1996. "Occupational Stress Intervention." *American Journal of Industrial Medicine*, Vol. 29, 338–341.
- JAMIESON, S. and M. WESTCOTT. 2001. "Occupational Health and Safety Act 2000: A Story of Reform in New South Wales." *Australian Journal of Labour Law*, Vol. 14, 177–189.
- JENSEN, P. L. 2002. "Assessing Assessment: The Danish Experience of Worker Participation in Risk Assessment." *Economic and Industrial Democracy*, Vol. 23, No. 2, 201–227.
- JOHNSTONE, R. 1999. "Evaluation of Queensland Construction Safety 2000 Initiative." Queensland Division of Workplace Health and Safety and National Occupational Health and Safety Commission, Canberra.
- JONES, K. 2001. "Esso — Guilty." *SafetyOnline*, 29 August.
- LANDSBERGIS, P. A., P. L. SCHNALL, J. E. SCHWARTZ, K. WARREN and T. G. PICKERING. 1995. "Job Strain, Hypertension, and Cardiovascular Disease."

- Organizational Risk Factors for Job Stress*. S. L. Sauter and L. R. Murphy, eds. Washington: American Psychological Association, 97–113.
- LERNER, M. 1982. "Stress at the Workplace." *Issues in Radical Therapy*, Vol. 10, 14–16.
- LINDÖE, P. H. and K. HANSEN. 2000. "Integrating Internal Control into Management Systems: A Discussion based on Norwegian Case Studies." *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. K. Frick, P. L. Jensen, M. Quinlan and T. Wilthagen, eds. Oxford: Pergamon, 437–455.
- MAYHEW, C., C. YOUNG, R. FERRIS and C. HARTNETT. 1997. *An Evaluation of the Impact of Targeted Interventions on the OHS Behaviour of Small Business Building Industry Owners/Managers/Contractors*. Workplace Health and Safety Program (DTIR) and National Occupational Health and Safety Commission, AGPS, Canberra.
- MOOREHEAD, A., M. STEELE, M. ALEXANDER, K. STEPHEN and L. DUFFIN. 1997. *Changes at Work: The 1995 Australian Workplace Industrial Relations Survey*. Melbourne: Longman.
- MURPHY, L. R. 1988. "Workplace Interventions for Stress Reduction." *Causes, Coping and Consequences of Stress at Work*. C. L. Cooper and R. Payne, eds. New York: John Wiley.
- NEEDLEMAN, C. 2000. "OSHA at the Crossroads: Conflicting Frameworks for Regulating OHS in the United States." *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. K. Frick, P. L. Jensen, M. Quinlan and T. Wilthagen, eds. Oxford: Pergamon, 76–86.
- NICHOLS, T. 1998. "Review Article: Health and Safety at Work." *Work, Employment and Society*, Vol. 12, 367–374.
- NICHOLS, T. and E. TUCKER. 2000. "OHS Management Systems in the U.K. and Ontario, Canada: A Political Economy Perspective." *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. K. Frick, P. L. Jensen, M. Quinlan and T. Wilthagen, eds. Oxford: Pergamon, 285–310.
- NIELSEN, K. 2000. "Organization Theories Implicit in Various Approaches to OHS Management." *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. K. Frick, P. L. Jensen, M. Quinlan and T. Wilthagen, eds. Oxford: Pergamon, 99–124.
- NORWEGIAN LABOUR INSPECTORATE. 2001. www.arbeidstilsynet.no/miinfo.
- NYTRØ, K., P. Ø. SAKSVIK and H. TORVATN. 1998. "Organizational Prerequisites for the Implementation of Systematic Health, Environment, and Safety Work in Enterprises." *Safety Science*, Vol. 30, 297–307.
- NYTRØ, K., P. Ø. SAKSVIK, A. MIKKELSEN, P. BOHLE and M. QUINLAN. 2000. "The Role and Effects of Process in Occupational Stress Interventions." *Work and Stress*, Vol. 14, No. 3, 213–225.
- NYTRØ, K. and P. Ø. SAKSVIK. 2001. "Systematic OHS-Work in Norway: The Importance of In-House Competence and a Model for Implementation." *Journal of Occupational Health and Safety—Australia and New Zealand*, Vol. 17, 507–520.

- QUINLAN, M. 1999. "Promoting Occupational Health and Safety Management Systems: A Pathway to Success—Maybe." *Journal of Occupational Health and Safety—Australia and New Zealand*, Vol. 15, 535–542.
- QUINLAN, M. and C. MAYHEW. 2000. "Precarious Employment, Work Re-Organisation and the Fracturing of OHS Management." *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. K. Frick, P. L. Jensen, M. Quinlan and T. Wilthagen, eds. Oxford: Pergamon, 175–198.
- QUINLAN, M. 2002. "Developing Strategies to Address OHS and Workers' Compensation Responsibilities Arising from Changing Employment Relationships." Report commissioned by the WorkCover Authority of New South Wales, Sydney.
- REDLINGER, C. and S. LEVINE, eds. 1996. *New Frontiers in Occupational Health and Safety: A Management Systems Approach and the ISO Model*. Fairfax, Virginia: AIHA Publications.
- REYNOLDS, S. and R. B. BRINER. 1994. "Stress Management at Work: With Whom, for Whom and to What Ends?" *British Journal of Guidance and Counselling*, Vol. 22, 75–89.
- REYNOLDS, S. and D. SHAPIRO. 1991. "Stress Reduction in Transition: Conceptual Problems in the Design, Implementation, and Evaluation of Worksite Stress Management Interventions." *Human Relations*, Vol. 44, 717–733.
- RUBIN, H. J. and I. S. RUBIN. 1995. *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks: Sage Publications.
- SAKSVIK, P. Ø., K. NYTRØ, and H. TORVATN. 2003. "Systematic Occupational Health and Safety Work in Norway: A Decade of Implementation." *Safety Science* (in press).
- SAKSVIK, P. Ø., K. NYTRØ, A. MIKKELSEN and C. DAHL-JØRGENSEN. 2002. "A Process Evaluation of Individual and Organizational Occupational Health and Stress Interventions." *Work and Stress*, Vol. 16, No. 1, 156–170.
- SHAW, A. and V. BLEWETT. 2000. "What Works? The Strategies which Help to Integrate OHS Management within Business Development and the Role of the Outsider." *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. K. Frick, P. L. Jensen, M. Quinlan and T. Wilthagen, eds. Oxford: Pergamon, 457–473.
- SPECTOR, B. and M. BEER. 1994. "Beyond TQM programmes." *Journal of Organizational Change*, Vol. 7, 63–70.
- THORSRUD, E. and F. E. EMERY. 1970. *Towards a New Organization of Enterprises*. Oslo: Tanum.
- TUCKER, E. 1995. "And Defeat Goes On: An Assessment of Third-Wave Health and Safety Regulation." *Corporate Crime: Contemporary Debates*. F. Pearce and L. Snider, eds. Toronto: University of Toronto Press.
- U.S. CHEMICAL SAFETY AND HAZARDS INVESTIGATION BOARD. 1998. "Investigation Report: Explosives Manufacturing Incident Sierra Chemical Company, Mustang Nevada 7 January 1998." Report No. 98–001–I–NV, CSHIB, Washington.

- WALTERS, D. 2001. *Health and Safety in Small Enterprises: European Strategies for Managing Improvement*. Brussels: PIE-Peter Lang.
- WALTERS, D. and K. FRICK. 2000. "Worker Participation in the Management of Occupational Health and Safety: Reinforcing or Conflicting Strategies." *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. K. Frick, P. L. Jensen, M. Quinlan and T. Wilthagen, eds. Oxford: Pergamon, 43–66.
- WALTERS, D. and P. JENSEN. 2000. "The Discourses and Purposes behind the Development of the EU Framework Directive." *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. K. Frick, P. L. Jensen, M. Quinlan and T. Wilthagen, eds. Oxford: Pergamon, 87–98.
- WINDER, C., D. GARDNER and R. TRETHERY. 2001. "Occupational Health and Safety Management Systems: Recent Australasian Developments." *Journal of Occupational Health and Safety—Australia and New Zealand*, Vol. 17, No. 1, 67–77.
- WORKCOVER NSW. 2001a. "Summary of OHS Regulation 2001." *WorkCover Authority of New South Wales*, Sydney.
- WORKCOVER NSW. 2001b. "Safely Building New South Wales: Priority Issues for Construction Reform." *WorkCover New South Wales*, Sydney.

RÉSUMÉ

La régulation de la gestion systématique de la santé et de la sécurité au travail : une comparaison de l'expérience australienne et norvégienne

La promotion de la gestion systématique de la santé et de la sécurité au travail (SOHSM) représente un réalignement significatif, quoique plutôt récent, d'une stratégie de régulation qui a été envisagée par plusieurs, sinon la plupart, des pays industrialisés (et aussi par quelques pays en voie de développement). Cependant, jusqu'ici, ce glissement a fait l'objet de peu d'évaluation critique au plan de ses origines et de ses implications, et on ne sait pas dans quelle mesure l'expérience de ces arrangements diffèrent d'un pays à un autre. Cet essai se veut le départ d'un processus visant à apporter une réponse à ces questions en comparant les origines et la nature des régimes SOHSM en Norvège et en Australie. En ce faisant, ce travail identifie et analyse les défis majeurs qui se présentent à cette approche de la gestion systématique de la santé et de la sécurité occupationnelles. Avant d'analyser ce développement dans les deux pays, il s'avère important de décrire en quoi consiste ce glissement vers une approche plus systématique et pourquoi ceci a été retenu comme une stratégie principale de régulation dans plusieurs pays industrialisés.

Le développement qui a pris racine dans des normes prescriptives en matière de SOHSM peut être perçu comme étant le cumul d'une troisième vague de réglementation qui prit son essor au début des années 1970 et qui associait des mécanismes de participation des travailleurs avec un mouvement vers des normes partielles d'autorégulation. Les questions de recherche qu'on se posait étaient les suivantes : comment la gestion systématique de la santé et de la sécurité au travail a-t-elle été façonnée par les systèmes de relations industrielles des deux pays ? Sur quel type de système de gestion le SOHMS s'appuie-t-il ? Comment le SOHMS a-t-il été mis en œuvre dans les deux pays ? Est-ce que le SOHMS est compatible avec d'autres développements dans les domaines de l'organisation du travail et dans les affaires en général ?

Méthodologie. Cet essai utilise comme base l'analyse et la synthèse de la recherche disponible et du matériel publié. À cela s'ajoute notre propre recherche conduite en Norvège et en Australie au cours de la dernière décennie. Ce travail a fait appel à des enquêtes réalisées chez les gestionnaires et sur les lieux de travail. De plus, des entrevues semi-structurées ont été conduites auprès de décideurs, de dirigeants, de permanents syndicaux et des études détaillées de documents de politiques gouvernementales et de rapports ont été effectuées. Les deux auteurs ont participé au développement et à la mise en œuvre de la gestion systématique de la santé et de la sécurité au travail aux niveaux de l'administration et des lieux de travail.

Analyse des systèmes de relations industrielles. L'importance des systèmes de relations industrielles en matière de santé et sécurité au travail se situe à deux niveaux : premièrement, l'envergure de la négociation collective, l'encouragement ordonné à la syndicalisation (ou l'inverse) et les mécanismes de participation influenceront le SOHSM, même lorsque la législation sur un environnement de travail au plan de la santé et de la sécurité occupationnelles prévoit déjà une structure parallèle favorisant la participation des travailleurs à la prise de décision; deuxièmement, des normes minimales de travail intégrées aux systèmes de relations industrielles (salaires, heures de travail, absence d'écart en termes d'équité) fournissent une base à l'appui des standards en matière de santé et de sécurité en général et, en particulier, à la gestion systématique de la santé et de la sécurité au travail. L'orientation récente des développements en Australie en matière de politique de relations industrielles va dans le même sens que celle qu'on observe aux États-Unis et en Grande-Bretagne, c'est-à-dire dans le sens d'un accroissement du rôle des ententes sur la base de l'établissement (incluant les contrats individuels de travail et des accords en l'absence d'un syndicat). À cela s'ajoute le déclin correspondant du rôle des tribunaux, des sentences et des syndicats; s'ajoute également l'éloignement du

modèle scandinave (où la centralisation, l'apport des syndicats demeurent encore significatifs) dont la Norvège constitue en exemple.

Le SOHSM servant de base au développement de systèmes de gestion efficace. L'approche systématique est un élément fondamental des législations propres à la Norvège et à l'Australie. Ce qui la distingue des autres approches réside dans le fait qu'elle ne se centre pas uniquement sur la conformité à des normes prescriptives relatives à un éventail de situations de risque. L'encadrement législatif vise plutôt à s'assurer que les employeurs vont mettre sur pied un ensemble cohérent de structures et de procédures pour identifier, évaluer et contrôler tous les risques importants en matière de santé et de sécurité. Au même moment, les avantages potentiels de cette approche en termes de flexibilité, d'amplitude et d'une préoccupation pour les processus (pas uniquement pour les résultats) comportent aussi des risques de confusion ou d'abus qu'on pourrait attribuer à la grande marge de manœuvre dont disposent les employeurs au moment de décider de la forme de conformité à assurer et à leur influence dans la conception et la mise en œuvre du système. Le problème de la grande influence des dirigeants dans la conception et l'implantation d'une gestion systématique de la santé et de la sécurité au travail n'est pas particulier à la Norvège, ni à l'Australie. On l'a déjà repéré dans d'autres pays au point de questionner même la valeur du concept de « systèmes ». Une question importante consiste à se demander dans quelle mesure les agences d'OHS en Norvège (avec son approche de collaboration plus marquée au plan des traditions de vie ouvrière) et en Australie ont réussi à mettre en place un agenda plus global, lorsqu'on le compare à d'autres pays tels que le Canada et les États-Unis reconnus pour leur approche plus volontariste. C'est là une question qui implique une recherche plus détaillée.

Des stratégies d'implantation. En Norvège, un modèle de mise en œuvre a été incorporé à la législation révisée de 1997 par le biais d'une méthode générale de participation fondée sur les cinq points suivants : la préparation, l'information, l'évaluation, la définition de priorités et l'implantation. En Australie, on assiste à la mise en œuvre d'un système un peu plus hybride, dont des modèles initiés par l'État et des modèles purement volontaires retenus par des entreprises ou encouragés par des conseillers. En général, on ne retrouve pas dans ces modèles les évaluations basées sur des données comme c'est le cas en Norvège. En tout et partout, nous avons noté que dans ces deux pays le processus de mise en œuvre souffre d'une conformité aux règles, d'une surveillance inadéquate de la part des inspecteurs, ces derniers accordant trop leur confiance en des initiatives patronales, et également d'une contribution insuffisante de la part des travailleurs et de leurs représentants.

La cohérence entre le SOHMS et l'évolution des affaires en général. Un des défis majeurs que l'approche SOHMS doit relever consiste dans la

montée de la précarité de l'emploi et des aménagements ponctuels du travail, la croissance de la petite entreprise et la présence de lieux de travail désorganisés (due en partie à des facteurs déjà mentionnés et aussi aux restructurations ou à la réduction de la taille des établissements). Le développement des aménagements temporaires du travail et celui de la petite entreprise entraînent de sérieux problèmes, parce qu'ils semblent réduire chez les employeurs leur capacité et leur intérêt à mettre en œuvre une gestion systématique de la santé et de la sécurité au travail. La Norvège et l'Australie offrent deux exemples où le législateur s'est attaqué à ce problème, quoique les corrections apportées demeurent sensiblement limitées pour le moment.

Conclusions et implications. La tendance vers l'adoption d'une gestion systématique de la santé et de la sécurité représente un glissement important de la stratégie réglementaire, sans pour autant devenir un sujet de recherche poussé, encore moins l'objet de comparaisons. En se fondant sur la documentation disponible, notre étude a mis à jour bien des similitudes et également des différences importantes entre les deux pays sous observation. Pour être efficace, une telle gestion nécessite un mécanisme indépendant de révision aussi bien qu'une contribution au plan de la conception et des boucles de rétroaction. Les organismes d'inspection des États ne disposent pas suffisamment de ressources pour s'acquitter de la première tâche et ils sont en pratique tenus à l'écart des deux derniers rôles. Le niveau d'implication des travailleurs demeure un sérieux problème dans les deux pays. Des modifications au climat des relations patronales-syndicales dans les deux pays en sont la cause, même si le glissement au plan de la réglementation et au plan institutionnel a été plus prononcé en Australie. Il est possible qu'une différence importante et évidente entre les deux pays se situe au niveau de la mise en œuvre, là où l'absence d'un modèle uniforme implique qu'il est plus difficile en Australie de s'entendre sur des normes. Le problème de la sur-conformité à la règle ou le fait que les procédures ne se traduisent pas dans la pratique quotidienne se présente comme un défi important au moment de la mise en œuvre d'une approche systématique dans les deux pays. Au sujet du SOHSM, cela soulève des questions cruciales à la fois en termes d'une recherche des façons de corriger cette limite et en termes d'une supériorité observée de gestion de la conformité des systèmes plutôt que la conformité aux normes spécifiques du système de santé et de sécurité. Si l'on ne réussit pas à relever ces défis, l'approche d'une gestion systématique peut être discréditée dans le futur. La manière dont une approche relativement sévère en matière de SOHSM peut survivre dans un contexte d'aménagement du travail constamment changeant apparaît aussi comme un sérieux défi. Ce sont là des sujets qui bénéficieraient d'une recherche comparative impliquant une étude sur le terrain.