

# ISSUES IN THE ASSURANCE AND VERIFICATION OF WORK HEALTH AND SAFETY INFORMATION



February 2014



This report was co-funded by Safe Work Australia, Safety Institute of Australia and CPA Australia.

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Macquarie Lighthouse Press  
Macquarie University NSW 2109

ISBN 978-1-74361-358-0 [PDF]  
ISBN 978-1-74361-359-7 [DOCX]

## Foreword

Safe Work Australia is working closely with the International Governance and Performance (IGAP) Research Centre at Macquarie University, to standardise and improve work health and safety reporting by businesses and organisations. This work is being co-funded by the Safety Institute of Australia and CPA Australia.

Currently there is a lack of standardised and accepted indicators to measure the work health and safety performance of organisations and businesses at the organisational level. Work health and safety information can and is being reported on a voluntary basis, however reporting is often selective and inconsistent. This hinders comparisons of work health and safety performance and due diligence reporting over time and across organisations.

This paper is one of a series of research papers that will inform a broader three staged policy development project taking place over the next three years. The aim of the project is to develop a standardised set of indicators businesses can use in annual reports as well as guidelines for the development of lead and lag indicators relevant to the size and nature of the business.

Stage one involves developing a draft set of external and internal indicators to improve organisational level work health and safety reporting and to help Officers meet their due diligence obligations under the model Work Health and Safety Act.

Stage two involves testing of the work health and safety indicators and guidelines. Testing will be carried out using a mixed method approach involving case studies, interviews and surveys in selected businesses across Australia. A pilot test will be conducted and an assessment of the outcomes undertaken.

Stage three will involve a review of the research outcomes, which will be used to develop policy options for the consistent use of standardised work health and safety indicators and guidelines.

Safe Work Australia

February 2014

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## 1. Introduction

Work health and safety<sup>1</sup> has increased in prominence in recent years. This has occurred as part of a broader trend towards increased social responsibility and integrated reporting by organisations in response to community demand for greater accountability, sustainability and transparency. Non-financial performance measures have become increasingly important in an information-led society. Recent corporate accounting and financial scandals have further highlighted the importance of governance systems within organisations, in relation to both financial and non-financial matters.

This paper provides a brief context of the work health and safety regulatory framework and the benefits of a work health and safety management system (WHSMS). It focuses on work health and safety audit issues including WHSMS implementation issues that have work health and safety audit implications. There is potential for work health and safety audits to learn from developments in financial information assurance including the combined assurance model.

## 2. Executive summary

In Australia employers have a general legal duty to provide a safe working environment for workers but retain discretion as to the means in which this is achieved. Guidance and tools are available in various forms however in general these are not mandatory. Harmonised WHS laws that commenced in most jurisdictions in 2012 continue to provide employers with broad discretion over work health and safety processes and policies within the workplace.

The ultimate goal of a WHSMS is to create a safety culture in the workplace. Much literature highlights the importance of workplace safety to organisational performance. An effective WHSMS turns upon organisational dynamics, the commitment and involvement of management and workers and appropriate use of audit. As organisations themselves operate in a dynamic economy, market forces and market structure can have an indirect influence on the operation of WHSMSs in practice. A poor WHSMS runs the risk of becoming an end in itself which does not serve the purpose of delivering safety. It can mask workplace safety issues as has been illustrated in high-profile disasters such as the Esso plant explosion of Victoria in 1995.

Work health and safety audits are necessary to ensure compliance and continual improvement of the WHSMS. The challenges for work health and safety audits can be linked to three principal drivers: organisational dynamics, discretion in approach and the qualitative and subjective nature of safety information. The factors that affect the operation of the WHSMS can carry implications for work health and safety audit. An ineffective work health and safety audit risks not only being a redundant process but may also have negative feedback effects on the work health and safety.

Developments in financial information assurance, namely standardisation in terminology and methodology, may prove beneficial to work health and safety audits. Work health and safety audits may also benefit from adopting a combined assurance model approach. However, challenges exist in tailoring such approaches to the idiosyncrasies of work health and safety.

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<sup>1</sup> This paper uses the term 'work health and safety' to refer to both 'work health safety' and 'occupational health and safety' (OHS), which are used interchangeably in the literature and in practice. 5

### 3. Work health and safety regulatory framework

#### 3.1. Work health and safety law

In Australia regulation of work health and safety is governed by the state, territory and federal governments. The general regulatory approach adopted by the jurisdictions is an outcomes based approach combining general legislative duties with self-regulation by organisations. Employers have a general duty to ensure workplace safety under law. However, they are left to determine how to satisfy this general duty as the legislation is not prescriptive in this regard.

The Australian approach is modelled on the 'Robens model' following recommendations by the Robens Committee in the United Kingdom (UK) in 1972 (WRMC, 2008, p. 2). The Robens model replaced prescriptive legislation with a three-tiered system comprising a general overarching law supported by regulations and codes of practice. The Australian approach follows a broader shift in work health and safety policy among most industrialised countries towards greater worker participation and self-regulation which began in the 1970's (Saksvik and Quinlan, 2003, p. 34).

In January 2012 harmonised work health and safety laws commenced operation in most jurisdictions following a lengthy process that began in February 2006 when the Council of Australian Governments (COAG) agreed to improve efforts in the harmonisation of work health and safety laws. In February 2008 model legislation was agreed upon as the way forward for achieving harmonisation. This was followed in July 2008 by an unprecedented intergovernmental agreement by all jurisdictions to adopt model work health and safety laws by the end of 2011. The model Work Health and Safety Act (WHS Act) was developed over 2010-2011 and enacted as mirror legislation in all jurisdictions except Victoria and Western Australia. Model regulations were finalised in November 2011. Model codes of practice have also gradually been released on various topics and are an ongoing work in progress. At the time of writing harmonised legislation has been passed by all the jurisdictions except Victoria and Western Australia.

#### 3.2. Duty of care

Under the model WHS Act a person conducting a business or undertaking (PCBU) has a primary duty of care to ensure the safety of workers engaged in work so far as "reasonably practicable".<sup>2</sup> The legislation specifically requires the provision of the following "so far as reasonably practicable":<sup>3</sup>

- safe working environment
- safe plant and structures
- safe systems of work
- safe use, handling and storage of plant, structures and substances
- adequate facilities for the welfare of workers at work
- information, training, instruction and supervision necessary to protect health and safety, and
- monitoring of workers and workplace conditions to prevent injury and illness.

<sup>2</sup> Model WHS Act, s19(1). All section references refer to the model WHS Act unless otherwise expressed.

<sup>3</sup> s19(3).

Further, the WHS Act defines what is “reasonably practicable”.<sup>4</sup> It requires the PCBU consider and weigh all relevant matters including the following:

- likelihood of the risk or hazard occurring
- degree of harm involved
- reasonable knowledge (actual and imputed) of the risk and ways to eliminate or minimise it
- availability and suitability of measures to eliminate or minimise the risk, and
- costs of risk mitigation and whether they are “grossly disproportionate” to the risk.

Hence the model WHS Act continues to adopt the Robens model of providing general duties without a prescriptive approach. The PCBU generally retains discretion as to whether and what form of WHSMS to implement.

### 3.3. Duty of officers

Under the model WHS Act the duty of care is imposed on employers referred to as a “person conducting a business or undertaking”.<sup>5</sup> An “officer” of the PCBU is required to “exercise due diligence” to ensure compliance with duties and obligations under the model WHS Act.<sup>6</sup> The positive duty on officers marks a policy shift away from the previous ‘accessorial’ or ‘attributed’ liability to officers (Explanatory Memorandum (EM<sup>7</sup>) to the model WHS Act, para. 66). The continuous duty requires proactive steps to ensure compliance with the model WHS Act (para. 66). The PCBU and its officer(s) are capable of being prosecuted independently of each other<sup>8</sup>

An ‘officer’ is defined as:

- *public sector*: a person who makes or participates in decision making that affects the whole or a substantial part of business or undertaking of government (but not a government minister or elected member of a local authority acting in that capacity) or of a public authority.<sup>9</sup>
- *private sector*: an “officer” as defined under corporations law. This refers to:
  - a company director or person who makes or participates in decision making that affects the whole or a substantial part of the business
  - a person who has the capacity to significantly affect the company’s financial standing, and
  - a person in accordance with whose instructions or wishes company directors are accustomed to act,

excluding professional advisors, receivers, administrators, liquidators and partners of a partnership.<sup>10</sup>

<sup>4</sup> s18.

<sup>5</sup> s19. A PCBU disregards whether or not the business or undertaking is conducted with other parties or for profit (s5(1)). It excludes volunteer associations and elected members of a local council (ss5(5) and (7)). In relation to partnerships, each partner is considered to be a PCBU rather than an officer of a PCBU (ss4 (‘officer’) and 5(3)). An “officer” in that capacity alone is not a PCBU (s5(4)).

<sup>6</sup> s27.

<sup>7</sup> The explanatory memorandum is to the ‘model’ WHS Act. Some jurisdictions may have developed their own EM when enacting the WHS laws.

<sup>8</sup> s27(4).

<sup>9</sup> ss4 (‘officer’), 247 and 252.

<sup>10</sup> *Corporations Act 2001* (Cth), s9; WHS Act s4 (‘officer’). For partnerships, each partner is considered to be a PCBU: s5(3).

'Due diligence' is defined to include taking "reasonable steps" toward the following:<sup>11</sup>

- acquire and maintain current knowledge of work health and safety matters
- understand the nature of the organisation's operations and general hazards and associated risks
- ensure appropriate resources and processes to eliminate or minimise work health and safety risks
- ensure appropriate processes for the management of information on work health and safety incidents, hazards and risks and the timely response to such information
- ensure appropriate processes for compliance with duties and obligations under the model WHS Act, including incident reporting, worker consultations and worker training, and
- verification of the provision and use of resources and processes mentioned above.

According to the EM to the model WHS Act officers' obligations under the Act are intended to be "directly related to the influential nature of their position" (para. 70). Where officers rely on the expertise of managers or other persons "that expertise must be verified and the reliance must be reasonable" (para. 70).

### **3.4. Standards**

Work health and safety reporting and audit practices vary across organisations and jurisdictions as there are no mandatory uniform work health and safety standards in Australia. The main work health and safety audit guidance in use within Australia are the AS/NZS 4801 and OHSAS 18001 standards and self-insurer audit tools.

The lack of a uniform regime effectively increases transaction costs of the market by raising the understanding requirements of users of work health and safety reports and audits. The need to understand various standards and guidance also increased the demand placed on auditors and the challenge of providing complete training in work health and safety reporting and audit. Standardisation can be complex as risks and costs vary across organisations due to factors such as industry, size, nature of organising work and worker structure.

#### **3.4.1. AS/NZS 4801 and AS/NZS 4804**

AS/NZS 4801:2001 (Occupational health and safety management systems—Specification with guidance for use) contains guidance on establishing an audit framework. It is principally directed at independent external audits although it can also provide reference for internal audit procedures. The standard was first published by the Joint Standards Australia and Standards New Zealand Committee (JSA/SNZ) in 2000 and subsequently updated in 2001.

AS/NZS 4804:2001 (Occupational health and safety management systems— General guidelines on principles, systems and supporting techniques) contains general guidance on how to establish a WHSMS in an organisation as well as continuous improvement and resources required. The standard was first published by the JSA/SNZ in 1997 and subsequently updated in 2001.

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<sup>11</sup> s27(5).

Both standards follow a general structure of policy, planning, implementation, measurement/evaluation and review. Although they share common management system principles with standards for environmental management systems and quality management systems they are more aligned to risk management principles and methods. AS/NZS 4804:2001 is also envisaged to be more applicable to organisations in general than AS/NZS 4801:2001. For example *SafetyMAP* is WorkSafe Victoria's equivalent tool for AS/NZS 4801:2001 and follows the same framework (WorkSafe Victoria).

### 3.4.2. National Self-Insurer WHS Audit Tool (NAT)

The National Self-Insurer Work Health and Safety Audit Tool (NAT) was developed by a multi-jurisdictional working group comprising various regulatory bodies which was established in 2005 and tasked with responsibility for the development of a nationally consistent work health and safety audit program and guidelines. The NAT was first published in 2007 and subsequently re-published in 2009 following a review. The NAT is based on AS/NZS 4801:2001 and other industry audit tools that were commonly used at the time of its development such as the various state regulators' self-insurance tools. The NAT follows the same structure as AS/NZS 4801:2001 standard: policy, planning, implementation, measurement/evaluation and review.

### 3.4.3. OHSAS 18001

OHSAS18001 (*Occupational Health and Management Systems – Specification*) is an international standard describing WHSMS requirements which can be objectively audited for certification and registration purposes. It forms part of the OHSAS 18000 series together with OHSAS 18002 (*Occupational health and safety management systems – Guidelines for the implementation of OHSAS 18001*) and was first published in 1999 and revised in 2007.

OHSAS 18001 was created by the Occupational Health and Safety Advisory Services (OHSAS) Project Group an international working group in response to demand for an international WHSMS standard following the success of the International Standards Organisation (ISO)'s standards ISO 9001 (*Quality Management Systems*) and ISO 14001 (*Environmental Management System*). Although internationally recognised OSHAS 18001 is not an ISO standard but was officially published by the British Standards Institution. All three of these standards follow a Plan-Do-Check-Act approach. As described in OHSAS 18001:2007 this structure involves:

- *Plan: establish the objectives and processes necessary to deliver results in accordance with organisation's work health and safety policy*
- *Do: implement the processes*
- *Check: monitor and measure processes against work health and safety policy, objectives, legal and other requirements and report the results, and*
- *Act: take actions to continually improve work health and safety performance.*

## 3.5. Certification

Although work health and safety audits are not mandatory under law, except for "Class A" asbestos removalists who require evidence of a certified safety management system, the Australian government has established formal infrastructure for a third-party certification approach. The Joint Accreditation System of Australia and New Zealand (JAS-ANZ) was established in 1991 by the Australian and New Zealand governments to facilitate harmonised accreditation

in the interests of trade.<sup>12</sup> The JAS-ANZ accredits Conformity Assessment Bodies (CABs) to provide third-party certification for organisations that meet various management system certification schemes such as in relation to quality, environment, IT and work health and safety systems.

The JAS-ANZ does not develop the standards for which it accredits CABs to perform certification. These are developed by other bodies. The JAS-ANZ currently accredits CABs to provide third-party certification for the following work health and safety standards:

- *AS/NZS 4801:2001*
- *National Self Insurer Work Health and Safety Audit Tool (NAT)*
- *SafetyMAP*
- *OHSAS 18001:2007*
- *GB/T 28001:2001*<sup>13</sup>
- *IS 18001:2000, and*
- *SS 506: Part 1:2009.*

### **3.6. Self-insurers under workers' compensation law**

In Australia work health and safety audit is significantly driven by workers' compensation laws which are administered separately by state territory and federal governments. The laws require employers to purchase workplace insurance from a licensed insurer unless they are self-insured.<sup>14</sup> Self-insured employers effectively underwrite their own risk and administer their own claims management. They are usually larger employers.

In order to be licensed as a self-insured employer the relevant regulator will consider various factors including WHSMS and work health and safety performance. An external work health and safety audit may be required or considered in applications for self-insurer licence issuances and renewals. Self-insured employers retain discretion on the WHSMS implemented but must submit self-audits to the relevant regulator. Guidance is provided on WHSMS and self-audit requirements which also form the criteria against which the WHSMS is assessed by the regulator.<sup>15</sup>

## **4. External challenges to WHSMS and work health and safety audits**

The organisation of work is subject to dynamics occurring at three different levels: macroeconomic, organisational and job-specific (NIOSH, 2002, p.2). In relation to WHSMS and work health and safety audits these dynamics influence organisations both directly and indirectly and can be used to understand changes in safety culture within organisations over time.

For example, economic growth can have implications for safety budgets and create production pressures. Industrial laws influence the hiring of workers and can alter the

<sup>12</sup> The JAS-ANZ is a not-for-profit, self-funded organisation, of which governing board members are appointed by the Australian and New Zealand governments. See: JAS-ANZ.

<sup>13</sup> Note: GB/T 28001:2001 is a Chinese standard which covers all technical aspects of OHSAS 18001:1999. IS 18001:2000 is an Indian standard based on AS/NZS 4804:1997 and BS 8800:1996 (*Guide to occupational health and safety management system*). SS 506 : Part 1 : 2009 is a Singaporean standard which effectively adopts OHSAS 18001:2007.

<sup>14</sup> For example, see *Workers Compensation Act 1987* (NSW), s155(1).

<sup>15</sup> See the *National Self-insurer WHS Audit Tool – User Guide and Workbook*.

political dynamics in organisations. Technological advances and automation of work can breed new work safety issues (Leveson, 2004). Organisational restructuring and new production processes (e.g. total quality management (TQM), lean production, outsourcing) may cause a WHSMS to become outdated (Landsbergis, 2003). In particular, the literature has identified flexible employment practices and small to medium enterprises (SMEs) as having negative influences on WHSMSs (NIOSH, 2002; Gallagher, Underhill and Rimmer, 2001).

#### **4.1. Market failures in certification**

A third-party certification approach effectively provides for the 'market-based' regulation of safety. The key advantage of certification is that it replaces the need for multiple reviews by different parties with a common interest. WHSMS and work health and safety audits thereby become susceptible to market flaws.

The failure of mandatory work health and safety certification in the Netherlands demonstrates the ability for market mechanics to subvert the policy intention behind safety regulation. The scheme was introduced in 1998 and created an overnight market for certificates. Lack of interest and demand for certification by employers led certification audits to focus and compete on cost rather than quality. Good safety performers could not differentiate themselves to compete better as certificates were mandatory for all. This experience highlights how a market-based approach can fail when participants do not have sufficient interest in safety but simply seek the certificate for market access: the quality of certification becomes gradually diminished over time. The work health and safety certification ceased to be mandatory in 2005 following public criticism (Zwetsloot, Hale and Zwanikken, 2011; Zwetsloot, Zwanikken and Hale, 2011).

In a market-based system sanctions against poor performers are unlikely to work due to vested financial interests. Research into the Dutch certification and testing regime (CTR) found that very poor safety performers still retained certificates and the rare instances of retraction were due to failure to pay bills rather than poor performance. Poor performers can simply approach unscrupulous auditors who are willing to apply lower standards or accept higher fees to issue a certificate. Poor performers can also apply creativity to obtain certificates with minimal cost and effort in turn creating a market for such consulting advice (Zwetsloot, Zwanikken and Hale, 2011).

Market structure, as between customers and suppliers, can shape a market's dynamics and competitive focus with ramifications for the quality of certification audits. In practice most industry professionals know each other particularly in smaller markets. This carries implications for auditor independence. Market transparency issues can also arise when associates with pre-existing relationships check each other's work (Zwetsloot, Zwanikken, et al., 2011).

#### **4.2. SMEs**

According to Saksvik and Quinlan (2003, p. 49):

The applicability of [WHSMS] to small employers has been seriously questioned notwithstanding some successful measures in the European Union, Australia and elsewhere.

Saksvik and Quinlan (2003) argue WHSMSs are most easily applied in larger organisations. Larger organisations usually have more sophisticated WHSMS, safety knowledge, training systems and resources available. Safety compliance costs can also be disproportionately higher for SMEs. Growth in the share of employment by SMEs poses a potential concern for regulators. Government resources are insufficient for conducting routine inspections once it is understood that above 90% of enterprises in Australia are small. This encourages a push towards paper compliance and may explain the failure of government inspectors to identify deficiencies such as those which led to the Esso plant explosion in Victoria in 1998. For instance, government inspection agencies are often satisfied that a system is in place rather than whether it is effective (Saksvik and Quinlan, 2003).

#### **4.3. Temporary workers**

The increased incidence of temporary labour and remote work creates the challenge of adapting WHSMS and audits around flexible work practices (Gallagher et al., 2001). Employers may be reluctant to bear the costs of adapting the WHSMS to accommodate these employees or to incur safety training expenses for temporary labour (Gallagher et al., 2001). Frequent job changing can also lead to the loss of safety information, knowledge and learning opportunities for an organisation as well as a greater need to train new staff (Saksvik and Quinlan, 2003). The organisation of employment in remote and poorly planned workplaces can have undesirable consequences of encouraging “potentially dangerous forms of work disorganisation (such as under-qualified workers, or workers competing for jobs)” (Saksvik and Quinlan, 2003, p. 49). These issues can shift the focus of safety systems toward personal rather than process safety. In a review of the research into safety in the construction industry Swuste, Frijters and Guldenmund (2012) identified structural issues that challenge safety systems including the following: low standardisation in work, the temporary project nature of work and the off-site/remote work location translating into fewer opportunities for training workers.

## **5. WHSMS**

### **5.1. Benefits of WHSMS**

A WHSMS is a systematic approach to addressing work health and safety risks in an organisation. The benefits to organisations from implementation of a WHSMS can be categorised into:

- direct benefits from reduced safety incidents, and
- indirect strategic and competitive benefits.

WHSMSs can reduce the rate of safety incidents (Fernández-Muñiz, Montes-Peón and Vázquez-Ordás, 2009). This reduces financial losses stemming from accidents:

- medical costs,
- legal costs,
- compensation,
- insurance premiums,
- worker absenteeism,
- disruptions to production processes, and
- damaged equipment.

Strategic and competitive benefits arise indirectly through improved public relations, stakeholder relations, workplace relations and management systems. Organisations can improve their public image through commitment to social responsibility. This enables the company to compete for consumers on dimensions other than cost and quality. Safety can also help an organisation to enhance relationships with other stakeholders such as shareholders, creditors, suppliers, unions, insurers and regulators. This can improve an organisation's bargaining strength with them (Smallman and John, 2001). Social responsibility is increasingly important in an information society where organisations are pushed to become increasingly transparent and accountable for their operations.

Safety helps to attract, retain and motivate workers. Having a WHSMS can improve an organisation's productivity and financial results. A poor safety climate can cause deterioration in an organisation's internal relationships and industrial climate, low morale, little trust in management and lack of identification with the organisation's vision among workers. This typically results in high turnover, low productivity and poor performance, thereby indirectly affecting long-term operating performance. Turnover also reduces human capital which is vital to an organisation's knowledge base for continuous improvement and innovative capability (Fernández-Muñiz et al., 2009).

A rigorous WHSMS aligned with one of the work health and safety standards helps an organisation manage legal compliance requirements. It can encourage improvement and rigour in other management systems through integration into existing management systems. This may be through encouraging adoption of other (harmonised) standards for management systems or applying management techniques learned through the work health and safety standard to other areas. For example, the OSHAS 18001 standard is consistent with the ISO standards for quality management systems and environmental management systems (ISO 9001 and ISO 14001 respectively).

## **5.2. Issues in WHSMS implementation**

Key requirements to ensure a WHSMS operates effectively include the following (Frick, 2011; Gallagher et al., 2001):

- management commitment
- worker participation
- implementation and integration with other organisational management systems, and
- appropriate use of audit.

A WHSMS is essentially only a tool to foster a work safety culture within a living, breathing organisation. It is therefore vital to ensure the WHSMS is adapted to the dynamics of a particular organisation. Successful WHSMS implementation turns upon addressing the key stakeholders of the WHSMS – management and workers – and the dynamics between them, as manifested in current management systems and culture. As suggested by Gunningham and Sinclair (2011, p. 20), whilst WHSMSs remain popular a receptive safety culture appears to be a necessary but not sufficient condition to their success. The challenge is to ensure the WHSMS does not become simply “‘paper’ compliance with a flawed systems model” (Saksvik and Quinlan, 2003, p. 48).

### 5.2.1. Management commitment

Management commitment is critical for establishing a work safety culture (Fernández-Muñiz, Montes-Peón and Vázquez-Ordás, 2012b; Gallagher et al., 2001). It can be difficult to achieve in practice when safety competes or conflicts with other organisational priorities or management interests.

Within an organisation limited resources must be allocated between various competing interests. It is difficult to 'sell' the importance of a WHSMS when it is costly to implement – money, time or training involved – or diverts organisational resources and attention. In relation to the construction industry Swuste et al. (2012, p. 1339) observe: "The focus on safety diminishes as soon as there is competition with other company goals, like production". A study of Spanish organisations' adoption of voluntary work health and safety standards found the main impediment to adoption was limited resources (Fernández-Muñiz, Montes-Peón and Vázquez-Ordás, 2012a). In addition, the difficulty of determining a return on investment (ROI) for safety can render decisions to invest in or prioritise safety harder to justify when organisational decision-making is focused on financial performance.

The inherent complexity of safety culture is another hurdle to gaining management support in practice. As A. R. Hale (2003, p. 197) points out, safety systems often cannot be simplified down to the level required by senior managers who may not have the ability, interest or time to grasp the inherent complexity involved in WHSMS particularly in high-hazard situations: "Top managers are fond of asking for simple and comprehensible systems. What cannot be explained in a page of A4 is too much for them".

Management motivation behind the implementation of a WHSMS is critical to its effectiveness as management ultimately determines the design and operation of the WHSMS (Frick, 2011). There is a risk that without a genuine interest in safety management will choose a WHSMS that delivers minimal safety simply as the cheapest way to meet legal obligations. Lack of genuine management commitment can also mean work health and safety issues are dismissed, understated or unreported (A. R. Hale, 2003). A common challenge identified in the literature is gaining management support for implementing safety changes and processes that "actually achieve what the IC [internal control] documentation purports to show" (Saksvik and Quinlan, 2003, p. 36). Key performance indicators (KPIs) will influence management motivation and how they define safety goals and issues which will thereby indirectly affect safety procedures implemented.

Management commitment to the WHSMS is critical to building worker commitment and, in turn, conducive to a strong workplace safety culture. Gunningham and Sinclair (2011) examined the relationship between safety performance and culture in different mining sites belonging to the same Australian company all subject to the same corporate work health and safety strategy and management tools. They found mining sites with better WHSMS performance experienced a 'virtuous safety cycle': workers grew more confident in the WHSMS as management demonstrated commitment to the WHSMS and would therefore be more willing to report incidents and respond favourably to management's safety initiatives (p.14). In contrast, poor performing mining sites experienced a 'negative feedback loop': a lack of trust between managers and workers resulted in lack of commitment to the WHSMS. Worker mistrust of safety initiatives and the WHSMS was exacerbated by a focus on short-

term production, lack of senior management commitment and lack of middle management accountability (p..19).

Gunningham and Sinclair (2011) reported that a number of factors contributed to improved WHSMS performance including:

- high safety norms
- demonstrable management commitment to the WHSMS such as willingness to prioritise safety over production which increased worker trust in management
- empowerment of middle management to make WHSMS decisions with support from senior management and accountability mechanisms in place
- integration of safety considerations into mainstream decision-making processes
- communication, consultation reporting and feedback on WHSMS issues, and
- solidarity and trust between management and workers.

Whether real management commitment can be achieved without a greater risk of regulatory intervention has been questioned in the literature. A regulatory approach that relies on self-regulation by organisations is often criticised for resulting in superficial rather than substantial compliance. A study by Parker and Nielsen (2006) in relation to the Trade Practices Act 1974 (Cth)<sup>16</sup> found a majority of Australian businesses had only implemented partial rather than full compliance systems with the latter highly related with regulator ‘run-ins’. They concluded that regulator enforcement activity was “very important for pushing firms beyond the most commonly implemented compliance system elements – those that are easiest to implement and most symbolic rather than substantive – towards deeper implementation” (p..476).

### 5.2.2. Worker participation

Worker participation in the design and implementation of the WHSMS is necessary for two interrelated reasons:

- ensure the WHSMS is appropriately adapted to work processes, and
- gain worker commitment for the WHSMS.

If the WHSMS is poorly developed and adapted to the work context deviations may occur for rational reasons such as superfluity, unworkability, irrationality, production hindrance or unintentional breach. If the WHSMS and its relevance are not understood it is liable to become ineffective paper bureaucracy. Inadequate training and communication may also result in a poor understanding of what constitutes compliance. For instance, workers may regard the rules as mere guidance only (Hale and Borys, 2013).

A well-designed WHSMS may still fail to operate effectively without political commitment from the workers governed by it. Low worker participation in design and implementation is likely to result in poor reception of the WHSMS among workers. A top-down, authoritarian approach may cause the WHSMS to be regarded as a political tool to serve management particularly where there is a strong climate of distrust towards management (Saksvik and Quinlan, 2003). Workers may respond via confusion and suspicion of management motives

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<sup>16</sup> The *Trade Practices Act 1974* (Cth) has been replaced by the *Competition and Consumer Act 2010* (Cth).

such as believing the WHSMS is aimed at reducing workers' compensation or sick leave benefits. Trade unions, weary of misuse of voluntary WHSMS, focus on management motives for the implementation (Frick, 2011).

### *5.2.3. Implementation and integration into complex systems*

According to Grote and Kunzler (2000, p. 132), a “major problem with most existing models of safety culture is that they are not integrated into general models of organisation and of organisational culture.”

The literature differentiates between personal safety and process safety (see for example Grote (2012)). Personal safety emphasises individual worker responsibility for ensuring their own safety whereas process safety acknowledges the importance of organisational systems including managerial and cultural factors (see for example Beatriz Fernández-Muñiz, José Manuel Montes-Peón and Camilo José Vázquez-Ordás (2007)). The general stance within the literature has gradually shifted toward greater emphasis on process safety above personal safety. For instance, Gallagher et al. (2001) found workplaces that focused on the concept of a ‘safe place’ were safer than those that focused on ‘safe person’. Criticisms of the personal safety approach are that it obscures organisation issues such as pressure to perform (Frick, 2011). Concomitant with process safety is the issue of complexity in organisational systems.

Effective implementation of a WHSMS usually involves adapting a general WHSMS to a specific organisation and integrating it into existing management systems (Frick, 2011). This is a complex task as organisations are interactive, dynamic and involve many interrelated components. Failure to properly integrate the WHSMS with other organisational systems risks causing the WHSMS to become ineffective paper bureaucracy. For instance, public inquiries into the explosions at Esso in Victoria in 1998 and DuPont in Brazil in 2005 revealed system failures in production management, communication and trust between management and workers (Frick, 2011). Additionally, the integration process may also involve substantial resources and costs such as consultants, training, coordination and reorganisation of processes which management may be reluctant to commit (Kontogiannis, 2009).

Senior management may also exploit implementation issues to avoid substantive changes to safety practices and liability. Parker and Nielsen (2006) argue that senior management may make symbolic commitments to safety and fail to set management incentives, sanctions and structures in a way to promote safety compliance instead leaving workers to determine this. Compliance systems may also be “used to avoid senior management and entity responsibility for breaches and/or to shift blame for breaches onto individual employees” (p.474).

At the heart of the complexity behind integration is the need to align different objectives and operations of multiple systems and various interests of multiple stakeholders all within a single organisation. As a simple example, the duty to report safety breaches may conflict with individual or team performance indicators thereby leading to underreporting. The safety system may also be leveraged to achieve ulterior purposes. Zwetsloot, Hale and Zwanikken (2011, p. 1001) cite the example of using stringent or particular safety requirements to distort competition among suppliers.

## 6. Work health and safety audits

### 6.1. What is a work health and safety audit

The AS/NZS 4801:2001 standard defines an audit as:

A systematic examination against defined criteria to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve the organisation's policy and objectives.

A work health and safety audit essentially involves a review of the work practices within an organisation to determine whether they comply with safety procedures, internal policies and regulations (Blewett and O'Keeffe, 2011; Fernández-Muñiz et al., 2012a). The audit process is similar to that for a financial audit: the audit scope and criteria are defined, the audit methodology is determined, the audit is carried out and audit results are reported (Fernández-Muñiz et al., 2012a).

According to Bigelow and Robson (2005), the literature differs in the scope of what is considered to be a work health and safety audit. The consensus is that it involves an assessment of an entire WHSMS. Glendon (2006) identifies six types of safety audits:

- audits on specific topics – e.g. human factors, hazardous substances
- plant technical audit – review of all plant and processes conducted by specialists
- site technical audit – covers all work of a specified type and conducted at predetermined intervals involving workers and specialists
- compliance/verification audit – tests compliance with legal obligations (compliance) and whether practices follow WHSMS policies and procedures (verification)
- validation audit – focuses on WHSMS design (e.g. appropriate monitoring and subsystems are in place), and
- management safety audit – combination of validation and verification audits covering general safety matters, usually performed annually and should be conducted at both strategic and operational levels.

### 6.2. Financial information assurance

Work health and safety reporting and audit have a shorter history relative to their financial information counterparts. Whereas financial information assurance has reached a level of maturity, as reflected in the prevalence of detailed, prescriptive guidance, standards and legislation this does not apply to work health and safety reporting and audits.

An example to highlight this point is the classification of different types of financial information assurance engagements for which different standards and terminology are applicable. Financial information assurance engagements can be classified according to purpose, scope, user and the level of assurance provided into the following categories: audit, review and agreed-upon procedures. In turn these can be either compliance and/or performance engagements. These categories are relatively well-defined and understood among practitioners and users including their associated terminology and processes involved (as per the relevant standards). The use of common terminology, methodology and

reporting provide credibility and understandability that reduce the risk of misuse and misunderstanding by users.

The Australian Auditing and Assurance Standards Board (AUASB) is responsible for developing auditing standards (ASAs) for the purposes of the corporations legislation (i.e. ASAs are legislative instruments). AUASB may also formulate other assurance standards (e.g. ASREs and ASAEs) and guidance (e.g. GSs) on audit and assurance matters. The AUASB defines an assurance engagement as (AUASB, 2009):

an engagement in which an assurance practitioner expresses a conclusion designed to enhance the degree of confidence of the intended users other than the responsible party about the outcome of the evaluation or measurement of a subject matter against criteria.

Assurance engagements can be classified into two types:

- reasonable assurance (audit), and
- limited assurance (review).

The AUASB provides definitions of various assurance engagements for which standards and guidance are issued (AUASB, 2009):

- *Audit ('Reasonable assurance engagement')*: an assurance engagement where the assurance practitioner's objective is a reduction in assurance engagement risk to an acceptably low level as the basis for a positive form of expression of the assurance practitioner's conclusion.
- *Review ('Limited assurance engagement')*: an assurance engagement where the assurance practitioner's objective is a reduction in assurance engagement risk to a level that is acceptable, but where that risk is greater than for a reasonable assurance engagement, as the basis for a negative form of expression of the assurance practitioner's conclusion.
- *Agreed-upon procedures engagement*: an engagement in which an auditor is engaged to carry out those procedures of an audit nature to which the auditor and the entity and any appropriate third parties have agreed and to report on factual findings. The recipients of the report form their own conclusions from the report by the auditor. The report is restricted to those parties that have agreed to the procedures to be performed since others unaware of the reasons for the procedures may misinterpret the results.
- *Compliance engagement*: an assurance engagement in which an assurance practitioner expresses a conclusion after evaluating an entity's compliance with the requirements as measured by the suitable criteria.
- *Performance engagement*: a performance audit or a performance review of all or a part of the activities of an entity (or entities) to assess economy, efficiency or effectiveness. It includes a *performance audit engagement* or a *performance review engagement* directed to assess:
  - the adequacy of an internal control structure or specific internal controls, in particular those intended to safeguard assets and to ensure due regard for economy, efficiency or effectiveness

- the extent to which resources have been managed economically or efficiently, and
- the extent to which activities have been effective.<sup>17</sup>

In comparison, this level of structure and maturity is yet to be realised for work health and safety reporting and audit. It is apparent from the literature and industry observations that there is a lack of standardisation in processes, terminology and the level of assurance in relation to work health and safety audits. This can create confusion and misunderstanding among users and practitioners.

Work health and safety audits are likely to benefit from increased rigour and the use of common terminology as well as greater clarity around methodology and level of assurance provided. However, it is important to differentiate the context and objectives of work health and safety audits from those of financial information audits. Work health and safety audits are focused on the promotion of safety culture and reduction of safety incidents whereas financial information audits aim to provide credibility and reliability to financial information for decision-making primarily by external users (i.e. shareholders). The focus of financial information audits remains assurance that the information which is largely quantitative is both compliant with the relevant legislation and accounting standards and presented fairly in all material respects.

Failure to conduct a work health and safety audit results in a poor safety outcome which unlike material misstatement of financial information – or at worse insolvency – will not destroy an organisation overnight. Hence, stakes in relation to work health and safety are different and measured in a different form – namely human lives and productivity. Work health and safety audits are arguably more amenable to use for continuous improvement purposes. This has implications for the degree of flexibility afforded to work health and safety audits such as tolerance for errors and the required level of auditor independence.

### **6.3. Work health and safety audit benefits**

The two key benefits of an audit are compliance testing and continuous improvement. Work health and safety audit checks whether work practices conform with the WHSMS (compliance) and helps to identify system weaknesses (continuous improvement) (Frick, 2011). This enables an organisation to build a safety culture, derive WHSMS benefits and manage legal compliance risks. Regular audits are also necessary in light of the dynamic nature of organisations and work practices. Work health and safety audits are generally regarded as important feedback tools for the WHSMS among practitioners and within the literature (see for example Glendon (2006); Lindsay (1992)).

There are two types of audits: internal audits and external audits. Internal audits are conducted by the organisation generally for its own compliance and continuous improvement purposes. External audits are conducted by an independent assessor often to satisfy a third party that the organisation has satisfactory safety systems. Hence, an external audit will often assess compliance against widely-accepted work health and safety standards and

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<sup>17</sup> Performance audit engagement means a performance engagement where the assurance practitioner provides reasonable assurance (a high, but not absolute, level of assurance). Performance review engagement means a performance engagement where the assurance practitioner provides limited assurance.

adopt a more rigorous and systematic approach whereas an internal audit entails more flexibility in criteria and methodology to suit the organisation's purpose.

External audits have additional advantages over internal audits. Fernández-Muñiz et al. (2012b, p. 746) assert organisations certified under OHSAS 18001 have "superior" WHSMS due to the external audit process involved: certified organisations have higher levels of management commitment, training, worker involvement, communication, processes, policies and conduct. Further, "some of the relations found previously in the literature between dimensions of safety climate, safety behaviour and safety performance in non-certified organisations may not be replicated in certified organisations" (Fernández-Muñiz et al. 2012b, p. 746). In addition, an external auditor may be less influenced by an organisation's political dynamics than an internal auditor.

Certification through an external audit may be a licence to participate in a particular market. For instance, CE (Conformité Européene) markings certify conformity with applicable European Union regulations on work health and safety and environmental protection and are mandatory for certain products traded within the European Economic Area (EEA) (European Commission, 2013). Certification also enables values alignment with stakeholders committed to social responsibility and may be demanded by customers. Certification is a common requirement in tendering for contracts or projects.

#### **6.4. Issues with work health and safety audits**

Work health and safety audits face various challenges due to confluence of three key issues:

- discretion in the conduct of work health and safety audits
- political and cultural dynamics of an organisation, and
- qualitative and subjective nature of safety information.

These factors challenge the ability of the work health and safety audit to obtain reasonable assurance and express an opinion on work safety culture and WHSMS performance and compliance effectively. They can also amplify any weaknesses in auditor skill and independence. A deficient work health and safety audit can further have negative feedback effects for the WHSMS. The risk is that the work health and safety audit becomes a redundant process which can further mask workplace safety risks. These challenges may also render work health and safety more amenable to a combined assurance approach (discussed below).

##### **6.4.1. Audit criteria**

Audit criteria are selected based on whether the audit purpose is aimed at compliance (testing of work practices against the WHSMS) or performance and continuous improvement (improving the effectiveness of the WHSMS in delivering safety). The audit should ideally be directed towards both. Yet selection of audit criteria can be challenging and reduce the effectiveness of the work health and safety audit. As Blewett and O'Keeffe (2011, p. 1019) state:

There are several parameters on which audit criteria and the nature of auditing can be confused or cause confusion. The generic nature of audit criteria may be inadequate for individual organisations, reductionist reporting of audit results may oversimplify matters that should cause

concern, and the confusion of audit criteria with the WHSMS itself may divert attention away from actions to improve work health and safety and towards activities that ensure audit success.

Audit criteria selection can be complicated by measurability issues. The focus of an audit is traditionally on measurability which in turn connotes quantification. Yet safety culture is qualitative, intangible and unquantifiable. More difficult aspects of safety can be thrown into the 'too hard' basket and issues that cannot be reliably measured may be dismissed as irrelevant to safety. The challenge is to ensure the work health and safety audit process and report accurately capture the safety culture of an organisation.

Audit criteria selection is also challenged by the inherently dynamic and interactive nature of safety culture and organisational systems. For instance, deviations from procedures can gradually become normalised over time (Le Coze, 2005). A static or one-dimensional assessment of safety performance may provide an inaccurate reading of the effectiveness of the WHSMS and safety culture (Le Coze, 2005). Past work health and safety performance also does not reflect future risks. Frick (2011) advocates for moving beyond the mere reporting of safety numbers to adopt a balanced scorecard approach that incorporates alternative indicators based on the broader goal of reducing safety risks.

The literature warns of the distinction between measuring safety incidents and safety culture (for example, see Blewett and O'Keeffe (2011)). Although the WHSMS and safety culture should generally correlate this may not be the case for deficient WHSMSs. An overemphasis on compliance with systems and processes may overlook flaws embedded in the system on the underlying assumption that the system guarantees safety. As Hohnen and Hasle (2011, p. 1026) explain:

This way of thinking essentially presupposes that accidents are viewed no longer as accidents but rather as rational events that could have been prevented had the right procedures been followed. In this vision, accidents and lack of safety are basically understood in terms of deviations from standard procedures. ... The subject matter of safety becomes a series of procedures and audit reports (on near misses), which have two related purposes: to prevent accidents and to document control over the physical work environment.

#### *6.4.2. Discretion in audit program*

The broad discretion available to organisations and auditors in the conduct of work health and safety audits poses a key challenge to their efficacy in measuring work safety performance. Discretion is ubiquitous throughout the audit process, including:

- audit purpose
- audit criteria
- audit methodology
- work health and safety / audit standard selection and interpretation
- audit evidence interpretation, and
- auditor selection.

Discretion in work health and safety reporting and audit can be both a source of strength and weakness. On the one hand, it provides organisations with flexibility to adapt WHSMSs to their specific circumstances. This was a key reason for not introducing a prescriptive approach to risk management procedures in the new harmonised model work health and safety laws (WRMC, 2009, pp. 212-216). Yet, such discretion also leaves work health and safety reporting and audit exposed to political dynamics and potential abuse.

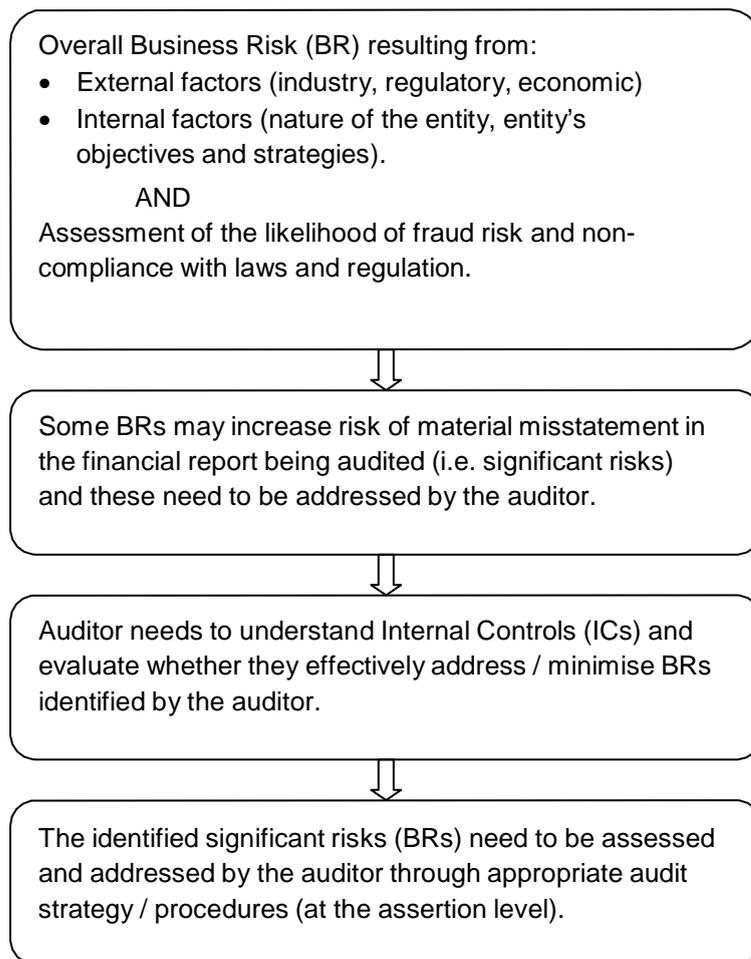
Guidance is available in the form of reporting and audit tools, however these also grant discretion to organisations and auditors through reliance upon their judgement. The literature shows interpretation reporting and audit practices may differ within the same set of work health and safety standards leading to different outcomes (Frick, 2011). According to Blewett and O’Keeffe (2011, p. 1018):

The work health and safety audit is conducted against Standards, but the Standards are written in a generic manner that requires the auditor to reliably and objectively interpret subjective data; that is, data that consist of people’s opinions or interpretations of events. Furthermore, because much of the legislation (and consequently the audit criteria) is performance-based, there are multiple ways in which compliance can be achieved. This makes the audit criteria and the evidence subject to auditor interpretation. So both the audit criteria and the adequacy of workplace practices are subject to interpretation.

As a result, management that is not genuinely committed to safety may choose an audit approach that is easier to pass, focuses on personal safety and adopts narrow audit and performance measures (Gallagher et al., 2001; Saksvik and Quinlan, 2003). Consequently, the risk is that work health and safety reporting and audit ultimately become meaningless activities. The risk is further exacerbated by the qualitative, subjective and dynamic nature of safety culture and safety information.

#### *6.4.3. Audit methodology*

Rigorous and systematic audit methodology is critical to ensure appropriate information collection, risk identification and auditor response to assessed risks in terms of evidence collection and evaluation. For financial information audits, the auditing standards (ASAs) describe a systematic, top-down and risk based approach as depicted in Figure 1 below:



**Figure 1.** Business Risk Approach as per ASA 315 (*Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment*)  
(Source:Roebuck and Martinov-Bennie (2010, p. 4))

This well-tested and rigorous systematic approach could potentially be adapted to work health and safety audits as follows:

- identification of safety risks/hazard
- assessment of existence and effectiveness of mitigating controls in the WHSMS system
- determination of the level of residual risk, and
- determination of response to the residual risk.

Another issue in need of more consideration in relation to work health and safety audit and reporting is the concept of materiality. Materiality is critical to the financial audit as it determines the scope of risk assessment, nature, timing and extent of audit procedures, evaluation of errors and/or non-compliance and their impact on the audit opinion. Determination of materiality is a matter of professional judgment for the auditor based on

factors such as the nature of organisation and business operations, principal user(s), benchmark stability and assessed level of risk associated with the engagement.<sup>18</sup>

The concept of materiality is likely to also be important in the context of work health and safety audit, however it requires further development. Two key difficulties in the determination and application of materiality in work health and safety audit and reporting are:

- a diverse range of users and purposes for work health and safety audit and reporting information, and
- the qualitative and subjective nature of safety information.

The need for a generally accepted materiality concept within work health and safety reporting and audit context is demonstrated in a recent study (Hecimovic and O'Neill, 2013) of large resources companies. The study found differences in what is considered to be material depending upon the background of the external assurer. Non-accounting assurers viewed materiality from the perspective of external stakeholders and were more likely to focus on qualitative non-financial information such as injury severity, broader risks and risk management systems which are more correlated with externalities associated with safety. In comparison financial assurance providers viewed materiality from the perspective of the organisation and focused on work health and safety measures that had financial consequences such as aggregated injury and illness measures that drive compensation claims.

#### 6.4.4. Audit evidence

A significant challenge identified in the literature is overreliance on paper-based audits which can inadequately capture the effectiveness of the WHSMS and safety culture of an organisation (for example see Frick (2011); Gallagher et al. (2001)). A paper-based approach often places inadequate focus on the qualitative aspects of WHSMS particularly workers' views. An organisation's political dynamics can also mean paper records do not reflect true worker sentiments. For instance, Blewett and O'Keeffe (2011) point to worker reluctance to participate in discussions at toolbox meetings when minutes are recorded, in the belief they may be held to account for their thoughts and suggestions. Auditors may prefer a desk-based approach because documentation is "a tangible representation of the formal WHSMS that appears to be less prone to subjective influence" (Blewett and O'Keeffe, 2011, p. 1018).

Fernández-Muñoz et al.'s (2012a) study of the implementation of the OHSAS 18001 standard by Spanish companies found that the most common deviations from the standard during implementation related to hazard identification, risk assessment and control measures and operational control. The areas of least divergence related to paperwork such as record keeping, documentation and document control with over 80% of the study group experiencing no deviations from the standards in these areas. These results are perhaps telling of the extent of reliance upon paper compliance in practice and gaps between paper-based systems and actual safety culture.

The qualitative and dynamic nature of safety culture underscores the importance of incorporating workers' views into the audit. Research has found that properly drafted worker surveys have demonstrated reliability in describing the work health and safety. Frick (2011)

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<sup>18</sup> See ASA 320 (*Materiality in Planning and Performing an Audit*).

recommends WHSMS performance appraisals be conducted mainly through worker surveys on perceived risks and work-related health given workers are the main beneficiaries of WHSMS. Such data could be supplemented by measurements, for example, injury statistics and expert opinion (Frick, 2011).

Auditor discretion over audit methodology may be influenced by attitudes to the work health and safety audit and political dynamics between auditors and management. If little importance is attached to the work health and safety audit by either management or auditors a completely paper-based, check-list approach may be adopted notwithstanding awareness of the limitations. An auditor could take the view that the paperwork provided sufficient audit evidence without the need for further investigation through worker surveys, observation, inquiry or re-performance. Time and work pressures may also influence the exercise of auditor discretion (Fernández-Muñiz et al., 2012a). Desk-based audits are more efficient, cheaper and do not require time from workers or disrupt production processes. In addition, if the WHSMS is designed with the audit in mind, it is likely to be more streamlined with audit completion, disregarding issues of actual efficacy (Hohnen and Hasle, 2011).

This leads to well-known situations of safety disasters occurring despite safety systems having been audited. For instance, the Esso plant explosion of 1998 occurred despite its parent corporation, Exxon Corporation, having recently audited the plant's management system. The audit was "mainly conducted on paper and missed the many deficiencies in the MS practice at the gas plant revealed by the ensuing public inquiry" (Frick, 2011, p. 977).

#### *6.4.5. Auditor expertise*

Work health and safety auditors require significant skill in the collection, interpretation and evaluation of work health and safety information. This is particularly the case in relation to qualitative information and in organisations with politically sensitive climates. Communication and interviewing skills and awareness of the nature of safety risks can lead to differences in information collection and interpretation. For instance, audit results can differ depending on questioning techniques adopted (e.g. whether questions are leading) or whether there is follow up on weak or missing responses (Robson, Macdonald, Gray, Van Eerd and Bigelow, 2012). Proper training is also required to build awareness of when organisational dynamics may cause a problem in the safety information collected. In addition, work health and safety specific knowledge is necessary to avoid inappropriate box-checking when conducting work health and safety audits (Gallagher et al., 2001).

A study of public sector work health and safety audit methodology found an auditor's ability to "see through a façade" was attributable to the following factors (Robson et al., 2012, p. 186):

- experience with audits and workplaces
- familiarity with the firm being audited
- multiple data collection methods
- having a worker representative from the joint health and safety committee present during interviews with management key informants
- persistent questioning during interviews, and
- a practice of increasing the stringency of evidence verification when suspicions arise.

#### *6.4.6. Interpretation of audit evidence*

The literature has identified the interpretation of audit evidence as an issue for work health and safety audits. Interpretation issues are further magnified in relation to qualitative information and subjective content divulged by workers.

As Frick (2011, p. 983) states:

Evaluations against claim numbers, lost time injuries or similar figures, against assessments of safety risks or against the whole spectrum of health and safety risks can reach very different conclusions on the effectiveness of the [work health and safety] MS...

Given audit outcomes are to a significant extent driven by the auditor's subjective interpretation, testing of audit results is required to ensure robustness. Robson et al. (2012) found audit quality was primarily controlled through a review by the program manager, yet consistency between auditors needed to be addressed in terms of implications for whether an audit was passed. It recommended the implementation of measures to reduce such inconsistency.

According to Hale and Borys (2013), the two alternative paradigms for rule formulation are the top-down and bottom-up approach. The first views rules as static and prescriptive where deviations are viewed negatively, and implicitly allocate responsibility. The second views rules as guidelines which must be adapted by workers to the specific situation when applied. These two different approaches must be considered when interpreting audit results and determining whether there has been compliance with the WHSMS.

#### *6.4.7. Auditor independence*

The broad discretion available in the conduct of work health and safety audits, combined with the qualitative and dynamic nature of safety information and safety culture, exposes work health and safety audits to significant auditor independence issues.

An inherent conflict exists in the appointment of an auditor to review an organisation from which the auditor receives compensation (Blewett and O'Keeffe, 2011). A lack of auditor independence may influence the exercise of discretion in the audit process such as whether to ask tough questions and follow up on responses or in the adoption of a desk-based audit despite awareness of its limitations. Issues of an organisation's political climate and management motivations play strongly here.

Conflicts of interest include opportunities for potential fee-generating opportunities such as consulting engagements. Research shows a desire among organisations for auditors to focus on continuous improvement and to learn from audit reports (Fernández-Muñiz et al., 2012a). The rational decision of seeking follow-up advice on improvements from the auditor who is well-placed to offer such advice would incur potential conflicts of interest. Conflicts can also arise when auditors perform audits on systems implemented under their previous consulting advice. Practical strategies around conflicts of interest include the separation of audit and consulting staff or the prevention of staff from consulting for organisations they have previously audited (Robson et al., 2012).

Ultimately, the policy consideration regarding work health and safety auditor independence is whether the conflicts of interest and associated risks are sufficiently important to justify adoption of a more stringent approach towards auditor independence.

#### *6.4.8. Organisational culture*

An organisation's political and cultural dynamics can influence the availability of safety information which impacts the effectiveness of the work health and safety audit. As Blewett and O'Keeffe (2011, p. 1018) state:

Internal challenges in power, influence and control that the auditor may be unaware of may result in employees and management deliberately under- or over-stating the position when questioned.

Organisational culture and dynamics may inappropriately emphasise work health and safety audit results over actual workplace safety (Blewett and O'Keeffe, 2011). This is especially the case when maintaining a positive corporate image is a key motivation behind implementing a WHSMS. Quantitative audit results are commonly used as performance measures with implications in the form of incentives and penalties (Robson, Macdonald, Van Eerd, Gray] and Bigelow, 2010). This can create a "culture of suppression" (Frick, 2011, p. 980). For instance, exposure to disciplinary sanctions can deter reporting by workers (Zoller, 2003). Further, organisations may allocate a disproportionate amount of effort and time towards achieving a certain work health and safety score despite it having no substantial effect on safety (Blewett and O'Keeffe, 2011).

Organisational culture impacts on the reporting of safety issues among workers. For instance, Swuste et al. (2012) note the construction industry is both politically and market sensitive and the strong focus on team performance and loyalty can override adherence to rules and safety procedures. A study by Eisner and Leger (1988) into the International Safety Rating Systems (ISRS) of South African mines reported that whilst mines' safety ratings had increased over time there was no real improvement in fatality rates although other reportable injuries fell. The results led to doubts over the ratings audit process and supported the inference that actual safety had not improved rather there was just more pressure not to report. A separate study by Guastello (1991) found the introduction of ISRS generally had no discernable impact on accident rates.

Zoller (2003) observes how social norms and the construction of knowledge can influence work health and safety systems by causing employees to underreport and blame themselves for accidents. Social norms and knowledge construction alter how workers perceive workplace risks and consequently how they allocate responsibility for health and safety between themselves and the organisation. For instance, a good worker in a physically demanding job could be described as someone who can "take the hard work, fast pace and the physical problems that come with the job" (p. 129). Accordingly, perceptions of the job description coloured by social norms may influence safety reporting.

#### *6.4.9. Feedback mechanism*

Research suggests work health and safety audits can interact with the WHSMS through a backward feeding process. As Hohnen and Hasle (2011, p. 1023) state:

Auditing can also be a process that actively creates the environment that it is supposed to audit...audit systems to some extent transform that which they are supposed to audit, by creating or transforming the work environment into a distinctive type of procedures and technologies that can be internally and externally audited.

Consequently, audit flaws can generate flaws in the WHSMS and the focus and ambit of the audit can be mirrored in the WHSMS. For instance, the pursuit of a simple audit approach may result in the design of a simple WHSMS that is inappropriate and ineffective for measuring and delivering safety. A paper-based audit methodology can shape the WHSMS to become more paper-focused with the risk of the WHSMS turning into meaningless paper bureaucracy (Blewett and O’Keeffe, 2011).

### **6.5. Combined assurance and governance systems**

Historically in Australia a shift towards systematic approaches to work health and safety management coincided with work health and safety regulatory reform in the 1980’s moving away from prescriptive legislation in favour of greater worker participation and self-regulation. According to Saksvik and Quinlan (2003, p. 38): “By the 1980s system and internal responsibility concepts were exerting an influence in policy circles.” In the drive towards WHSMSs, government agencies provided assistance such as guidance and self-audit tools. Compliance programs increasingly targeted ‘system’ failures. Safety bodies also promoted systematic products/packages whereby work could be restructured into systems that addressed both work health and safety compliance and improved productivity. Regulatory developments in other areas such as environmental law and in the development of international standards further promoted the push towards a systematic approach. (Saksvik and Quinlan, 2003)

According to Bigelow and Robson (2005, p. 2):

The growing demand for auditing of specific organisational functions is related to the increasing complexities of modern management systems as well as the need to improve quality and efficiency. Audits of health, environment and safety systems have also been widely utilised as they are seen as valuable tools for continuous improvement of work health and safety management system performance.

The classic model of organisational governance essentially comprises two key components namely strategic and oversight activities. Strategic activities set the organisation’s direction and objectives. Oversight activities ensure the boards’ strategic direction and defined objectives are achieved within boundaries set according to the organisation’s appetite for risk (including work health and safety risk). Oversight activities encompass two complementary activities, namely risk management and assurance (Decaux and Sarens, 2013).

The governance system focus of work health and safety regulation is consistent with a broader emphasis on governance and risk management systems in the regulation of organisations. This has been particularly evident in the context of financial governance due to large corporate accounting scandals and the global financial crisis but is also observed in environmental regulation.

Recent corporate scandals have been attributed to insufficient oversight activities which, in turn, highlighted weaknesses in internal systems resulting in inadequate risk information available for decision-making by boards. Organisational governance has therefore placed an increasing emphasis on risk management systems for multiple dimensions of organisational activity including work health and safety. Boards require assurance that appropriate risk management processes (i.e. risk identification and appropriate systems/controls addressing identified risks) are in place and are effective in reducing critical risks to an acceptable level and are complied with (Decaux and Sarens, 2013).

The enhanced focus on risk management systems has occurred concurrently with a shift towards greater social responsibility and integrated reporting among organisations. These two trends have increased demand for the assurance of multiple organisational systems and led to the emergence of the combined assurance model.

The 2009 South African Corporate Governance Code (King III Code) recommends integrated reporting as well as a combined assurance model “to provide a coordinated approach to all assurance activities” (Principle 3.5) (IoDSA, 2009a, p.33).<sup>19</sup> The King III Code defines combined assurance as (IoDSA, 2009a, p. 50):

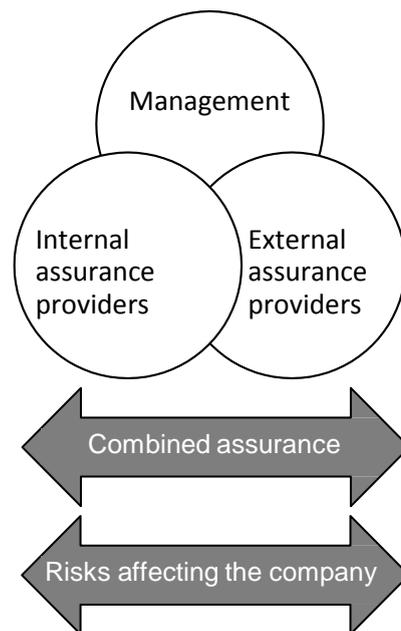
Integrating and aligning assurance processes in a company to maximise risk and governance oversight and control efficiencies, and optimise overall assurance to the audit and risk committee, considering the company’s risk appetite.

According to accompanying report (IoDSA, 2009b, p.62):

A combined assurance model aims to optimise the assurance coverage obtained from management, internal assurance providers and external assurance providers on the risk areas affecting the company.

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<sup>19</sup> King III was applicable to organisations listed on the Johannesburg Stock Exchange from March 2010.



**Figure 2:** Combined assurance model  
(Source: IoDSA (2009b), p.62)

Work health and safety audit lends itself well to a combined assurance model. Many parties are engaged or interested in work health and safety audit and review activities for various purposes. For instance, work health and safety matters can be relevant to legal, safety, compliance, risk, audit, public relations and investment committees. Separate activities may be performed for external certification or internal compliance. These various parties and activities provide comfort to the governance board and can be complementary.

As combined assurance involves multiple parties, coordination is necessary to ensure activities are streamlined to reduce overlaps, gaps and inefficiencies. In addition, coordination is necessary to avoid assurance providers working in isolation and competing rather than collaborating with one another (Decaux and Sarens, 2013). The board and management may find it useful to consider adopting the combined assurance model in relation to work health and safety. This would initially require detailed mapping of all the different types of assurance activities and levels of assurance provided to determine whether appropriate coverage and level of assurance is achieved for all key work health and safety risks, objectives and requirements.

## 7. Conclusion

The relationship between WHSMS, work health and safety audit and actual workplace safety is complex. At the heart of the complexity lie three key challenges, namely the dynamic nature of organisations, discretion in WHSMS and work health and safety audit processes and the qualitative and subjective nature of safety information. Developments in financial information assurance may provide a potential solution in addressing discretion through standardisation of terminology and methodology. Further work is necessary to ensure it is appropriately adapted to suit work health and safety. The combined assurance model may also prove useful in the area of work health and safety audit.

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