Session No. 657

Comparison of Global Safety Management Systems: CSA, ANSI, OHSA's 18000 Series and ILO

Eldeen Pozniak, BA, BSc, CEES, CHSC, CHSMSA, CRSP
Pozniak Safety Associates, Inc.
Saskatoon, Saskatchewan, Canada

Today we are going to discuss safety management systems and specifically some of the global systems that are best known – ANZI, CSA, OHSA's 18000 series and the ILO standard.

There are many benefits to safety management systems, such as being a businesslike approach to safety and being a systematic, explicit and comprehensive process for managing safety hazards and risks. As with all management systems, it provides for goal setting, planning, and measuring performance.

Some have asked the question "Why a Management System?" Safety has been around for a long time, there have been many approaches and people are still getting injured, so this methodology must be considered as an approach. With changing work patterns and associated hazards and risks, we need to have a systematic look at it all. In developed countries we are experiencing a shift in types of industries; new technologies; globalization; an aging workforce. In the developing countries we see a shift from rural to industrial activities. Safety gurus such as Dan Peterson have written many articles about these things and indicate that the only way we decrease the risks is to have a true system. But which system?

The CSA Z1000 Standard

A New Canadian standard was put forth in 2005 intended to help organizations reduce or prevent injuries, illnesses and fatalities in the workplace by providing companies with a model for developing and implementing an OHSMS. It is Canada's 1st consensus-based standard. Basically it harmonized with existing standards to facilitate acceptance and use as well as consistency.

This standard emphasizes the Canadian approach by addressing the need for individual participation in the operation of the management system. It is based upon the internal responsibility philosophy and concepts of due diligence, where basically "Everyone is responsible for integrating health and safety into his or her job, and should take every precaution reasonable in the circumstances to avoid losses."

With the Canadian court system and whether it is in the common law (OHandS jurisdiction) or in the Criminal Code, the definition of Due Diligence is basically taking all reasonable care or all reasonable steps in the circumstances to prevent the incident.

Three Levels of Due Diligence or Reasonable Steps

- Level One: Take every precaution reasonable to ensure compliance with external standards – Act and Regulations.
- Level Two: Take every precaution reasonable to ensure compliance with internal standards – Company procedures and rules.
- Level Three: Take every precaution reasonable for any residual risk not covered by above.

The ANSI Z10 Standard:

As with the CSA standard – at anytime OSHA may use ANSI Z10 as a justification for general duty clause citations. OSHA will be required to consider ANSI Z10 whenever it takes up the development of a Safety and Health management standard in its regulatory agenda. The American National Standards Institute along with the American Industrial Hygiene Association has developed and released Z10 – a voluntary consensus standards for OHSMS. It is the endorsed principles/tool by OSHA through the Voluntary Protection Program (VPP).

OHSA's 18000 series

OHSA's 18000 is an international OHSMS specification that empowers an organization to control its OHandS risks and improve its performance. It is comprised of two parts,18001 and 18002, and grew from a desire to create a system capable of assessment and certification, as a follow-up from British Standard 8800, Health and Safety management using a HS(G)65 approach. It is an audit/certification specification, not a legislative requirement or a guide to implementation. It also does not state specific performance criteria, or give detailed specifications for the design of a management system (18002 does). Instead, the system is geared towards reducing and preventing accidents and accident-related loss of lives, resources, and time.

The ILO – OSH Standard

The International Labour Organization, the tripartite United Nations agency that influences the development of labour laws across the globe, published the ILO – OSH Standard. This international model was developed after a detailed review of over 20 management systems worldwide. It was meant to reflect the globalization of organizations and the increase in outsourcing and partnering, therefore indicating of how systems need to evolve continually to reflect new ways in which organizations manage activities. However, unlike the OHSAS 18001 or ANZI standard, there are no current plans to certify organizations for conformance with the ILO model.

COMPARING WORLD STANDARDS CSA Z1000, ANSI Z10 and OHSA's 18000 series

CSA Z1000 (2006)	**ANSI Z10 (2005)**	**OHSA's 18000 series (1996, 1999, 2000) (BSI 8800)**	**ILO-OSH (2001) *Guidelines***
Scope (1)	Scope Purpose and Application (1)	Scope (1) towards employees and other *interested parties*	Scope (1) focus is workers.
Reference Publications (2)		Reference Publications (2)	
Definitions (3)	Definitions (2)	Definitions (3)	Definitions (2)
OHandS Management System (4)	OHandS Management System (4)	OHandS Management System Elements (4)	The occupational safety and health management system in the organization (3)
General (4.1)		General Requirements (4.1)	The occupational safety and health management system in the organization (3)
Commitment, leadership and participation (4.2)	Responsibility and Authority (3.1.3)	Structure and responsibility (4.4.1)	Responsibility and accountability (3.3) System planning, development and implementation (3.8)
Management commitment and leadership (4.2.2)	Responsibility and Authority (3.1.3)	Structure and responsibility (4.4.1)	Responsibility and accountability (3.3) System planning, development and implementation (3.8)
Worker participation (4.2.3)	Employee participation (3.2)	Consultation and communication (4.4.3)	Worker participation (3.2) Communication (3.6)
OHandS policy (4.2.4)	Policy (3.1.2)	OHandS Policy (4.2)	Occupational safety and health policy (3.1)
Planning(4.3)	Planning (4) Initial and Ongoing reviews (4.1)	Planning (4.3)	Initial review System planning, development and

			Implementation (3.7, 3.8)
Legal and other requirements (4.3.2)		Legal and other requirements (4.3.2)	Initial Review(3.7.2) Hazard prevention (3.10.1.2)
CSA Z1000 (2006)	**ANSI Z10 (2005)**	**OHSAS 18000 series (1996, 1999, 2000) (BSI 8800)**	**ILO-OSH (2001) *Guidelines***
Hazard and Risk Identification and assessment (4.3.4)	Assessment and Prioritization (4.2)	Planning for hazards identification, risk assessment and risk control (4.3.1)	Hazard prevention (3.10) Prevention and control measures (3.10.2) Management of change (3.10.2) Contracting (3.10. 5)
OHandS objectives and targets (4.3.5)	Objectives (4.3)	Objectives (4.3.3)	System planning, development and implementation (3.8) Occupational safety and health objectives (3.9) Continual Improvement (3.16)
		OHandS Management programme(s) (4.3.4)	System planning, development and implementation (3.8)
Implementation (4.4)	Implementation plan and Allocation of resources (4.4)	Implementation and operation (4.4)	
Preventative and Protective Measures (4.4.2)	Hierarch of Controls (5.1.1)	Planning for hazards identification, risk assessment and risk control (4.3.1)	Hazard prevention (3.10) Prevention and control measures (3.10.2) Management of change (3.10.2) Contracting (3.10. 5)
Emergency prevention, preparedness, and response	Emergency Preparedness (5.1.5)	Emergency Preparedness and Response (4.4.7)	Emergency prevention, preparedness and response

(4.4.3)			(3.10.3)
Competence and training (4.4.4)	Education, training and awareness (5.2)	Training, awareness and competence (4.4.2)	Worker participation (3.2) Competency and training (3.4)
Communication and awareness (4.4.5)	Communication (5.3)	Consultation and communication (4.4.3)	Worker participation (3.2) Communication (3.6)
Procurement and contracting (4.4.6)	Procurement (5.1.3) Contractors (5.1.4)	Operational Control (4.4.6)	Procurement (3.10.4) Contracting (3.10.5)
Management of Change (4.4.7)	Design review and management of change (5.1.2)	Operational Control (4.4.6)	Management of change (3.10.2)
CSA Z1000 (2006)	**ANSI Z10 (2005)**	**OHSAS 18000 series (1996, 1999, 2000) (BSI 8800)**	**ILO-OSH (2001) *Guidelines***
Documentation (4.4.8)	Document and Record control Process (5.4)	Documentation (4.4.4) Documentation and data control (4.4.5)	Occupational Safety and health management system documentation (3.5) Occupational Safety and health management system documentation (3.5)
Evaluation and corrective action (4.5)		Performance measurement and monitoring (4.5.1)	Performance monitoring and measurement (3.11)
Monitoring and measurement (4.5.2)	Monitoring and measurement (6.1) Feedback to the planning process (6.5)	Records and records management (4.5.3)	Occupational safety and health management system documentation (3.5)
Incident investigation and analysis (4.5.3)	Incident Investigation (6.2)	Accident, incidents, non-conformance and corrective and preventive action (4.5.2)	Investigation of work related injuries, ill health, diseases and incidents and their impact on safety and health performance (3.12) Preventive and corrective

			action (3.15)
Internal Audits (4.5.4)	Audits (6.3)	Audit (4.5.4)	Audit (3.13)
Preventive and Corrective Action (4.5.5)	Corrective and Preventive Actions (6.4)	Checking and corrective action (4.5)	
Management review and continual improvement (5)	Management Review Process (7.1) Management review outcomes and follow-up (7.2)	Management Review (4.6)	Management review (3.14)

Commonalities/Similarities:

There are some things that all have in common, such as all are based upon Deming's Work of Plan – Do – Check – Act and all are voluntary consensus standards. Each is designed to be utilized by organizations of all types and sizes, with an emphasis on performance based ideology.

Each emphasizes continual improvement in an OHSMS, but does acknowledge this can have different aspects such as lag and leading indicator results are better year on year, achieving better results with fewer resources, culture improvements into concepts of breakthrough performances. Some standards discuss aspects of improvements within the systems themselves, becoming more comprehensive, easier to understand and to work within. Auditing, statistics trending, benchmarking, inspections are all common elements that assist with tracking the continuous improvement aspect.

All Standards include a stakeholder involvement component. If we look at internal stakeholders that could include directors, trustees, workforce including trade unions' worker representatives and on-site contractors and such. External stakeholders could include regulators, neighbours, clients and supply chain, insurers, shareholders, and consumers.

Differences:

Beyond some verbiage and the items that we have picked out by reviewing the above charts there are only two other main differences. OHSA's 18000 series and now the ANSI through the VPP program are the only audit/certification specification at this point. Some of the standards focus on human loss versus total loss control approach, therefore differ with their control focus

So which system is the best – one may ask. Whichever one works for your organization for many reasons specific to your organization. The main point is that there are advantages to using a systems approach. The system that you utilize will be up to you.

Some considerations are which system that will meet your specific hazards and risks philosophy. Each one of these can assist with the priorities, planning, organizing, controlling, monitoring and reviewing components of the program and allow a method for us to allocate resources as "reasonable and practicable." The "Which Model?" question is answered with the aim being a system that is consistent with the organization's needs and management approach. All need to be adapted to an industry's/company's specifics. While there are potential disadvantages to formal systems, such as paperwork and bureaucracy, the benefits of developing arrangements that fully meet an organization's needs make them worthwhile when properly implemented.

As safety professionals, we need to know what is out there. While there are potential disadvantages to formal systems, such as paperwork and bureaucracy, the benefits of developing arrangements that fully meet an organization's needs make them worthwhile when properly implemented. It is our job to be able to recommend an appropriate system and work with it once it is approved… or we are told which one we are to work with. If you have a system in place and are expanding operating bases, or your are considering a systems approach then I recommend that you further research the standard/specifications and look at the pros and cons of each. Create a comparison table and score system you wish to consider – see which most closely meets your specifications.

In conclusion, it does not matter which one you utilize. But you do need to have a system in place that works for you. Any Occupational Health and Safety Management System (OHSMS) specifies

processes to continuously improve your OHandS performance and at the same time, comply with legislation. It provides the framework to seamlessly integrate the OHSMS with your overall business plan.