Improving Road Safety for All Users on Federal-Aid Projects

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Topic: Improving Road Safety for All Users on Federal-Aid Projects

Per the February 2023 Federal Register announcement, we submit the following information to address this request:

Summary: Our priority at DOT and FHWA is to make our transportation system safe for all people. Right now, we face a crisis on our roadways. In 2021, an estimated 42,915 people across the Nation--117 people per day--lost their lives in motor vehicle crashes.

This represents the highest number of fatalities since 2005. Every transportation project, whether the project’s purpose is safety-related or not, is an opportunity to improve safety. The street network including on-road and off-road facilities should provide safe, equitable, accessible, and comfortable transportation for everyone. Part of the work that DOT proposes to significantly reduce fatalities and serious injuries on our Nation’s highways, roads, and streets is to develop a National Roadway Safety Strategy (NRSS). The NRSS, adopts the Safe System Approach principles to guide our safety actions, and identifies critical and significant actions DOT will take now in pursuit of five core objectives: Safer People, Safer Roads, Safer Vehicles, Safer Speeds, and Post-Crash Care. As part of the actions to address the national crisis of fatalities and serious injuries on our roadways, FHWA requests comments on what strategies, programmatic adjustments or regulatory changes could help improve safety on U.S. highways. Requests for comments include but are not limited to whether changes to the FHWA Design Standards regulation or other FHWA regulations are needed to facilitate the development of
Complete Streets and Complete Networks that serve all users, how the safety performance of Federal-aid projects should be assessed, how funding could be optimized for safety improvements, and how to include measures and collection of more data that can improve safety performance across Federal-aid projects.

ASSP Background

American Society of Safety Professionals (ASSP) is the oldest society of safety professionals in the world. Founded in 1911, we represent more than 36,000 professionals advancing workplace safety and health in every industry and state and around the globe. ASSP members have upheld the occupational safety and health (OSH) community’s standards for excellence, ethics and practice for more than 100 years.

Technical Insights

Response from the members of our Transportation Practice Specialty is supportive of this call for comments and data.

Consensus Standards

As an advocate for workplace safety and OSH professionals, ASSP understands the importance of leading the discussion and evolution of voluntary safety standards. ASSP is the secretariat for 11 American National Standards Institute (ANSI) committees responsible for more than 100 safety standards. ASSP’s role in the standards development process is to organize the committees and ensure the standards are developed, revised and published in a timely manner and in accordance with ANSI procedures.

ASSP has the following occupational safety and health standards committees:

- Construction & Demolition Operations (A10)
- Walking/Working Surfaces (A1264)
- Ventilation Systems (Z9)
- Safety and Health Metrics (Z16.1)
- Fleet/Motor Vehicles (Z15)
- Confined Spaces (Z117.1)
- Lockout, Tagout and Alternative Methods (Z244.1)
- Fall Protection and Fall Restraint (Z359)
- Hydrogen Sulfide Training (Z390.1)
- OSH Training (Z490)
- Overall OSH [Z590]
- OSH Management (Z10; ISO 45001)
- Risk Management (ISO 31000)
We recommend that the Federal Highway Administration consider reviewing these American National Standards for inclusion as references. If the Federal Highway Administration is interested in reviewing these standards, please let ASSP know and we will be pleased to provide copies of the standard for review by agency personnel.


This standard covers workers engaged in construction, utility work, maintenance or repair activities on any area of a roadway. Establishes the minimum requirements for the construction and maintenance of roadways to achieve the following objectives: 1. Prevent worker injuries and illnesses resulting from working in roadway work zones. 2. Establish safe work practices in roadway work zones. 3. Prevent vehicular crashes in roadway work zones.


The purpose of this standard is to provide organizations with a document for the development of policies, procedures and management processes to control risks associated with the operation of motor vehicles. It has been developed to assist organizations in defining and developing an effective safety and risk management program.


This technical report describes practices for the safe management and operation of partially and fully automated motor vehicles (Levels 1-5, as defined in SAE J3016) that are (a) owned or operated by organizations in the private, public and non-governmental sectors and (b) used for organizational business. It supplements ANSI/ASSP Z15.1, Safe Practices for Motor Vehicle Operations, which is a comprehensive fleet safety management standard.


This standard defines requirements and expectations for organizations to establish effective measurement systems that assess safety and health performance, reduce risks, identify gaps in safety and health management systems, and drive needed improvements. It applies to all organizations and provides flexibility based on their size, type of management system and level of organizational risk. The standard can supplement requirements from government agencies, non-government organizations and other groups such as rating agencies that may have their own private or public reporting requirements.

This standard broadens the scope of metrics beyond incident rates and other failure metrics. It promotes the use of leading metrics, metrics related to success, and business impact. Business impacts include
effects on productivity, quality, worker well-being, recruitment, retention, morale and engagement, absenteeism, company reputation, financial health, and shareholder value.

**ANSI/ASSP Z590.3-2021 Prevention through Design Guidelines for Addressing Occupational Hazards and Risks in Design and Redesign Processes**

This standard provides guidance on including prevention through design concepts within an occupational safety and health management system. Through the application of these concepts, decisions pertaining to occupational hazards and risks can be incorporated into the process of design and redesign of work premises, tools, equipment, machinery, substances, and work processes including their construction, manufacture, use, maintenance, and ultimate disposal or reuse. This standard provides guidance for a life-cycle assessment and design model that balances environmental and occupational safety and health goals over the life span of a facility, process, or product.


This document provides guidelines on managing risk faced by organizations. The application of these guidelines can be customized to any organization and its context. This document provides a common approach to managing any type of risk and is not industry or sector specific. This document can be used throughout the life of the organization and can be applied to any activity, including decision-making at all levels.


This standard provides guidance on the selection and application of techniques for assessing risk in a wide range of situations. The techniques are used to assist in making decisions where there is uncertainty, to provide information about particular risks and as part of a process for managing risk. The document provides summaries of a range of techniques, with references to other documents where the techniques are described in more detail.


As with ISO 31000, this handbook can be used to manage risk in all types of organizations. It applies to an organization, and to its activities. It applies to organizations that are considering implementing ISO 31000 or seeking improvement of existing risk management.


This standard provides a management tool to improve performance, provide safe workplaces and reduce the risk of occupational injuries, illnesses and fatalities.
This document specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance.

Questions Released for Comment

ASSP: Many of these questions are meant for response by governmental agencies/entities that do have control over implementation of roadway safety programs. ASSP answered questions where we believe the Society has expertise and something of value to offer. Most of our technical comments are based on our voluntary national consensus standards and how they would apply to the safety issues listed in this announcement. The Federal Highway Administration is asking for feedback and insights on applicable standards and specifications.

1. What steps are being taken by your agency (if you are commenting on behalf of an agency) or an agency you are familiar with to improve safety for all roadway users, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles? How are equity and demographic data considered?

   ASSP: We refer back to the American National Standards we cited in this comment. We know from user feedback that there are having positive impact. It is important to know that the Z15 documents address management and operational aspects of transportation safety and not necessarily design.

6. How could the FHWA regulations governing Design Standards for Highways (Part 625) be revised to consistently support prioritization of the safety of all users across all project types?

   ASSP: We refer back to the American National Standard we cited in this comment addressing Prevention Through Design, [PTD]. This standard addresses PTD and occupational safety and health. However, we do believe that the concepts from these standards address the safe design related issues raised in this call for comments.

9. What, if any, elements of design are not adequately covered by the existing design standards in Part 625?

   ASSP: We refer back to the American National Standard we cited in this comment addressing Prevention Through Design, [PTD]. This standard addresses PTD and occupational safety and
health. However, we do believe that the concepts from these standards address the safe design related issues raised in this call for comments.

15. What policies or procedures on conducting project-specific safety performance assessments and analyses does your agency have? Provide examples and citations to relevant laws, regulations, policies, procedures, or other materials where possible.

**ASSP:** We refer back to our risk management and risk assessment standards. They are widely used in business and industry addressing risk management and risk assessment. These standards have been used by local government impact transportation safety and health issues. We recommend that the Federal Highway Administration would benefit from reviewing these American National Standards.

16. What methods, tools, and types of safety performance assessments are used to analyze project-specific safety performance? What are the minimum data and analysis requirements that should be considered on how to conduct a safety performance assessment?

**ASSP:** We refer back to our risk management and risk assessment standards. They are widely used in business and industry addressing risk management and risk assessment. These standards have been used by local government impact transportation safety and health issues. We recommend that the Federal Highway Administration would benefit from reviewing these American National Standards.

18. How are safety performance assessments integrated into the overall project development cycle? At which stage(s) of the project development process (e.g., planning and programming, environmental analysis, design, operations and maintenance) are project-specific safety performance assessments conducted? Are evaluations conducted after the project has been implemented? Responses may include examples of projects where safety performance assessments were conducted and how they informed the final project deliverables.

**ASSP:** We refer back to our risk management and risk assessment standards. They are widely used in business and industry addressing risk management and risk assessment. These standards have been used by local government impact transportation safety and health issues. We recommend that the Federal Highway Administration would benefit from reviewing these American National Standards.

19. How is safety performance assessed or considered at the system level planning or early transportation project identification/prioritization stage? How is network screening used to inform project decision making?
ASSP: We refer back to our risk management and risk assessment standards. They are widely used in business and industry addressing risk management and risk assessment. These standards have been used by local government impact transportation safety and health issues. We recommend that the Federal Highway Administration would benefit from reviewing these American National Standards.

20. What indicators or measures have been used to determine the effectiveness of safety performance assessments?

ASSP: We refer back to the Z16.1 American National Standard we cited in this comment addressing health and safety performance metrics. This standard addresses metrics from the perspective of occupational safety and health. However, we do believe that the concepts from these standards address metric related issues raised in this call for comments.

21. To what extent is the safety performance assessment or analysis used to inform project decision making? How is safety performance weighted in relation to factors such as environmental impact or traffic congestion? Are there requirements to include countermeasures or evaluation of alternative designs that are expected to improve safety performance? If yes, please provide examples of the requirements or projects where the safety performance assessment led to the implementation of countermeasures and strategies that improved safety performance.

ASSP: We refer back to our risk management and risk assessment standards. They are widely used in business and industry addressing risk management and risk assessment. These standards have been used by local government impact transportation safety and health issues. We recommend that the Federal Highway Administration would benefit from reviewing these American National Standards.

22. How is safety performance evaluated after the project is implemented? To what extent are countermeasures, alternative designs, or strategies to improve safety performance replicated on other projects, based on past project evaluations?

ASSP: We refer back to our risk management and risk assessment standards. They are widely used in business and industry addressing risk management and risk assessment. These standards have been used by local government impact transportation safety and health issues. We recommend that the Federal Highway Administration would benefit from reviewing these American National Standards.

27. What additional resources (i.e., staff, guidance, tools, budget, etc.) would be necessary to adequately assess the expected safety performance of Federal-aid projects?
**ASSP:** We refer back to our occupational safety and health management systems, [Z10 and ISO 45001]. They are widely used in business and industry addressing safety and health management in a wide range of industries and applications. These standards have been used by local government impacting transportation safety and health issues. We recommend that the Federal Highway Administration would benefit from reviewing these American National Standards.

Of interest, we have spoken with many of our members who work in the transportation industry. We are aware from their feedback that there is significant interest in this proposal relating to the implementation of enhanced safety management for transportation systems and infrastructure.

We also included our position statement addressing the use of voluntary national consensus standards in the regulatory process.

Thank you for your time and attention to our comments. If we can be of any assistance in this matter, please let us know.

Respectfully,

Christine M. Sullivan, CSP, ARM
2022-23 ASSP President

**ASSP Headquarters Contact Information**
Timothy R. Fisher, CSP, CHMM, CPEA, ARM, FASSP
Director, Standards Development and Technical Services
American Society of Safety Professionals
ASSP External Relations
520 N. Northwest Highway
Park Ridge, IL 60068
TFisher@ASSP.Org; 847/768-3411
POSITION STATEMENT ON

THE ROLE OF CONSENSUS STANDARDS AND
GOVERNMENTAL

REGULATIONS IN OCCUPATIONAL SAFETY AND
HEALTH

Approved by the ASSP Board of Directors
June 2018, Reaffirmed With ASSE/ASSP Name Change

POSITION STATEMENT ON THE ROLE OF CONSENSUS STANDARDS IN
The utilization of national consensus standards will be of increased importance to this country as the economy of the United States moves towards more of a global perspective. National consensus standards reflect the opinions of the professionals who work at all levels of the public and private sectors in technology development, manufacturing, training, financial analysis, personnel, academia as well as insight from the final end user. This balanced insight enables standards to be crafted in a way which not only benefits and protects users of the standard, but also furthers the interests of the businesses which have been created to meet user demand.

ASSP supports the increased utilization of consensus standards in the formulation of legislation and regulation for occupation safety and health. Governmental agencies such as OSHA, CPSC, NHTSA, etc... should be encouraged to utilize these consensus standards as they provide an efficient/effective alternative to traditional public sector rule making.

Policy Implementation

ASSP advocates initiatives to encourage the utilization of national consensus standards as an effective/efficient option for meeting the demand of increased regulation/legislation in occupational safety and health since:

- National consensus standards have fewer procedural burdens
- The consensus method provides for a balance between competing interests
- The voluntary nature of consensus standards enables users to adapt provisions to meet unusual circumstances.
- Much lower standards development cost are obtained.

(Supporting white paper enclosed)
Preface

The American Society of Safety Professionals acknowledges a responsibility to take an active role in the evolution of national policy with respect to safety and health standards and regulations. At all times, and especially in times of political reform, there is a need for government to receive the counsel of the safety and health community with respect to standards development and promulgation.

As we review over three (3) decades of social legislation and its enforcement under EPA, OSHA, CPSC, etc., Congress and the professional safety and health community are again raising questions as to what the role of occupational safety and health standards and regulation should be. Some legislators have proposed a more comprehensive program of standards and enforcement. Others have maintained that the proper place for standards development and enforcement is within the national consensus standards-setting framework. Others have supported a performance-oriented approach to safety and health standards.

While this paper primarily focuses upon occupation safety and health standards and regulation, the positions set forth here can be applied generically to other regulatory areas. Essentially the uses of national consensus standards in the regulatory process, unless warranted by legislation already in place, should be pursued along the lines suggested in the various venues of this paper.

Introduction

To obtain a legislative compromise one of whose objective was to avoid delays that were inevitable if regulations were developed under the provisions of the Administrative Procedure Act, the Occupational Safety and Health Act of 1970 required the newly formed Occupational Safety and Health Administration (OSHA) to promulgate safety and health regulations using existing nationally recognized consensus standards. While this action did serve the congressional intent of quickly establishing a set of regulations for OSHA to enforce, it also resulted in the adoption of hundreds of regulations that were of minimum value in protecting workers. Although OSHA has done much to eliminate such nuisance regulations, enforcement of regulations with questionable value in the 1970's resulted in resentment from industry that lingers even today.

Yet another problem in OSHA's rapid adoption of consensus standards as regulations was that advisory provisions of voluntary consensus standards became mandatory provisions of government regulations. In other words, not only was the voluntary standard made into a mandatory regulation, but many advisory provisions that used the word "should" were made into mandatory provisions when OSHA replaced the word "should" with "shall." The result was that some regulations were, as a practical matter, impossible
to fully comply with. Many OSHA regulations were changed to address such concerns, but the experience seems to have damaged OSHA’s reputation and credibility.

These developments also impacted the conduct of consensus standards committees. Many committees revised standards to clarify the original intent of provisions, more explicitly addressed exceptions to general provisions, narrowed the scope of the standards or otherwise reacted to developments at OSHA. Even today, members of consensus standards committees look beyond conveying general principles and concepts and concern themselves with exceptions to the rule, adverse impact on specific industries, legal implications of standards, and the potential for misinterpretation. Thus, as a result of OSHA and other factors, the development and maintenance of consensus standards related to occupational safety and health has become a much more complicated and demanding endeavor.

Given that OSHA regulations now exist and given the cost and complexity of developing and maintaining consensus standards, one may question the value of consensus standards activities. Should consensus standards be withdrawn if they cover areas also covered by OSHA regulations? If so, what would happen if OSHA is eliminated? If no, what value is the consensus standard providing? What role should consensus standards play in occupational safety and health? What functions must be reserved for regulation?

To the above end this paper examines the proper role of consensus standards and government regulation in occupational safety and health. After describing the role of consensus standards to occupational safety and health, this paper concludes with a description of policies of the American Society of Safety Professionals intended to enhance this role.

Discussion

The Value of Consensus Standards Generally

When compared to government regulation, consensus standards have several advantages, including the following:

- fewer procedural burdens,
- consensus method,
- voluntary nature allows users to adapt provisions to meet unusual circumstances,
- much lower development cost.

These advantages lead to authoritative documents that can be quickly developed and modified, appeal to common sense, are flexible in application, and are cost effective when compared to the federal regulatory process.

It is important to note that the concept of consensus and the input of most, if not all, materially interested parties is critical to the consensus system. Care must be exercised in the makeup and organization of
consensus committees to assure the integrity of the process. Without these attributes the validity of a consensus standard is suspect.

When Government Regulation is Required

As previously stated, the validity of consensus standards is based on achieving consensus among all materially interested parties. It follows that government regulation is probably necessary when consensus cannot be achieved in the voluntary standards process, or when the voluntary standards process does not receive input and consider the views of all materially interested parties.

Government regulation is also required when a higher level of validity or greater objectivity is required for enforcement. Such may be a watershed issue for industry as OSHA is legislatively and administratively reformed. If industry wants high objectivity (i.e., little or no discretion or interpretation by OSHA compliance officers), then detailed and comprehensive regulations must exist. On the other hand, if industry wants less regulation and greater flexibility, then industry should consider greater application of voluntary standards in enforcement decisions made by OSHA compliance officers using their professional judgment. Given the appeal provisions allowed under OSHA this trade off appears worthwhile.

A potential danger in increased use of consensus standards is that the process will become targeted by special interests. However, viewed another way, increased use, and application of consensus standards by OSHA will motivate increased participation in the consensus process and thereby increase the quality and validity of consensus standard related to occupational safety and health. While the "political" intensity of the process may increase, each party in the process will proceed with the understanding that (1) consensus does not require unanimity, and (2) failure to reach consensus may result in federal regulation.

The Value of Consensus Standards in Areas Addressed by Government Regulations

A practical concern to resource-limited standards developers is the extent to which support should be continued for consensus standards in areas addressed by government regulation. Consensus standards related to safety and health are perceived as less acceptable when OSHA regulations address the same issue, but nevertheless provide the following benefits:

- consensus standards can provide a useful "how to" supplement to OSHA regulations,
- consensus standards can influence revisions to OSHA regulations,
- unlike OSHA, consensus standards can address off-the-job safety and health issue,
• consensus standards address new issues and incorporate updated scientific information quickly while OSHA proceeds with its rulemaking process,

• consensus standards can provide a valuable reference for safety and health evaluations in cases where OSHA regulations have become outdated.

**The Relationship Between OSHA Regulations and Consensus Standards**

What the preceding discussion suggests is that a complementary relationship should exist between OSHA regulations and consensus standards. As a matter of policy, OSHA should take advantage of valid consensus standards and use them in enforcement, mindful of the fact that consensus standards are not written to address every foreseeable circumstance. OSHA will spend less money developing regulations, and armed with common sense, consensus standards, and reasonable discretion, OSHA compliance officers can do their job more effectively. For the consensus standards developer, OSHA regulation can provide an alternative to stalemate when consensus cannot be achieved. In addition, such action is also in accordance with the approved, reaffirmed, and revised Office of Management and Budget Circular A-119 Federal Participation in the Development and Use of Voluntary Standards (See Appendix B). For those almost unresolvable issues of standards setting, the ASSP recommends more use of the negotiated rulemaking option as critical safety and health standards need to be available.

**ASSP Supports Consensus Standard Alternatives to Federal Regulation**

ASSP encourages support of consensus standards activities and processes as an alternative to government regulation of occupational safety and health whenever conditions permit. When compared to government regulation, consensus standard activities allow for greater participation by ASSP professionals in the development of safety and health practices. Also, since consensus standards do not profess to address every possible situation, ASSP professionals also have greater influence in the application and interpretation of consensus standards than they do with federal regulations.

**Implications for OSHA Reform**

ASSP encourages support of OSHA reforms that foster the use of consensus standards in enforcement when a standard does not exist, is inadequate, or is obsolete/dated. For safety professionals/practitioners to realize greater opportunities to apply their professional skill and judgement, consensus standards must, in some sense, be authoritative. Without such authority, safety and health professionals may not have sufficient influence and resources to properly do their jobs. For consensus standards to be authoritative, OSHA must be able to routinely rely on provisions of consensus standards in enforcement.

Since national consensus standards do not contemplate every possible scenario, there exists a need for interpretation of the standards based upon professional judgement. When such standards are used in the
regulatory enforcement process, federal/state agencies should rely primarily, although not exclusively, upon the view of those who wrote the standards. Facilitation of agency needs should be provided promptly in a collegial manner.

**ASSP's View of Government Regulation**

While government regulation appears fundamental to safety/health standardization, it should, nevertheless, be efficient, participative, and centralized. The regulated community will more likely view these characteristics as a value-added process where they are encouraged to provide input. Having regulations developed centrally reduces the need for each jurisdiction to prepare their own standards. Having multiple standards bodies presents many difficulties for the regulated community that has facilities in many jurisdictions.

Standards need to be written for the regulated community to readily understand and implement. If standards were more clearly written, compliance directives would not be needed as an interpretation would be obvious. Standards often appear written more for ease of enforcement or to help the solicitors prevail in legal proceedings. Enabling legislation may be necessary, in this situation, to achieve the desired results.

These regulatory standards often have some requirements which have little to do with achievement of safety and health objectives. Some of this may result from OSHA's approach in writing standards in a one-size-fits-all style. These standards should require only what is necessary to achieve a reasonable reduction in risk. Layers of documentation and written certifications are often extras that add compliance burden with little safety/health accomplishment. If enabling legislation is needed to obtain these results, such action may be necessary.

- Standards, developed by OSHA or any agency, need a user panel review before they are published in final form. Enabling legislation or appropriate regulation may be required to obtain this result.
- Standards covering similar issues in the same Part or across different Parts of OSHA standards should have the same requirements unless the hazards are very different.
- OSHA should have an active process to review standards and update them on a five (5) year cycle after a period of experience in application to harmonize them with the more current consensus standards.
- The standards making/regulatory process should factor in a requirement to allow visits of sites/personnel in the regulated community at any time in the development of a standard to review how issues proposed or being developed for regulation are currently being managed and the costs of managing these issues.
The above features should be put forth or considered as desirable tasks of rule-making when legislators or regulators move toward development of such regulatory standards.

Conclusion

The ASSP supports a complementary relationship between OSHA regulations and consensus standards related to occupational safety and health which uses valid consensus standards enforcement, mindful of the fact that consensus standards are not written to address every foreseeable circumstance. ASSP points out that action of this nature may empower and enhance the professional stature of both ASSP members and OSHA compliance officers. Most importantly, such action will allow for a more efficient and responsive use of occupational safety and health resources thereby improving working conditions.

To further set in place the Society's view of national consensus standards per se Appendix A is provided. This policy position was approved by the Board of Directors on March 5, 1990. In essence the position looks at consensus voluntary standards apart from regulations while covering the range of issues involved in effective participating in the uniquely American system of standards making.