SMS: Getting Ready

Safety Management Systems

SMS Framework

Federal Transit Administration

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SMS Framework

What is the SMS Framework?

SMS is the basis for FTA's new National Public Transportation Safety Program. Effective SMS implementation will improve public transportation safety and provide transit agencies with a structure for understanding and addressing safety risks through proactive and timely organizational decision-making.

FTA developed this SMS Framework to guide public transportation and oversight agencies by:

- Providing a brief overview of key SMS concepts;
- Describing attributes of an effective SMS;
- Presenting FTA's adopted SMS components and sub-components; and
- Presenting SMS development phases and sample tasks.

FTA'S SMS Framework provides the building blocks of SMS and some of the major milestones for its implementation. By sharing this Framework, FTA aims to standardize the understanding of SMS and actively support its implementation through communication and partnership with the public transportation industry.

Why SMS?

The safety of passengers and employees is a top priority for all public transportation industry stakeholders. When compared to other modes of surface transportation, public transit has demonstrated a strong safety record. However, accidents still occur. In recent years the understanding of how accidents happen in the public transportation industry has expanded. Looking beyond the assignment of blame to an individual employee or supervisor, SMS allows public transportation agencies to examine how organizational factors contribute to incidents, accidents, and near misses. Organizational factors include how an agency:

- Allocates its resources;
- Defines and establishes operational procedures;
- Supervises frontline personnel;
- Selects and trains staff;
- Monitors service delivery operations; and
- Resolves human performance issues.

Recent investigations of accidents and incidents have revealed the importance of these organizational factors *after the fact*. SMS proactively identifies and analyzes contributing organizational factors *before the fact*—before accidents or incidents bring them to light.

Successful management of these organizational factors requires that transit agencies make wise decisions about how they identify, prioritize, and address safety concerns. To date, most public transportation

agencies have experience in applying system safety principles to address safety concerns. SMS builds on this experience by integrating basic system safety principles – updated to reflect advances in safety thinking–into specific organizational and management processes through:

- Increasing the focus on hazard identification across the organization;
- Broadening the scope of safety data collection;
- Emphasizing the importance of managing safety risks across all areas of operations;
- Integrating data from other organizational processes into safety data analysis;
- Promoting participation and contribution of frontline personnel in the management of safety; and
- Fostering an organizational culture that encourages proactive safety reporting and safety risk management.

SMS is a management system, akin to a financial or quality management system. It ensures that a public transportation agency, regardless of its size or service environment, has the necessary organizational structures, activities and tools in place, and the necessary safety accountabilities to direct and control resources to manage safety optimally.

SMS activities proactively detect safety concerns and organizational factors, and correct them using data-driven prioritization. As such, important to its success is the:

1. Effective collection, analysis, and sharing of safety data, and
2. Active, accurate, and routine safety performance measurement.

SMS provides transit and oversight agencies with additional tools and activities, and therefore new opportunities, to efficiently and effectively align safety priorities and promote continuous improvement in safety performance.

What are the attributes of SMS?

SMS is a formal, top-down, organization-wide approach to managing safety risks and assuring the effectiveness of safety risk mitigations. SMS helps a transit agency focus its safety management efforts by ensuring that:

1. Senior management has access to the information necessary to strategically allocate resources based on the unique safety priorities of the specific transit agency;
2. Lines of safety decision-making accountability are established throughout the organization to support the resolution of safety concerns and thus promote a proactive safety culture; and
3. Transit agencies address organizational factors that may lead to safety breakdowns, identify system-wide trends in safety, and manage hazards before they result in accidents or incidents.

SMS can be adapted to the mode, size, and complexity of any transit agency in any environment: urban, suburban, or rural. The extent to which SMS processes, activities, and tools are implemented (and documented) will vary from agency to agency. For a small transit operation, SMS processes will likely be straightforward, and activities and tools less burdensome. For a larger transit agency with hundreds or thousands of employees and multiple modes, SMS processes will likely be complex, and activities and tools more resource-intensive.

SMS is adaptable

- SMS adapts to transit agencies of all sizes, service environments, modes, and operating characteristics.
- SMS provides the necessary processes, activities, and tools to manage safety effectively.

The FTA SMS Framework helps to standardize the building blocks of an effective SMS; however, each transit agency will determine the level of detail necessary to identify and establish its accountabilities, as well as the complexity and detail of its own processes, activities, and tools to address its unique safety risks.

Executive Management Commitment

It is a basic management tenet that accountabilities flow top-down. Therefore, as a management system, SMS requires that safety accountability reside with the top executive of a transit agency. While this is usually at the CEO or General Manager level, an agency's Board of Directors also plays an integral role for establishing a sound foundation for safety management.

Regardless of agency size, executive management must play a significant role in developing and sustaining an SMS and a positive safety culture. Without the ongoing commitment of agency executives, any attempt for successful integration of SMS practices into the agency's activities will likely fall short. As such, before going into detail for each of the four components of the FTA SMS Framework, it is important to discuss the role of executive management in SMS implementation and continued operation.

SMS requires management commitment

- The Accountable Executive is ultimately responsible for safety management.
- Executive management includes the management of safety through SMS among its top priorities.
- Support for safety and the SMS is visible throughout all levels of management.

Executive management is ultimately accountable for safety because they are tasked with allocating resources to address business functions, including the management of safety, as organizational processes.

SMS requires the establishment of explicit lines of decision-making accountability at the senior management levels. Within SMS, the individual with ultimate accountability for its day-to-day operation is known as the *Accountable Executive*. Typically, the Accountable Executive is the head of a transit agency: its CEO, President, General Manager, or Executive Director. Regardless of title, the Accountable Executive

plays a central role in the development, implementation, and operation of SMS, in addition to setting safety objectives and safety performance targets.

The Accountable Executive does not need to hold special qualifications or be a safety expert. However, the Accountable Executive must:

- Understand how SMS works, what it seeks to achieve, the potential benefits it will generate for the agency, and his or her role in the management system operation;
- Know the key personnel to consult for the safety information that will inform decisions related to the allocation of resources; and
- Have an understanding of significant safety issues that a transit agency might face during delivery of services.

For an Accountable Executive, safety information–like financial, schedule, planning, and service information – is an integral source of the overall information necessary to allocate resources, set budgets, and manage safety risks. The Accountable Executive should use safety reports and analyses, which are products of SMS processes, as factors in budget planning.

The Board of Directors, or equivalent authority, plays a similar critical role in budget planning and will need to stay informed of top agency safety management priorities and, in consultation with the Accountable Executive, ensure that safety risks are minimized through the strategic application of available resources.

SMS Components and Sub-components

The FTA SMS Framework is comprised of four components and eleven sub-components.

Safety Management Systems Components

Safety Management Policy	Safety Assurance
1. Safety Management Policy Statement 2. Safety Accountabilities and Responsibilities 3. Integration with Public Safety and Emergency Management 4. SMS Documentation and Records	7. Safety Performance Monitoring and Measurement 8. Management of Change 9. Continuous Improvement
Safety Risk Management	Safety Promotion
5. Hazard Identification and Analysis 6. Safety Risk Evaluation	10. Safety Communication 11. Competencies and Training

Each component and its sub-components are applicable to an agency of any size. SMS provides the flexibility for each transit agency to decide how to implement these processes and activities. SMS components interact with each other to provide an effective system of feedback. The following sections describe the components of SMS and serves as guidance to the transit agencies in their implementation of SMS.

I – Safety Management Policy

The Safety Management Policy is the written foundation of a public transportation agency's safety management system. It formally and explicitly commits an agency to the development and implementation of the organizational structures and resources necessary to sustain the safety management processes and activities of an SMS. An effective Safety Management Policy establishes that a transit agency's top executive is ultimately accountable for safety management.

The Safety Management Policy component encompasses an agency's safety objectives and safety performance targets, and the necessary organizational structures to accomplish them. It establishes senior leadership and employee accountabilities and responsibilities for safety management throughout an agency. It also commits senior leadership to the oversight of an agency's safety performance through

> **SMS is formal and structured**
>
> - SMS defines management commitment to meet established safety objectives and safety performance targets.

meetings and regular reviews of activity outputs and discussions of resource allocation with key agency stakeholders.

The Safety Management Policy is implemented in practice though the Safety Management Policy Statement, which the Accountable Executive formally endorses.

Safety Management Policy sub-components

1. *Safety Management Policy Statement* – This sub-component clearly frames the fundamentals upon which a transit agency will build and operate its SMS. It documents executive management's commitment to the SMS, and places the management of safety at the same level as a transit agency's topmost business processes.

   To be effective, a transit agency's Safety Management Policy Statement addresses the following six crucial aspects:

   - Must be signed by the highest executive in the agency (typically, the Accountable Executive (CEO/GM) or Board of Directors/oversight entity) to convey that SMS is important to the highest level of the organization;
   - Includes a clear statement about providing resources for managing safety during service delivery because no activities, safety-oriented or otherwise, can operate without resources;
   - Commits the agency to an employee safety reporting program to convey that receiving safety information from employees is critical to the operation and success of the SMS;
   - Defines conditions under which exemptions from disciplinary actions would be applicable, thus encouraging the reporting of safety concerns by employees;
   - Spells out unacceptable operational behaviors; and
   - Is communicated, with visible and explicit support from executive management, throughout the transit agency.

   Finally, the Safety Management Policy Statement documents management's commitment to continuous safety improvement, as well as to the continuous improvement of the safety management system itself.

2. *Safety Accountabilities and Responsibilities* – This sub-component defines the accountabilities and responsibilities for the performance of the SMS. It describes the relationships between the Accountable Executive and a transit agency's governance structure.

   Under the Safety Accountabilities and Responsibilities sub-component, an Accountable Executive is identified and accountabilities, responsibilities, and authorities are defined for the executive and senior managers. These accountabilities, responsibilities (and their delegation), and authorities ensure the effective and efficient operation of the SMS, and may vary from agency to agency based on the size and complexity of the agency.

It is critical to appoint a subject matter expert for the implementation and day-to-day operation of the SMS, as well as staff necessary to support the subject matter expert in the day-to-day operation of the SMS. The following sample responsibilities would most likely fall to this SMS manager:

- Directs collection and analysis of safety information;
- Manages hazard identification and safety risk evaluation activities;
- Monitors safety risk mitigations;
- Provides periodic reports on safety performance;
- Advises senior management on safety matters;
- Maintains safety management documentation; and
- Plans and organizes safety training.

While SMS responsibilities will not look the same at all transit agencies, the following are some anticipated, and minimum, sample responsibilities that fall on all line and technical management personnel who have responsibilities under SMS:

- Actively support and promote the SMS;
- Ensure that they and their staff comply with the SMS processes and procedures;
- Assist in ensuring that resources are available to achieve the outcomes of the SMS; and
- Continually monitor their area of SMS responsibility.

Each transit agency will determine the structure for accountabilities and responsibilities that will best support its SMS. However, the following principles apply to all:

- Ensure accountability for SMS performance is at the highest level of the organization;
- Implement SMS in a manner that meets transit agency safety performance objectives;
- Establish the meeting or committee structure necessary for the size of the agency to ensure that safety information moves up, down and across the agency; and
- Effectively communicate roles and responsibilities to all relevant individuals.

3. *Integration with Public Safety and Emergency Management* – This sub-component ensures integration of programs that have input into, or output from, the SMS. Each transit agency will identify and describe the necessary coordination with both external organizations and internal departments for dealing with emergencies and abnormal operations, as well as the return to normal operations. This sub-component addresses the various internal and external programs that may affect safety management and includes an index of the plans and procedures that support the transit agency's public safety and emergency management activities.

4. *SMS Documentation and Records* – This sub-component includes the activities for the documentation of SMS implementation, the tools required for day-to-day SMS operation, and the management of new or revised safety requirements, regulatory or otherwise.

The extent and complexity of the SMS documentation will be commensurate to an agency's size and complexity. SMS documentation and records must be readily available to those with accountabilities for SMS performance or responsibilities for SMS implementation and operation.

II – Safety Risk Management

The Safety Risk Management component is comprised of the processes, activities, and tools a transit agency needs to identify and analyze hazards and evaluate safety risks in operations and supporting activities. It allows a transit agency to carefully examine what could cause harm, and determine whether the agency has taken sufficient precautions to minimize the harm, or if further mitigations are necessary.

All transit agencies have implemented activities to identify safety concerns. Under an SMS, this practice will

> **SMS is proactive**
>
> - Safety Risk Management promotes the identification of hazards before they escalate into accidents or incidents.
> - Safety Risk Management evaluates safety risk and establishes necessary mitigations.

expand to ensure use of both proactive (i.e. employee safety reporting) and reactive (i.e. investigations) sources that are as comprehensive as necessary for the size and complexity of the agency.

Through ongoing Safety Risk Management activities, safety hazards and concerns in transit operations are identified, evaluated, and mitigations are put in place to manage their safety risk.

Safety Risk Management sub-components

5. *Hazard Identification and Analysis* – As the first two steps in the Safety Risk Management process, hazard identification and analysis identify and address hazards before they escalate into incidents or accidents. They also provide a foundation for the risk evaluation and mitigation activities that follow.

   Hazards are an inevitable part of transit operations. Only after a transit agency identifies hazards can it address them. Many transit agencies have some of the following hazard identification sources in place:

   - Employee safety reporting program
   - Observations of operations
   - Inspections
   - Internal safety investigations
   - Accident reports
   - Compliance programs
   - Committee reviews
   - Industry data
   - Governmental sources (FTA, NTSB, oversight agency)

- Customer and public feedback or complaints

There are many sources for safety information and many ways to identify hazards, and the sources and methods used depend on the size and complexity of the organization. The data sources may vary, but there are key attributes of effective hazard identification:

- The more comprehensive the data sources, the more confident management can be that safety concerns are being identified;
- Training employees on proper identification and reporting of safety concerns increases the likelihood that hazards can be addressed;
- Focus on the collection of safety concerns while safety representatives work with operations and management personnel to identify the exact hazard(s); and
- Promote and support agency-wide safety concern reporting and hazard identification.

Each transit agency will establish its preferred methods for hazard analysis. As appropriate, subject matter experts from relevant departments should be involved in a transit agency's hazard analysis.

6. *Safety Risk Evaluation and Mitigation* – Following hazard identification, a transit agency implements activities and tools to evaluate safety risks associated with identified hazards, and subsequently develops mitigations to reduce safety risk exposure.

The term "safety risk" represents the likelihood that people could be harmed, or equipment could be damaged, by the potential consequences of a hazard and the extent of the harm or damage. Therefore, safety risk is expressed and measured by the predicted probability and severity of a hazard's potential consequences.

Safety risk evaluation must consider existing mitigations when determining whether further measures are needed to mitigate the potential consequences of a hazard. Safety risk mitigations are actions taken to reduce the likelihood and/or severity of the potential consequences of a hazard.

Safety risk mitigation enables a transit agency to actively "manage" safety risk in a manner that is aligned with its safety performance targets, and consists of initial, ongoing, and revised mitigations.

III – Safety Assurance

The Safety Assurance component ensures that mitigations are implemented, adhered to, appropriate, effective and sufficient in addressing the potential consequences of identified hazards. Mitigations developed under the Safety Risk Management process are "handed-off" to Safety Assurance analysts reviewing the data to determine if (1) the mitigations are effective, and (2) that no new risks have been introduced through implementation of the mitigations. Safety Assurance also ensures that the SMS is effective in meeting an agency's safety objectives and safety performance targets. A transit agency assures its safety objectives are met through the collection and analysis of safety data, including the tracking of safety risk mitigations.

> ### Safety Assurance builds confidence and assures mitigation effectiveness
>
> - Safety Assurance ensures that transit agencies implement appropriate and effective mitigations.
> - Safety Assurance is a never-ending process that monitors the safety performance of an organization.

A transit agency implements its Safety Assurance process through the active monitoring of operations, safety reporting systems, routine workplace observations, inspections, audits, and other activities, designed to support safety oversight and performance monitoring. An effective employee safety reporting program is essential to the Safety Assurance function.

Safety Assurance also helps a transit agency evaluate whether an anticipated change may affect the safety of operations. If an anticipated change is determined to introduce safety risk, a transit agency would conduct Safety Risk Management activities to minimize the safety risk associated with the change.

Safety Assurance sub-components

7. *Safety Performance Monitoring and Measurement* – SMS generates data and information that senior management needs in order to evaluate whether implemented safety risk mitigations are appropriate and effective, and how well an agency's safety performance is in line with established safety objectives and safety performance targets. Safety performance monitoring does not focus on monitoring individuals, but rather monitoring the safety performance of a transit agency itself through routine monitoring of operations and maintenance activities.

   Examples of safety performance monitoring activities include the following:

   - Monitor employee safety reporting program
   - Monitor service delivery activities (must include field observations)
   - Monitor operational and maintenance data
   - Conduct safety surveys
   - Conduct safety audits, studies, reviews, and inspections
   - Conduct safety investigations
   - Evaluate data and information from external agencies or peers

8. *Management of Change* – Change may introduce new hazards and safety risk into transit operations. Therefore, agencies should establish the criteria that define when a change must be evaluated through the Safety Risk Management process. If a proposed or identified change meets or triggers those criteria, the agency uses Safety Risk Management to review existing mitigations to determine if they are sufficient or if new mitigations are necessary. It is important that a transit agency leverage its field monitoring activities (under the Safety Performance Monitoring and Measurement sub-component) to support the identification of changes in a system that may not be planned.

9. *Continuous Improvement* – Evaluation of the SMS is necessary to ensure that it effectively and efficiently allows the agency to meet safety objectives and performance targets. Transit agencies should address any identified weaknesses in SMS organizational structures, processes, and resources in a timely manner, and also complete annual reviews of overall safety performance.

IV – Safety Promotion

Safety Promotion provides visibility of executive management's commitment to safety, and fosters improved safety performance by increasing safety awareness through safety communication and training. Through communication of lessons learned and broader safety information, employees are made aware of safety priorities and safety concerns at both the organizational level and as they relate to their own duties and responsibilities.

> **SMS promotes a strong culture of safety**
>
> - Safety Promotion encourages and teaches safety through effective communication and training.
> - Safety Promotion ensures employees at all levels get the training they need to do their job safely.

The appropriate training for all staff, regardless of their level in the agency, provides visibility for, and knowledge of, the SMS. It ensures employees receive the training they need to do their job safely, and gives them shared ownership of the transit agency's safety mission. This training commitment demonstrates management's commitment to establishing an effective SMS.

Safety Promotion sub-components

10. *Safety Communication* – A two-way feedback loop between frontline employees and management about safety information is crucial in establishing a positive safety culture. Effective safety communication makes personnel aware of safety priorities and initiatives and ensures that feedback is captured and acted upon as appropriate. Safety-related information must be actively and routinely communicated, and must focus on raising awareness of hazards and potential safety risks. Regular discussion of safety concerns promotes an environment that encourages employees to report concerns and demonstrates management commitment to both the employees and the agency's safety performance objectives.

11. *Competencies and Training* – Training of all employees with respect to their role and responsibilities as they relate to agency safety performance is perhaps the most critical driver for successful SMS implementation. It also shapes employee perception of executive management's commitment to safety. Achieving appropriate levels of competency for each staff level enables the consistent application of their skills to help the transit agency achieve its safety performance objectives.

At the frontline employee level, safety management training should provide for the development of *safety reporting competencies*, i.e. employees should receive formal training on the expected contents of employee safety reporting (what to report; what not to report) and the procedures established for reporting.

At the safety management level, formal training should develop safety data management competencies, i.e. how to analyze safety *data,* extract *information* from the safety data, and turn safety information into safety *intelligence* for senior management decision-making for the allocation of safety management resources.

SMS Implementation and Maturity

SMS implementation occurs over time and requires a shift in the management and perception of safety by individuals and the organization as a whole.

A transit agency builds SMS maturity through a series of steps that lead to confidence that safety risk is being identified, evaluated, and mitigated to an extent that is consistent with its safety objectives and safety performance targets. An agency's SMS is mature when agency employees, from Accountable Executive to frontline operators, can unequivocally answer these five questions:

1. What are our most serious safety concerns?
2. How do we know this?
3. What are we doing about it?
4. Is what we are doing working?
5. How do we know what we are doing is working?

The steps to SMS implementation maturity will vary among transit agencies, as constraints and possibilities in approaching safety management, its communication, and training will vary greatly from agency to agency. The FTA hopes that this SMS Framework, and subsequent training, guidance, and assistance, will help expedite SMS maturity within the industry.

While every transit agency is unique, the common goal from the Board of Directors to the Accountable Executive, middle management, supervisors, and frontline employees is to ensure that passengers reach their destination safely and employees return home each day.

SMS Implementation Phases

The FTA proposes three phases for SMS implementation. Each implementation phase is associated with a component of the FTA SMS Framework. There is no specific phase associated with Safety Promotion because safety management training and safety communication are ongoing activities that intertwine in all implementation phases and the life cycle of SMS.

> ### The Three Implementation Phases of SMS
>
> - Phase 1 – Planning, Organization and Policy Development
> - Phase 2 – Safety Risk Management
> - Phase 3 – Safety Assurance

Phase 1 – Planning, Organization and Policy Development

The objectives of Phase 1 are to (a) generate a blueprint of how to meet and integrate SMS requirements into a transit agency's service delivery operations, (b) create an accountability framework for the development of SMS implementation activities, and (c) develop safety policy documents.

The SMS gap analysis is central to Phase 1. A gap analysis is an assessment of where the transit agency is today with respect to implementing SMS, as compared to a fully mature SMS. From the SMS gap analysis, a transit agency can determine the status of its safety management processes, including the organizational structures and resources necessary to support them. From this baseline, a transit agency can plan to develop or strengthen existing safety management processes.

The output of Phase 1 is the SMS implementation plan and completion of safety policy development.

Phase 1 Completion

At the completion of Phase 1, a transit agency should have finished the following tasks in a manner that meets the expectations set forth in relevant requirements and guidance material:

- Appoint the person and/or assemble the team responsible for the development of the SMS implementation plan;
- Conduct an SMS implementation gap analysis by reference to the components and sub-components of the FTA SMS Framework;
- Develop an SMS implementation plan that describes the development of organizational structures and deployment of resources that are required for managing safety under SMS. The SMS implementation plan must detail the tasks, the task owners, and due dates;
- As part of the SMS implementation plan:
    - Identify the Accountable Executive and the safety management accountabilities of managers;
    - Develop the Safety Management Policy Statement draft;

- Identify the departments involved with the integration of emergency plans, procedures, and/or protocols that direct both internal emergency response to transit related events and external emergency response with local emergency services for community-wide emergency activities;
- Develop the blueprint of essential activities and tools of the Safety Risk Management process;
- Develop the blueprint of essential activities and tools of the Safety Assurance process;
- Identify safety management training needs based on audience groups; and
- Develop the infrastructure for safety management communication.

Phase 2 – Safety Risk Management

The objectives of Phase 2 are to (a) establish and implement Safety Risk Management activities and tools so a transit agency can identify and analyze hazards and evaluate safety risks, and (b) correct potential shortcomings, from an SMS viewpoint, in activities and tools that an agency already has in place. Organizationally, this is accomplished when safety risk management responsibility moves beyond just the safety department and into each operational division of the agency.

Most transit agencies have Safety Risk Management activities, though at different levels of implementation maturity and with different degrees of effectiveness. These activities and tools may include information analysis from accident reports, incident investigations, and employee reports.

Phase 2 strives to strengthen existing activities and tools and to develop those that do not yet exist. Toward the end of Phase 2, a transit agency will be ready to perform integrated safety analyses based on information obtained through different methods of safety data collection.

Phase 2 Completion

At the completion of Phase 2, a transit agency should have finished the following tasks in a manner that meets the expectations set forth in relevant requirements and guidance material:

- Hazard identification and analysis
  - Establish criteria and guidance for the activities and tools for hazard identification and analysis; and
  - Establish an employee safety reporting program.
    - Clearly identify the non-punitive aspects of the employee safety reporting program.
    - Clearly identify behaviors that are exempt from discipline.
- Safety risk evaluation and mitigation
  - Develop and adopt safety risk matrices for probability and severity, and evaluate safety risks associated with service delivery operations; and
  - Establish criteria for the elevation of safety risks to executive management, as necessary.
- Develop hazard identification, analysis, safety risk evaluation, and mitigation documentation;
- Develop and deliver training for hazard identification, analysis, safety risk evaluation, and

mitigation to relevant personnel, and include the training material in relevant transit agency documentation;

- Communicate the start of the employee safety reporting program; and
- Communicate the completion of the tasks above to relevant personnel throughout a transit agency.

Phase 3 – Safety Assurance

The objectives of Phase 3 are to (a) implement essential Safety Assurance activities and tools that allow a transit agency to monitor safety performance during service delivery operations, (b) manage operational change, and (c) provide for continuous improvement of the SMS.

Phase 3 strives to strengthen existing Safety Assurance activities and to develop those that do not yet exist. At the end of Phase 3, a transit agency will be ready to monitor safety risk controls and engage in continuous corrective action to maintain their effectiveness over time and under changing operational demands.

Phase 3 Completion

At the completion of Phase 3, a transit agency should have finished the following tasks in a manner that meets the expectations set forth in relevant requirements and guidance material:

- Safety performance monitoring and measurement
    - Develop safety performance monitoring and measurement activities; and
    - Establish safety performance indicators and safety performance targets.
- Management of change
    - Define trigger thresholds for engaging in change management activities (i.e. hazard identification, analysis, and safety risk evaluation); and
    - Ensure no service delivery operations will be initiated in the changed environment until an initial evaluation has been conducted.
- Continuous improvement
    - Develop criteria for SMS continuous improvement;
    - Establish SMS assessments; and
    - Define internal SMS assessment activities.
    - Identify safety assurance and oversight activities carried out by external agencies.
- Document all safety performance and monitoring, management of change, and continuous improvement activities;
- Develop and deliver training on safety performance and monitoring, management of change and continuous improvement, and include the training material in relevant documentation; and
- Communicate the completion of all the above tasks to relevant personnel.

Appendix A: Sample SMS Policy Statement

The management of safety is one of our core business functions. [Transit agency] is committed to developing, implementing, maintaining, and constantly improving processes to ensure that all our transit service delivery activities take place under a balanced allocation of organizational resources, aimed at achieving the highest level of safety performance and meeting established standards.

All levels of management and all employees are accountable for the delivery of this highest level of safety performance, starting with the [Chief Executive Officer (CEO)/Managing Director/or as appropriate to the organization].

[Transit agency] commitment is to:

- **Support** the management of safety through the provision of appropriate resources, that will result in an organizational culture that fosters safe practices, encourages effective employee safety reporting and communication, and actively manages safety with the same attention to results as the attention to the results of the other management systems of the organization;
- **Integrate** the management of safety among the primary responsibilities of all managers and employees;
- **Clearly define** for all staff, managers and employees alike, their accountabilities and responsibilities for the delivery of the organization's safety performance and the performance of our safety management system;
- **Establish and operate** hazard identification and analysis, and safety risk evaluation activities, including an employee safety reporting program as a fundamental source for safety concerns and hazard identification, in order to eliminate or mitigate the safety risks of the consequences of hazards resulting from our operations or activities to a point which is consistent with our acceptable level of safety performance;
- **Ensure** that no action will be taken against any employee who discloses a safety concern through the employee safety reporting program, unless disclosure indicates, beyond any reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures;
- **Comply** with, and wherever possible exceed, legislative and regulatory requirements and standards;
- **Ensure** that sufficient skilled and trained human resources are available to implement safety management processes;
- **Ensure** that all staff are provided with adequate and appropriate safety-related information and training, are competent in safety management matters, and are allocated only tasks commensurate with their skills;
- **Establish and measure** our safety performance against realistic and data-driven safety performance indicators and safety performance targets;
- **Continually improve** our safety performance through management processes that ensure that appropriate safety management action is taken and is effective; and

- **Ensure** externally supplied systems and services to support our operations are delivered meeting our safety performance standards.

_____

Accountable Executive

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Date