

System Safety Program Part 270 Regulation

APTA Webinar #5

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***System Safety Program
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FRA - Office of Safety

For Discussion Purposes Only

Slide 1 of 44



U.S. Department
of Transportation
**Federal Railroad
Administration**

Agenda

Review of must complete by dates

Lessons Learned

Q & A



Key Dates

Rule Effective Date

- May 4, 2020

Plan Submission

- No later than **March 4, 2021**

73 days left



Write it to fit your organization, not ours



The rule provides each passenger rail operation with a certain amount of flexibility to tailor its SSP to its specific operations.

FRA SYSTEM SAFETY PROGRAM PLAN 20 ELEMENTS

1 Policy Statement	2 Program Goals	3 Passenger Rail Operation System Description	4 Passenger Rail Operation Management and Organizational Structure	5 SSP Implementation Plan	6 Maintenance Inspection & Repair Program	7 Rules Compliance & Procedure Review
8 Employee/ Contractor Training	9 Emergency Management	10 Work Place Safety	11 Public Safety Outreach Program	12 Accident Reporting and Investigation	13 Safety Data Acquisition	14 Contract Procurement Requirements
15 Risk Based Hazard Management Program	16 Risk Based Hazard Analysis	17 Technology Analysis & Implementation Plan	18 Safety Assurance, Including Change Management, Configuration Management, & Safety Certification	19 Safety Culture	20 Internal System Safety Program Assessment	

Consultation



- A passenger rail operation must consult in good faith and use best efforts to reach agreement with all directly affected employees on the contents of the SSP plan and amendments to the plan. A consultation statement needs to be included with your submission of your SSP.

More Lessons Learned

Thanks to those that have requested an informal review.

We have more and more coming in every day.
Streamlining our review process to provide a quicker turn around on reviews.

Based on those reviews are following lessons learned.

Overall Goal Of Your SSP

§270.101 System safety program; general.

(a) Each passenger rail operation subject to this part shall establish and fully implement a system safety program that **continually and systematically evaluates railroad safety hazards on its system and manages the resulting risks to reduce the number and rates of railroad accidents, incidents, injuries, and fatalities....**

Overall Goal Of Your SSP

§270.101 System safety program; general. (con't)

....A system safety program shall include a risk-based hazard management program and risk-based hazard analysis designed to proactively identify hazards and mitigate or eliminate the resulting risks. The system safety program shall be fully implemented and supported by a written SSP plan described in §270.103.

(b) A system safety program **shall be designed so that it promotes and supports a positive railroad safety culture.**



General

270.103 (a)

(1) Each passenger rail operation subject to this part shall adopt and fully implement a system safety program through a written SSP plan that, at a minimum, contains the elements in this section.



General

270.103 (a)

(2) Each passenger rail operation subject to this part shall communicate with each railroad that hosts passenger train service for that passenger rail operation and coordinate the portions of the SSP plan applicable to the railroad hosting the passenger train service.

This includes contractors for your operation.

Include Title and Contact information of senior representatives of host railroads.



General

270.103 (a)

This includes contractors for your operation.

Titles and contact information of senior representatives of:

1. host railroads,
2. contract operators,
3. shared track/corridor operators, and
4. others who provide or utilize significant safety-related services.

System Safety Program Policy Statement

#2

270.103 (b) – aka Element 1

Each SSP plan shall contain a policy statement that endorses the passenger rail operation's system safety program. This policy statement shall:

- (1) Define the passenger rail operation's authority for the establishment and implementation of the system safety program;
- (2) Describe the safety philosophy and safety culture of the passenger rail operation; and
- (3) Be signed by the chief official of the passenger rail operation.

#2

System Safety Program Policy Statement

270.103 (b) – aka Element 1

Generally, an effective Policy Statement will be written in a clear and concise manner and explain its role in the SSP. For example, a Policy Statement could describe how:

- Passenger rail operation leadership is clearly committed to safety.
- Passenger rail operation leadership's decisions demonstrate that safety is prioritized over competing demands.
- Reporting systems and accountability are clearly defined.
- A safety conscious work environment is encouraged.
- Passenger rail operation employees feel personally responsible for safety.
- Communication is open and effective across the system.
- Mutual trust is fostered between employees and the passenger rail operation.
- Passenger rail operation leadership is fair and consistent in responding to safety concerns.
- Training and other resources are available to support safety.



Rail system description

270.103 (d) – aka Element 3

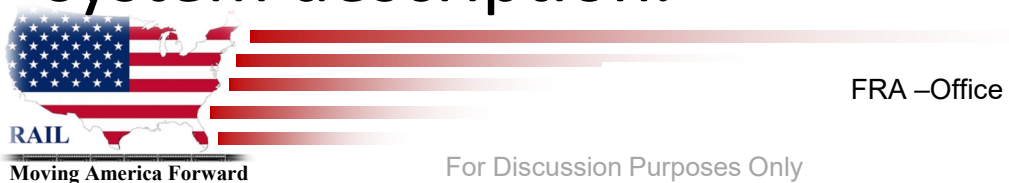
- 1) Each SSP plan shall include a statement describing the rail system. The description shall include: The rail operations, including any host operations; the physical characteristics of the rail system; the scope of rail service; the rail system's maintenance activities; and any other pertinent aspects of the rail system.
- 2) Each SSP plan shall identify the persons that enter into a contractual relationship with the passenger rail operation to either perform significant safety-related services on the passenger rail operation's behalf or to utilize significant safety-related services provided by the passenger rail operation for purposes related to railroad operations.
- 3) Each SSP plan shall describe the relationships and responsibilities between the passenger rail operation and: Host railroads, contractor operators, shared track/corridor operators, and persons providing or utilizing significant safety-related services as identified pursuant to paragraph (d)(2) of this section.



Rail system description

270.103 (d) – aka Element 3

The system description is an important part of the overall SSP plan and should provide sufficient information to allow a basic understanding of the system and its operations. A good system description is important for a clear understanding of the environment and of the interfaces that occur during operation of passenger trains, and especially any elements that may positively or negatively affect safety. The extensive participation by individuals intimately familiar with the passenger rail operation is essential for creating a successful system description.



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Rail system description

270.103 (d) – aka Element 3

For example, a system description should include the following elements related to physical attributes, operational details, and equipment details, as applicable.

Physical Attributes:

- the number of miles of track in the system and what entity or entities own(s) those tracks;
- maximum authorized speed;
- number of miles operated over host railroad track;
- whether the track is shared or in a shared corridor;
- the number of stations and what entity or entities own(s) and maintain(s) the stations;
- type of platforms, boarding characteristics (high- or low-level; Americans with Disabilities Act accessibility);
- the number and types of grade crossings (active, passive, public, private, etc.) (the grade crossing detail information maybe referenced in a grade crossing inventory list);
- the number of tunnels and bridges;
- location of maintenance facilities and the type of maintenance that is performed at each location and what entity or entities provide(s) the maintenance services;
- the dispatching location and what entity or entities perform(s) the dispatching services;
- the location of vehicle storage facilities, the location of offices, etc.; and
- other relevant physical attributes.



Rail system description

270.103 (d) – aka Element 3

Operational Details:

- The operating days and hours of service (including any special event operations);
- The number of passengers who utilize the system on a daily basis (both weekdays and weekends);
- The number of routes in the system (including a system map would be helpful);
- The type of signal system; and
- Other relevant operational details.

Equipment Details:

- Types and number of rolling stock (including ownership of the rolling stock) – passenger coaches, locomotives, cab cars, etc.;
- Types and number of maintenance and other on-track vehicles; and
- Other relevant equipment details.





Emergency Management

270.103 (j) – aka Element 9

Each SSP plan shall contain a statement that describes the processes used to manage emergencies that may arise within the passenger rail operation's system including, but not limited to, the processes to comply with applicable emergency equipment standards in part 238 of this chapter and the passenger train emergency preparedness requirements in part 239 of this chapter.



Emergency Management

270.103 (j) – aka Element 9

Note: Nothing in this Element affects the requirements contained in 49 CFR Part 239 – Passenger Train Emergency Preparedness.

Each SSP plan must address planning and response to emergencies that may occur onboard trains and **in other areas on the system, including emergencies in passenger stations and maintenance shops.** This section does not attempt to detail what an emergency management plan should consist of, but instead provides general considerations for identifying a general emergency response plan for the system. This would include the identification of the emergency evacuation plans for trains, a continuity of operations plan, and other specific emergency plans for fixed locations.



Emergency Management

270.103 (j) – aka Element 9

Each passenger rail operation has a unique operating environment which will govern how emergency response is developed and carried out. To effectively manage emergencies, each system should establish an overall emergency management plan. Developing an emergency management plan requires a clear understanding of the system, capabilities, resources, and needs. The plan should address: the appropriate and effective response to emergency situations, such as derailments, collisions, and severe weather conditions; the mobilization by passenger rail operations and emergency responders; and the process to recover and restore service to normal operations. The emergency management plan should identify roles and responsibilities, and establish procedures for intra and interagency coordination and communication. It should also describe how the passenger rail operation will address persons with disabilities during emergencies.



Workplace Safety

270.103 (k) – aka Element 10

Each SSP plan shall contain a statement that describes the programs established to protect the safety of the passenger rail operation's employees and contractors. The statement shall include a description of:

- (1) The processes that help ensure the safety of employees and contractors while working on or in close proximity to railroad property as described in paragraph (d) of this section;
- (2) The processes that help ensure that employees and contractors understand the requirements established by the passenger rail operation pursuant to paragraph (f)(1) of this section;
- (3) Any fitness-for-duty programs or any medical monitoring programs; and
- (4) The standards for the control of alcohol and drug use in part 219 of this chapter.



Workplace Safety

270.103 (k) – aka Element 10

Workplace safety is an integral part of any SSP. Workplace safety touches many, if not all, of the elements embedded in the SSP. Workplace safety should also be part of the overall safety philosophy and culture of a passenger rail operation.

This description should also include any programs the passenger rail operation has established under its own company authority to address alcohol and drug use (e.g., programs that require alcohol and drug testing for employees not covered by FRA's alcohol and drug testing regulations).

FRA realizes that one size does not fit all. There are many different workplace safety programs throughout the railroad industry, developed by industry and labor, that address the safety of passenger rail operation employees and contractors. FRA expects a passenger rail operation to utilize the hazard analysis process to determine if the present programs are sufficient, or to determine if there are any gaps which may require an extension of, or change (addition/modification) to, existing programs.



Workplace Safety

270.103 (k) – aka Element 10

In addition to identifying and describing the workplace safety programs, an SSP plan must identify the process used to ensure employees and contractors understand the requirements of the workplace safety programs. See § 270.103(k)(2).

Some workplace safety programs are regulated or mandated by Federal agencies other than FRA (e.g., the Occupational Health and Safety Administration). There are also State and local workplace safety requirements. An SSP plan does not have to address, but may reference, workplace safety programs that would not fall under FRA's railroad safety jurisdiction (e.g., programs addressing risks associated with slip, trip, and fall hazards in a dispatching center). A passenger rail operation should note that if its SSP plan does include a workplace safety program that is not related to railroad safety, that program will not be protected by the SSP rule's information protection provisions. If a passenger rail operation is uncertain whether a workplace safety program falls under FRA's railroad safety jurisdiction, it should contact FRA for specific guidance.

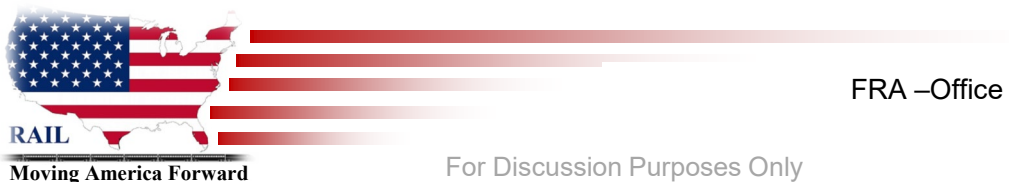


Public safety outreach program

#6

270.103 (I) – aka Element 11

Each passenger rail operation shall establish and set forth a statement in its SSP plan that describes its public safety outreach program to provide safety information to railroad passengers and the general public. Each passenger rail operation's safety outreach program shall provide a means for railroad passengers and the general public to report any observed hazards.



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Public safety outreach program

#6

270.103 (I) – aka Element 11

This public safety outreach program is an important element that presents the opportunity for the passenger rail operation to directly communicate with the passengers who utilize the service. The program can include social media to provide passengers with information on service and schedules, interruptions of service during emergency situations, safety behavior when utilizing the system, and boarding and alighting safety tips.

In addition to passenger notifications, public safety outreach programs can include school and community programs, such as Operation Lifesaver, Inc. or other programs addressing grade crossing and trespasser safety.

A passenger rail operation should utilize the hazard analysis process to determine if its existing public safety outreach programs are sufficient, or to determine if there are any gaps which may require an extension of, or change (addition/modification) to, existing programs.



Accident/Incident Reporting and Investigation

270.103 (m) – aka Element 12

Each SSP plan shall include a statement that describes the processes that the passenger rail operation uses to receive notification of accidents/incidents, investigate and report those accidents/incidents, and develop, implement, and track any corrective actions found necessary to address an investigation's finding(s).



Accident/Incident Reporting and Investigation

270.103 (m) – aka Element 12

Note: Nothing in this Element affects the requirements contained in 49 CFR Part 225 – Railroad Accidents/Incidents: Reports, Classification, and Investigations.

An SSP plan must identify and define:

- How notifications of all accidents/incidents and near misses are received,
- How these events are investigated and reported, and
- What the processes are for developing, implementing, and tracking corrective actions found necessary to address an investigation's finding(s).

FRA does not prescribe any one method for internal accident investigation, thus leaving a passenger rail operation the flexibility to develop processes and procedures that fit its unique operating environment. An SSP plan should identify any persons/organizations (both internal and external to the passenger rail operation) involved in the identified processes, and define the responsibilities of each of those persons/organizations.



Accident/Incident Reporting and Investigation

270.103 (m) – aka Element 12

Accidents/incidents and near misses can reveal hazards and risks on the system, which can then be addressed as part of the passenger rail operation's SSP. These actions can provide information to the passenger rail operation on what additional actions it can take as part of its SSP to address the hazards and resulting risks that led or contributed to an accident/incident or near miss.



Safety Data Acquisition

270.103 (n) – aka Element 13

Each passenger rail operation shall establish and set forth a statement in its SSP plan that describes the processes it uses to collect, maintain, analyze, and distribute safety data in support of the system safety program.



Safety Data Acquisition

270.103 (n) – aka Element 13

This description should identify those personnel and departments involved and their responsibilities in the processes.

Safety data acquisition is an important SSP element that contributes to the overall rail safety program. Accurate data collection and the analysis and distribution of that data within the system can help to determine where safety problems or hazards exist; develop targeted programs; and focus resources towards the prevention of future incidents and improvement of safety culture.



Safety Data Acquisition

270.103 (n) – aka Element 13

There are many sources of data to consider. Some examples include:

Safety hotline reports,

1. Near miss reports,
2. Incident reports,
3. Accident reports (both internal and external – i.e. NTSB and FRA),
4. Supervisor reports,
5. Employee injury/incident reports,
6. Trespasser incident reports,
7. Unsafe practice reports,
8. Violation of rules/procedures reports,
9. Internal assessments, and
10. Inspections.

Contract procurement requirements

#9

270.103 (o) – aka Element 14

Each SSP plan shall set forth a statement that describes the process(es) used to help ensure that safety concerns and hazards are adequately addressed during the safety-related contract procurement process.

Contract procurement requirements

270.103 (o) – aka Element 14

This description should identify the personnel and departments involved and their responsibilities in the process.

The contract procurement requirement is an SSP element that can have far-reaching safety implications. The procurement process should attempt to ensure that obtained services, equipment, and other materials will maintain the safety of rail operations and services. Basic safety and user requirements may be included in procurement specifications and coordinated with the appropriate departments to ensure that no new hazards are introduced into the system.

Contract procurement requirements

#9

270.103 (o) – aka Element 14

FRA expects each passenger rail operation to attempt to **ensure that procured services, equipment, and other materials will not degrade the safety of rail operations and services**. The passenger rail operation identifies the processes used to help ensure that safety concerns and hazards are adequately addressed during the safety-related contract procurement process and to identify those personnel and departments involved and their responsibilities in the process



Safety Culture

270.103 (t) – aka Element 19

Each SSP plan shall contain a statement that describes how the passenger rail operation measures the success of its safety culture identified in paragraph (b)(2) of this section.

(b) *System safety program policy statement.* Each SSP plan shall contain a policy statement that endorses the passenger rail operation's system safety program. This policy statement shall:

(2) Describe the safety philosophy and safety culture of the passenger rail operation;



Safety Culture

270.103 (t) – aka Element 19

An organization's safety culture can have a profound impact on safety outcomes. Many critical elements of safety culture not only are applicable to ensuring safe operations, but reflect basic good business practices. The key indicator of a robust safety culture is that leaders' attitudes, organizational policies and decision making, and employees' behaviors should consistently demonstrate that safety is prioritized over competing goals and demands.

Safety culture is dynamic and can vary within the organization. There are many ways to measure safety culture. Several methods may need to be implemented to properly measure safety culture throughout the organization.

Safety Culture

270.103 (t) – aka Element 19

Some ways to measure safety culture may include:

- Employee surveys.
- Effectiveness of the risk-based hazard management program.
- Changes in rates of:
 - overdue corrective actions;
 - deferred maintenance;
 - overdue training;
 - delayed internal assessments;
 - reportable accidents;
 - non-reportable accidents; or
 - negative audit findings.

Whatever method chosen to measure safety culture, the SSP plan must describe the processes and time periods for each method used.



Questions?

Please raise your hand

or

Type your question in the comment section

Q&A

QUESTION:

When are the annual internal assessments (audit) results required by FRA?

ANSWER:

Within 60 days of completing the internal SSP plan assessment

Q&A

QUESTION:

How do I submit my system safety plan to FRA?

ANSWER:

The plan can be submitted to the Associate Administrator of Railroad Safety and Chief Safety Officer in Washington D.C. and/or electronically through the [FRA Railroad Portal](#).

For electronic submittal user guide, contact Mike Ramsey or Larry Day.

FRA System Safety Team

- Communication

- System Safety Team

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Questions?



Thank you for your time