



STRatégie d'Action de l'EPF au Niveau Européen  
(the European Strategy Action of EPF)  
in consultation with the French sector

## GT3

# Feedback

Feedback, safety event reporting and associated database,  
performance assessment



- 1 ■ Introduction and background information
- 2 ■ Proposals and recommendations
- 3 ■ Conclusion



**STRANE: STR**atégie d'Action de l'EPSF au Niveau Européen (the European Strategy Action of EPSF) in consultation with the French sector

Strategic position report

## **GT 3: Feedback**

*Feedback, safety event reporting and associated database,  
performance assessment*

Date / version: 07/11/2025 – V1.0

### **Organisations represented:**

- AFRA
- AFWP
- AGIFI
- ALSTOM GROUP
- CAPTRAIN
- DB Cargo Rail France
- EPSF
- ERMEWA
- HEXAFRET
- OC'VIA
- OFP
- RAILPOOL
- SETVF
- SNCF SA
- SNCF Voyageurs
- TRENITALIA
- UTPF

## 1. Introduction and background information

The European Commission is currently finalising the text of the Common Safety Methods on the Assessment of Safety Level and Safety Performance (CSM ASLP), the main objectives of which are *to provide a common approach on assessing the safety level and safety performance achieved by railway operators, while also providing methods to establish railway safety indicators both nationally and within the EU*. The text introduces the assessment of the Safety Level and Performance of each railway operator and, by aggregating the results obtained, the safety level of a Member State, together with the associated calculation methods. To prepare for its implementation, which would be in addition to any existing national measures, a tool to report safety incidents at the European level is also being developed.

### STRANE - Strategic position report – **GT 3: Feedback** - Page 1 of 7

**Disclaimers:** This document is a summary of the discussions and common positions shared by the stakeholders of the STRANE working group. The document is not intended for public dissemination and does not under any circumstances engage the responsibility of the associated entities. However, with regard to its content and the identified common positions, each participant is free to use it as they see fit for their own purposes.

Safety event reports are an essential input for feedback to work effectively. Provided that these reports are sufficiently reliable, relevant and as comprehensive as possible (i.e. qualitative, qualified and quantitative), they form a crucial knowledge base, the analysis of which will reveal opportunities to improve safety. However, using incidentology as a means of measuring a company's safety performance level can undermine the transparent reporting of safety events.

At the same time, the French approach to operators reporting safety incidents, as stipulated in the order of 4 January 2016, demonstrates a degree of maturity and pragmatism. It incorporates improvements in best practices that have been made over the nine years since the order was implemented and nearly twenty years of experience, in terms of how data is collected, its quality, and how it is used. By joining the harmonisation movement at a European level, the challenge is to perpetuate and even further improve this model, which is a useful complement to the European method with national concepts and has a long history, and then, in the long term, to supplement it with data collected in other Member States in order to develop benefits for the French sector.

## 2. Proposals and recommendations

### **I°/ Feedback: Fundamentals to the continuous improvement of risk management**

Sharing experiences between players in the railway system, as facilitated by the EPSF, is a fundamental pillar of the French sector's safety culture. The importance of analysis and knowledge sharing is recognised by all players in the sector. It is to be hoped that the EPSF, in conjunction with the various players, will continue to facilitate the sharing of feedback at a national level. The feedback process includes organising regular meetings (5 to 6 per year: feedback from RUs, IMs, Systems, Events, Supervision + Feedback Seminar) and publications such as the safety newsletter, the monthly safety bulletin and bow-tie diagrams (representing failure scenarios). The Voie Libre platform, maintained by the EPSF, is the medium used to share the outputs of the process at a national level, relying in particular on safety events being reported in the CYRUS database.

However, there is room for improvement in the sharing of experiences between players in the French railway system. This could be achieved by supplementing it with data from other Member States, the findings of investigations by other investigation bodies and the work of the Joint Network Secretariat (JNS) procedures, in order to more accurately identify safety issues and anticipate risks by adopting a broader, longer-term perspective.

### **II°/ Reporting of safety events and the French model**

In order to guarantee the quality of the data transmitted, a consistent quality control process must be implemented. Furthermore, this process must provide a clear framework of the possibilities and limitations of interpreting this data and the context of events to all its users (whether internal or external to the railway system, e.g. journalists, politicians or road freight transport operators).

The French safety event reporting model is based on three pillars that the sector is seeking to preserve:

- 1) Establish a framework for the detection, analysis and assessment of Safety Events carried out by railway operators

To this end, the EPSF promotes and develops safety event reporting practices through its national CYRUS database and by drafting guidelines. The severity **rating** of a safety event (6-level severity scale), the **justification** of events with High Severity Potential - HPG, and High Learning Potential - HPA, are key elements in the shared perception of risk.

2) Contribute to feedback by sharing the lessons learned on the effectiveness of barriers

Analysis of **failure scenarios** sheds light on the effectiveness of barriers. In France, it is central to the organisation of the feedback process (see §1). A dedicated tool designed to generate failure scenarios from standardised input data would improve the dissemination of its findings to the sector in an aggregated and anonymised form, and would also facilitate future compliance with CSM/ASLP requirements.

3) Monitor risk management of railway operators

When situations with high severity potential are detected, the railway operator concerned ensures that lessons have been learned and that appropriate measures have been implemented. The risk-based monitoring strategy must be both fair and equitable for all, based on an analysis of the frequency and severity of the safety events.

### **III°/ Safety Event Reporting and safety performance assessment (European model - CSM ASLP / CSM CST)**

1) The sector promotes the CSM/ASLP, which is seen as an opportunity to improve the French model

The ontology proposed by the Agency is unquestionably a major step forward in understanding the performance of the safety management systems in operation. In effect, as this ontology is not limited to reporting safety events, it directly covers the barriers implemented in safety management systems and operators' expertise in managing them.

Furthermore, the method proposed by the Agency to build failure scenarios (Building Blocks) seems very promising and will provide a common language throughout Europe in order to share the lessons learned.

Finally, the Agency encourages existing national databases to be connected to the ISS, which provides the opportunity for a two-way exchange of information and avoids double reporting.

## 2) Limitations identified by the sector

**Access to data** in the ISS database appears to be very restricted, with a sharing philosophy based solely on a need-to-know basis. At this stage, it is not possible to conduct analyses on a large volume of events. Only the Group of Analysts (GoA) will be authorised to do so. Data collection should go through the NSA so that it has access to it.

**The Safety Level (SL) and Safety Performance (SP) indicators** are partly constructed using complex mathematical procedures that are not widely used in the scientific community and implemented in a programming language that is becoming less and less widely used (R language). They enable changes to be tracked over time for a given entity and would allow comparisons to be made between groups of similar operators. The sector remains open but cautious: tests during start-up will put these new indicators to the test and should confirm or refute how relevant they are.

**The Safety Level** has an ambiguous name, as it does not actually reflect a level of safety, but is useful for detecting a change in frequency or in the human consequences of the occurrence of safety events. Although it is recognised as a good method of issuing an alert, this indicator is not suitable for rare events and does not allow the probability of a very rare event occurring to be detected (see appendix).

**Safety Performance** measures safety performance and is based solely on self-assessment as part of a continuous improvement process. However, it does not take into account the results of monitoring activities. This means that discussions with the Agency will be needed to establish a shared vision and align any potentially conflicting indications between this indicator and the assessment methods used by NSAs, largely based on the results of their monitoring activities.

**The absence of integration of the concepts of high severity potential - HPG** (which is a "near serious accident"), **high learning potential - HPA, and severity scale** is a real limitation on the potential of the data, given the amount that is collected. The CSMVASLP focuses too much on significant accidents, which serve as the basis to calculate the Safety Level, and not enough on precursors. In the absence of integration into the CSM ASLP via the Group of Analysts, collection at national level must continue. This data will be forwarded to the Agency to avoid double reporting.

**As data quality assurance is delegated to operators and NSAs**, comparisons of indicators between operators in different countries will be more or less biased by differences in practices and quality assurance requirements between these players. A review of the French railway sector will need to be conducted to shed light on the limitations of applying the Safety Level.

**The involvement of ECMs is anticipated.** In the past, the ERA has already implemented a dedicated tool to report safety alerts: the Safety Alerts IT tool (SAIT). This tool, which is not accessible to NSAs but the use of which has now been made a requirement under the ECM regulation, has yet to be fully exploited to extract information that would be beneficial to the sector. Beyond simple reporting, which provides information on new failures and potential hazards, monitoring the identified solutions would help clarify their effectiveness for the sector. In this way, the tool could be integrated into the ISS.

### STRANE - Strategic position report – **GT 3: Feedback** - Page 4 of 7

**Disclaimers:** This document is a summary of the discussions and common positions shared by the stakeholders of the STRANE working group. The document is not intended for public dissemination and does not under any circumstances engage the responsibility of the associated entities. However, with regard to its content and the identified common positions, each participant is free to use it as they see fit for their own purposes.

**The implementation period for the ISS is expected to be lengthy:** four years from the adoption of the text, plus an additional two years to obtain the initial calculations for the indicators. This transition phase must enable the French model for reporting information to be gradually integrated into the European model, while ensuring that there is never any loss in the level of information collected.

#### **IV°/ Coordination between national and European databases**

The CSM ASLP foresees the possibility of connecting national databases to the European ISS database. The French sector would like the EPSF to offer the option of reporting events to the NSA, which would be responsible for forwarding them at the European level, thereby avoiding the need to report events directly at the European level.

### 3. Conclusion

The sector sees the CSMASLP as an opportunity to significantly improve the French model and make it "interoperable". The identified limitations would represent a significant loss of information for the sector and would have a major impact on the EPSF's ability to carry out its missions if the European model alone, in its current form, were to be adopted.

Therefore, in view of the implementation time frame already mentioned, there is an opportunity to be proactive in proposing ideas to the Agency and through various channels of influence. The aim is for this CSM to incorporate the French approach based on equitable sharing of experience and make it sustainable.

## **APPENDIX: EPSF position on CSIs**

The EPSF has had several opportunities to present its vision of CSIs (see, in particular, the February 2025 issue of the *Revue Générale des Chemins de Fer*). The main message conveyed by the EPSF is that counting deaths and serious injuries is of very limited value for three reasons:

- The most common types of accidents are collisions at level crossings and collisions involving "intruders" (94% of fatalities in France in 2024);
- Serious accidents caused by railways are very rare, but when they do occur, the number of fatalities is very high (accident in Greece and Brétigny in France);
- The yearly coverage is not suitable for rare events.

Thus, in the first case, these indicators detract from risks that occur rarely but have significant consequences. In the second case, once a very serious accident has occurred, the priority is not to update these indicators.

With regard to NRVs (national reference values), there is a threshold below which counting no longer makes any sense. Let us imagine that a serious accident occurs every nine years. For eight years, the annual rate is zero (everything is fine), but in the ninth year, the rate exceeds the NRV, which triggers the implementation of a national safety plan. However, in the tenth year, the accident did not happen again, and we can deduce, without proven causality, that the plan worked.

If ambitious NRVs are sought, they should be taken into account from the design phase and/or in the authorisation process by demonstrating reliability in terms of operational safety. Then, during the operational phase, any suspicion of a deviation from the authorisation (near serious accident, minor incidents with an excessive increase in frequency, and especially the results of inspections) should give rise to risk analyses, including, where appropriate, the effect of an action plan. Finally, these analyses must be updated until we are satisfied that the risk has been adequately addressed. There are requirements of this type in the aviation sector: EASA (part 21) and FAA (AC39-8). Railway regulations already provide the necessary basis to define such a strategy, but nothing is binding at this stage, and what is done in aviation cannot be directly transposed to the railway sector.

Finally, regarding the annual rate of significant accidents, which has indeed remained stable for (at least) 10 years:

- The threshold of €150,000, one of the criteria for an accident to be considered significant, has not been adjusted for inflation. Mechanically, it is therefore easier to observe significant consequences today than it was 10 years ago, even though the intrinsic level of safety has improved.
- We are seeing an increase in rail accidents caused by weather conditions (trees falling on tracks, derailments due to mudslides). This argues in favour of agreeing that the level of safety is better for other risk factors.

### **STRANE - Strategic position report – GT 3: Feedback - Page 6 of 7**

**Disclaimers:** This document is a summary of the discussions and common positions shared by the stakeholders of the STRANE working group. The document is not intended for public dissemination and does not under any circumstances engage the responsibility of the associated entities. However, with regard to its content and the identified common positions, each participant is free to use it as they see fit for their own purposes.

STRANE - Strategic position report – **GT 3: Feedback** - Page 7 of 7

**Disclaimers:** This document is a summary of the discussions and common positions shared by the stakeholders of the STRANE working group. The document is not intended for public dissemination and does not under any circumstances engage the responsibility of the associated entities. However, with regard to its content and the identified common positions, each participant is free to use it as they see fit for their own purposes.

