CER/EIM position on the CSM ASLP implementation

Date: 5 February 2021

Summary of conclusions

The following conclusions are elaborated further below:
 • CER and EIM support the objective to improve collecting and sharing harmonised safety data at Union level in order to continue learning and improving safety.
 • The development process and planning for the CSM ASLP up to now was under unusual pressure and circumstances, likely leading to sub-optimal results.
 • Some elements of the CSM ASLP and phased application hold residual uncertainties potentially impacting the achievement of its objectives, notably:
   o reporting of occurrence scenario's and risk control measures,
   o limitations in shared data and learning potential for GoA and individual operators,
   o availability of (temporary and final) IT solution and interface versus fixed dates of CSM ASLP application,
   o the complexity of the CSM urging for support/training,
   o unbalance in costs and benefits for operators and for considerable time (years).
 • To mitigate the real and perceived uncertainties and risks in achieving the CSM ASLP objectives we suggest that the application of the CSM ASLP is evolving through 'gateways' (to be further defined).

Looking back

The preparatory work of the COR project (2016-2018) resulted in a Mandate to ERA on ASLP (EC, 7 Jan 2019) and the Big Picture Report (ERA, 2 Dec 2019). CER and EIM support the objective to improve collecting and sharing harmonized safety data at Union level in order to continue learning and improving safety.

Since the start of the ERA CSM ASLP Working Party (Dec 2019) its members were under high pressure to develop the deliverables per Dec 2020 (start of consultation). Representatives of operators as well as NSA's repeatedly requested ERA and EC to review the project-planning for its extraordinary short development time (1 year!) and high meeting frequency (ERA meetings alone peaking above 10 meetings a month!), all related to the very ambitious project objectives as stated in the Big Picture report. Although the WP adapted quite well to the Covid limitations by remote-only meetings, the necessary coordination within the participating parties to establish their contributions was severely limited. Still, the planning up to CSM entry into force did not change although now a two-phase application of the CSM is foreseen.

Conclusion: CER and EIM support the objective to improve collecting and sharing harmonized safety data at Union level in order to continue learning and improving safety. The development process and planning for the CSM ASLP up to now was under unusual pressure and circumstances, likely leading to sub-optimal results.

State of affairs

We have now, at the time of the public consultation, a good idea of the requirements, methods and means as described by the final draft CSM ASLP (Dec 2020). Even though we have supported the development of the CSM ASLP as well as we could under the constrained circumstances, some elements of the CSM ASLP may not have been as well designed as could have been done, given more time. Similarly, we feel that the real consequences resulting from the requirements of the proposed CSM are not yet properly assessed. This leads to uncertainties in the consequences of the CSM application, especially in the following areas.

The requirements for 'simple' and 'detailed' reporting of the specified event-types are considered a clear although substantial extension of current reporting obligations. But the method to report occurrence-scenario's and risk control measures is unfamiliar to most operators (and NSA's), non-standard and complex, especially without graphical tooling. This casts doubts on the quality and thus usefulness of the reported/collected data as well as on the required resources for reporting.

The main tasks of the Group of Analysts have been described and the working arrangements will be developed later this year. The Sector appreciates being able to participate to the tasks of the GoA (having the legal basis of an ERA Working Party). At the same time, any participating body has no formal power as the GoA can only deliver proposals which, if endorsed, are to be effectuated through ERA. So, the motivation to participate in the GoA tasks will depend on the expectations for resources spent versus results gained.

While working on their tasks, we expect that the GoA will face a principal limitation in collective learning. Even if we assume that the harmonization of the data collection allows for justified comparability and aggregation of data (hard to verify, by the way), the assessment results can only reflect a black-box perspective, that is, only the outcomes of safety level and safety performance and not the why. The reason for this is that (almost) no information is available to the GoA (because not collected, or protected) that explains the context-dependency of the individual operators and their risk management processes (white-box perspective). So, while the GoA may be able to identify trends or peculiar results when comparing outcome-data, the understanding of these results can only be obtained after further analysis based on additional, context-specific data. These limitations also impact any proposal for the improvement of safety.

For the first phase of CSM application, with limited reporting obligations, a provisional IT solution is foreseen for data collection/sharing. For the second phase, with full CSM application, the Information Sharing System should be available for use (after specification, developing and testing). Both these IT solutions for their own phase and scope of application, are critical factors for the feasibility of the CSM application. We consider it a risk that the application phases of the CSM are set on fixed dates (yet to be determined) instead of being set on the demonstrated availability and usability of the respective IT solutions including appropriate interfacing.

Personnel from operators not familiar with the CSM ASLP, consistently react having difficulties with understanding its contents. This clearly signals the need for improvement of readability and for support during dissemination of the CSM ASLP before entering into force.

The Impact Assessment for the CSM ASLP is not yet completed, but the main characteristics are clear. The foreseeable costs for all the stakeholders can be estimated with reasonable accuracy. We note however, that compared to Agency's IA, we consider some cost-factors missing and some

underestimated. Also, it is to be expected that, due to learning-curve effects, initial costs will be relatively higher and will decrease only after the implementation has matured. Due to the fast CSM development, not foreseen effects and costs should be expected.

The benefits expected by ERA are related to the purposes and objectives of the CSM for the different stakeholders (summarized in the Appendix). We agree that the assessment of the collected data could support Union and national authorities to target their initiatives for safety improvements (based on benchmarking and trending etc of outcome data). We do not agree, however, that the collected data could support individual operators in making their risk management more efficient or more effective to any substantial degree. For this, operator- and context-specific data is needed, and that is either not collected or it is protected.

The overall impact for operators is that the costs are direct, substantial and certain, while the benefits are indirect, small and uncertain. The overall benefits for society may turn positive based on a reduction of harm and damage after some years of learning and improvement on a national or Union level. For an individual operator, this would be much harder to achieve, if at all. It would be problematic when operators are forced by external regulations to spend resources on tasks and measures that are not balanced by benefits in their own area of responsibilities. This could limit or even prevent operators to take more efficient and more effective measures to increase the level of safety.

Conclusion: some elements of the CSM ASLP and phased application hold residual uncertainties potentially impacting the achievement of its objectives, notably: reporting of occurrence scenario's and risk control measures, limitations in shared data and learning potential for GoA and individual operators, availability of (temporary and final) IT solution and interface versus fixed dates of CSM ASLP application, the complexity of the CSM urging for support/training, unbalance in costs and benefits for operators and for considerable time (years).

Looking forward

As explained above, the fast development and resulting CSM are likely to have real and perceived uncertainties and risks in achieving the objectives of improving safety by sharing of information and collective learning. To preserve and maximize the achievement of these objectives we suggest that the implementation of the CSM ASLP is evolving through 'gateways'.

Gateways are checkpoints to ensure that the application of the CSM ASLP is controlled, that is, to ensure an optimal cost benefit ratio by controlling the successive steps of implementation. This is achieved by taking into account the knowledge gathered during one step (foreseen as well as unexpected costs and benefits) before applying the next. The decision at the gateway needs to be based upon an impact assessment to ensure a positive cost benefit.
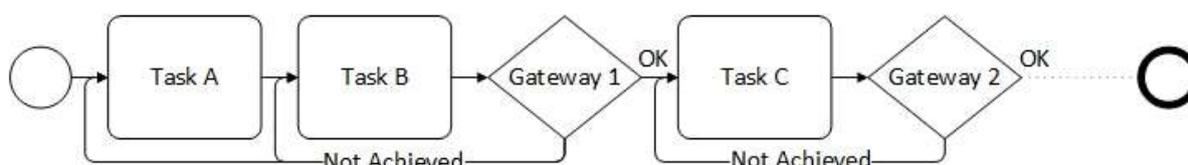
The draft CSM ASLP – work plan – 2021-2026 contains some elements that fit well into a gateway point, but there is a need to rethink the planned full implementation of CSM ASLP in the sense of which gateway point is needed and when it needs to be applied. It is important that the evolution between the gateways is within the scope of what can reasonably be monitored and controlled.

See Appendix for examples of gateway-points.

Conclusion: to mitigate the real and perceived uncertainties and risks in achieving the CSM ASLP objectives we suggest that the application of the CSM ASLP is evolving through 'gateways' (to be further defined).

Appendix

<u>Mandate to ERA on CSM ASLP</u>

The mandate to ERA (7-9-2019) stipulates 'the drafting of the common safety methods for assessing the safety level and the safety performance of railway operators at national and Union level'. The final draft CSM ASLP (Dec 2020) defines:

- 'safety level' as the safety risk level as estimated and assessed by a specified method (based on the reporting by operators on, loosely speaking, accidents and incidents) and
- 'safety performance' as the level of maturity of a railway operator to manage its risk control measures as assessed by a specified method (based on the reporting by operators on a self assessment and on the reporting of occurrence scenario's and risk control measures related to accidents).

<u>Purposes of the CSM ASLP</u>

The final draft CSM ASLP (Dec 2020) describes its purposes as (summarized from the recitals):

- provide assistance to operators for improving their safety management and, in particular to ensure that they can achieve their business objectives in a continuously improved safe manner,
- support decision making of Member States regarding the achievement of common safety targets,
- enable railway operators, national safety authorities and the Agency to collectively ensure a broader visibility of the current safety level and safety performance of the railway operators for the different types of operations and provide the necessary system-wide data and information for efficient continuous improvements, taking into account technical and scientific progress,
- establish a harmonised assessment of safety level, a harmonised assessment of safety performance and a well-structured process to help each railway operator, national safety authorities and the Agency to qualitatively and quantitatively learn about the causes of accident and incident occurrences and on their consequences in terms of victims and damages,
- establish the necessary elements of a well-structured and sustainable collective learning, allowing any railway operator to identify and target their own improvement needs and allowing the national safety authorities and the Agency to collect national and Union level data with the aim to produce meaningful harmonised information that are necessary for their respective risk-based decision-making.

<u>Examples of gateway-points</u>

List of example gateway-points (criteria including dependencies, dates, and contingencies to be further developed):

- Is GoA (working arrangements) fit to start its tasks?
- Is temporary IT solution including interface fit for specified use?
- Are ISS specifications fit (reflecting user-requirements) to start ISS design?
- Is pilot-ISS fit for use (limited scope of functionality and reporting)?
- Is full-version ISS fit for use (full scope of functionality and reporting)?
- Are SL and SP assessment methods fit for ERA Recommendation and use?
- (And in general each update of an CSM ASLP appendix.)