

European Union Agency for Railways: Overview of activities on the Monitoring of the Railway System

UNECE Working Party on Transport Statistics, 15-17/6/2022



- **Statutory reporting**
 - The Agency monitors the progress on the safety and interoperability of the EU rail system, as mandated by [Regulation \(EU\) 2016/796](#)
 - Assessment of achievement of Common Safety Targets (CST) for EU Member States based on Common Safety Indicators (CSIs)
- **Ex-post evaluations**
 - Evaluate the impact for the railway sector of a single recommendation or a set of inter-connected recommendations once they have been in force for a specific period
 - Coordinate Agency inputs required by mandated evaluations for which either the Commission or the Agency is in the lead
- **Data and information analysis**
 - Provide data analysis and analytical support throughout the agency in order to deliver evidence-based, objective and credible evidence for decision-making

- The Railway Safety Directive establishes that '*...Railway safety should be generally **maintained** and, when practicable, continuously **improved**, taking into account technical and scientific progress, and the development of Union and international law.*
- The Agency Regulation provides for that the Agency shall '*...shall monitor the **overall safety performance** of the Union rail system*'
- In particular '*...the Agency shall monitor progress on the **safety** and **interoperability** of the Union rail system. Every 2 years it shall present to the Commission, and publish, a report on progress on safety and interoperability in the single European railway area*'
- Latest Biennial report published at the beginning of June 2022 and available [here](#).
- Webinar on the latest findings is scheduled for the 24/6. Further details about this event is available from: [Free webinar - Railway Safety and Interoperability: the Importance of Data Sharing | ERA \(europa.eu\)](#)

- Significant accident and resulting causalities have decreased steadily in Europe since 2010, with **2020 being the safest year ever.**
- Although the positive trend depicted at the EU level:
 - The overall **cost of railway accidents remains high** (about 3.2 billion EUR per annum only for significant accidents in EU-27)
 - The **decrease in significant accidents has mainly been driven by “external” accidents**, while ‘internal’ accidents (collisions, derailments, fires in rolling stock and other accidents) show a more stable trend in the last years
 - **Large differences in safety levels still exist between EU Member States**
- Due to the **COVID pandemic** the total train-km in Europe (EU-27) decreased by around 10% in 2020 compared to 2019; anyway, while similar decrease was recorded also for the freight tonne-km, the drop in passenger-km was much higher (i.e. over 40%)

Although interoperability of the Union railway system is improving but progress is slow and uneven: good on aligning rules and procedures, slow in the area of rolling stock and infrastructure. Key highlights:

- **Rail modal share is stagnating;**
- **A new metric** of interoperability is the **seamlessness of international rail traffic** (rail traffic volumes, transfer time and punctuality at border sections) across Europe year-on-year;
- **The degree of implementation** of single functions under **TAP and TAF TSI** by operators varies considerably among functions and it is **progressing very slowly**;
- While the **number of published rules** has seen an impressive decrease over the past six years, it has flattened since 2019, as the potentially removable rules are becoming scarce;
- **The deployment of the ETCS at EU level has been slow so far** and varies considerably among Member States;
- **Non-application of TSI requirements remains a common practice** as visible from the number of derogations requests addressed to the Commission

Assessment of achievement of Common Safety Targets (CST) - I

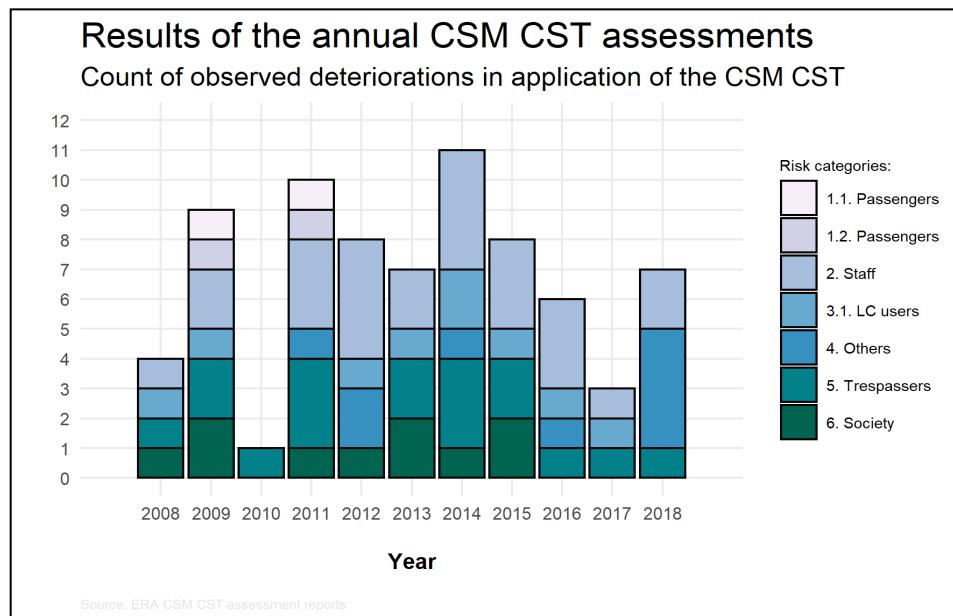
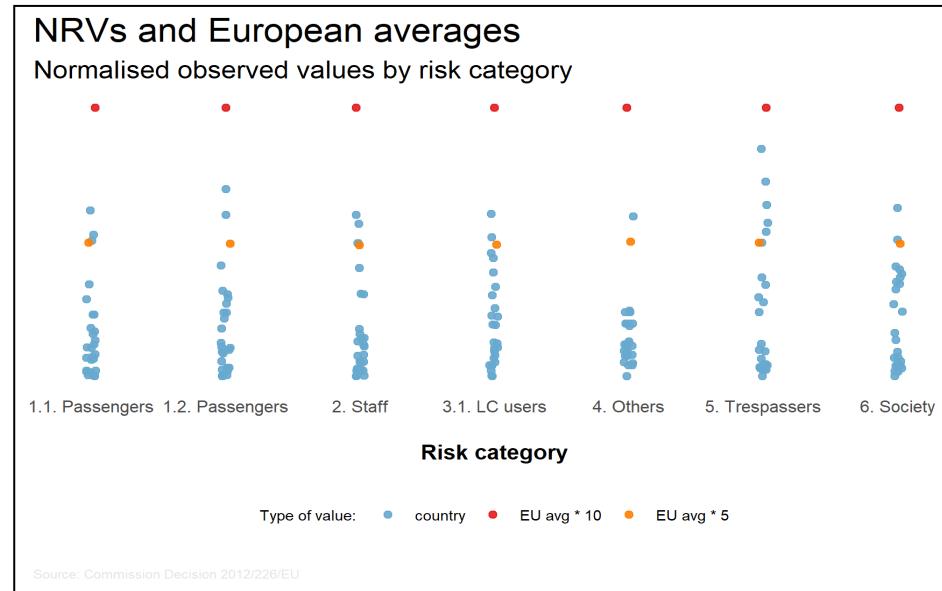
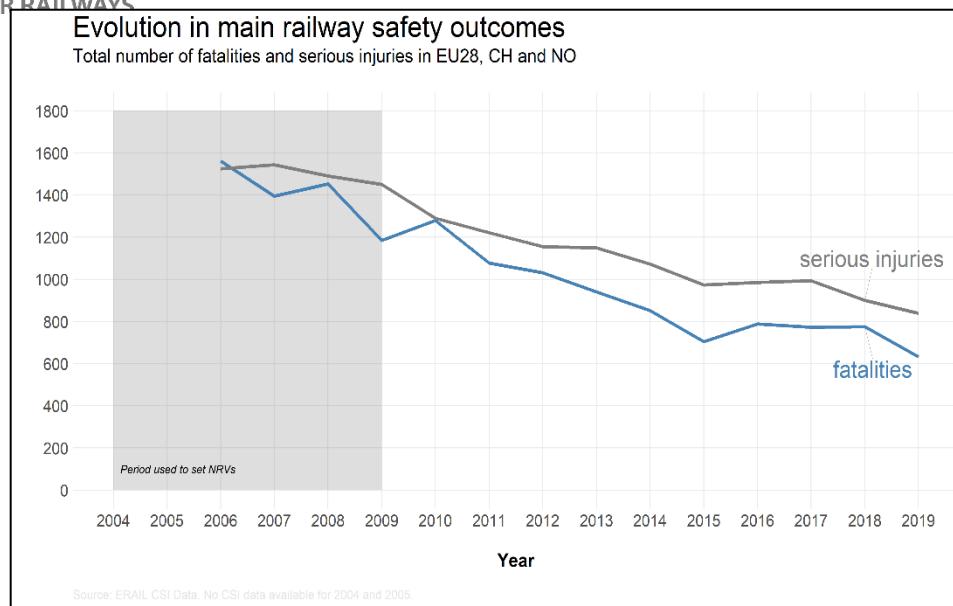
Purpose

- Common Safety Targets (CSTs) and its associated Common Safety Method (CSM) are tools for assessing and ensuring that a high level of safety is maintained and, when and where necessary and reasonably practicable, improved. (*Railway Safety Directive, Art.7*)

Method (CSM)

- Details of the method are set out in the [Common Safety Method on Common Safety Targets](#)
- The method has four steps to take account of random variation in data
- The method compares Observed Risk (last year and 5 previous years) with the second set of CSTs/NRVS (baseline) for the EU countries + Norway

Assessment of achievement of Common Safety Targets (CST) - II



Considerations

- Regular revision of NRVs is important
- Decide between 'reference values' or 'safety targets'
- Method is sensitive for 'low counts'

Ex-post review of CSM CST can be found [HERE](#)

- *“In order to facilitate assessment of the achievement of the CSTs and to provide for the monitoring of the general development of railway safety, Member States shall collect information on CSIs through the annual reports of the national safety authorities”* (Art. 5 of Directive EU 2016/798)
- The CSIs are set out in **Annex I of Directive (EU) 2016/798**, while the **Appendix** at Annex I lays down the common definitions for the CSIs and methods to calculate the economic impact of accidents
- Annex 1 of Directive (EU) 2016/798 requires that *“Common safety indicators (CSIs) shall be reported annually by the national safety authorities”*.
- Historical CSI data (2006-2020) are publicly available on the [ERA webpage](#)

- The specific objectives for the Agency ex-post evaluations are defined as follows:
 - To check if the activities/ the recommendation(s) lead to a mitigation of the problems already identified in the ex-ante assessment(s)
 - To understand existing remaining problems as well as future potential problems, business opportunities and impacts for the railway sector for mid- and long-term planning
 - To ensure that Agency inputs linked to mandated evaluations are delivered according to the requirements and based on reliable sources of evidence

- Support ERA staff with drafting and analysing **high quality surveys**.
- Provide **accident briefings** to DG MOVE and ERA staff.
- Conduct **two targeted studies** on a yearly basis (depending on resource availability). At least one of these studies shall be dedicated to a topic related to existing or future contributions of rail to the EU Green Deal objectives.
- Support ERA staff with **ad hoc data analysis requests**, covering tasks such as:
 - **Geo-analysis;**
 - **Text mining analysis;**
 - **Dashboard creation;**
 - **Complex visualisations.**
- Maintain the Railway System Data inventory (RSDi).
- Contribute to **railway forums on data and statistics** (e.g. RMMS, UNECE, PRIME, Eurostat). Ensure alignment with and awareness of ERA initiatives in the field.



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and safe railway system without frontiers.**

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