Procedures applied for RMMS data quality assessment and management

1. Quality assessment

Every year

- According to the Directive 2012/34/EU (Article 15) and the Commission implementing
 Regulation 2015/1100, every year the Member States must provide their input to the RMMS
 report filling in a questionnaire via a specific webtool, TRAMOS-Rail (Transport Monitoring
 System Rail). Data gathering via TRAMOS is the main source for the RMMS report and this
 document focuses on it.
- TRAMOS is a tool designed for submitting data to the Commission and therefore is
 accessible only to the Commission and to Member States representatives in charge of the
 RMMS input. This ensures also the correct treatment of any confidential data that Member
 States may have included in the questionnaire.
- Member States are invited to provide their input during the last quarter of year T for the year T-1, usually between the first week of October and the 31st of December. During the same period they can also modify their TRAMOS inputs of the previous years (in case of statistical adjustments or new data made available in the meantime for example).
- During January T+1 DG MOVE revises the contributions of Member States.

The revision consists in a first quality assessment performed through different kinds of checks:

- Actual submission of all Sections Actual submission of all indicators required in the section, unless an indicator is not relevant for the Member State concerned (ex.: not all Member States have high-speed services or freight services of 6000 gross tonnes)
- Consistency of each Member State's input over the years Member State's time series of each indicator are analysed looking for discontinuities, outliers, missing data, typos, etc.
- Consistency across Member States Indicators are compared across countries to see if there are incoherent paths, outliers or typos.
- Confidentiality issues If for some reason a Member State considers a specific indicator to be commercially sensitive, it must state so in the subsection "Additional Comments" of the relevant section. DG MOVE will engage with the Member State to find a way to provide the information in a non-problematic manner (ex. in aggregated or anonymous form). If this is not possible, then DG MOVE checks that the information considered as confidential has not been provided by mistake in the data subsections, or that it cannot be inferred from the data provided in the data subsections.

- Not all indicators provided by Member States are of a purely quantitative nature. DG
 MOVE checks also the general coherence of this kind of information¹.
- After the revision of a Member State submission, DG MOVE has two options:
 - The section submitted is complete and coherent, the information provided (including the explanations in the additional comments subsections) is clear - DG MOVE approves the section in TRAMOS and the contribution is "closed".
 - The section submitted is incomplete and incoherent, the information provided (including the explanations in the additional comments subsections) is not clear - DG MOVE then uses the TRAMOS function "ask for clarifications", where a message is sent via the tool to the TRAMOS contributors for that country. At that point the status of the submitted section is "feedback" and the Member State must re-submit it replying to the request for clarification. The process of approval starts again.
- During February T+1 DG MOVE revises the replies to its requests for feedback and (usually) approves the remaining sections. This process can extend until March if there are late feedbacks from Member States or if a second iteration is needed.

Every two years

- Every two years in March/April a deeper revision of the TRAMOS database takes place.
- DG MOVE also compares the trends of the RMMS indicators with similar (even if not perfectly comparable) indicators from other public and reliable sources to see if there are any unexpected and inexplicable differences. A not exhaustive list of examples:
 - Volumes (EUROSTAT, Statistical Pocketbook, IRG-Rail market monitoring)
 - Market shares (IRG-Rail market monitoring)
 - Load factors (IRG-Rail market monitoring)
 - TACs (IRG-Rail market monitoring)
 - Employment (EUROSTAT)
 - Active licences (ERA, IRG-Rail market monitoring)
- Depending on the results of this assessment DG MOVE addresses any remaining issue as described in the following paragraph.

2. Quality management

- After completion of the deeper quality assessment performed every two years, DG MOVE addresses the remaining gaps and data incoherencies through:
 - Own estimates
 - Inputs from other (official and reliable) sources
 - Corrections (in case of remaining typos or errors of magnitude)
- The original input of Member States remains available in TRAMOS unchanged. Mirror TRAMOS questionnaires in the webtool are used by DG MOVE to modify each single figure without changing the original input. In this way any change to the original inputs is explained and traced.

¹ In the "Additional Comments" subsections Member States are allowed to provide explanations in their national language. Some of them use this opportunity. In the first assessment phase DG MOVE translates these contributions in English and saves the translated text in TRAMOS.

- Any adjustment/modification performed by DG MOVE is reported in the staff working document accompanying the RMMS report as a Note to the graphic showing the relevant indicator.
- In some cases outliers or series' disruptions have an explanation provided by the Member State in the Additional Comments of the TRAMOS questionnaire or by DG MOVE own research (ex.: governance changes, modifications of TACs schemes, non-availability of a specific product, etc.). In all these cases the relevant explanation is also included in the RMMS report.