

**Independent Regulators' Group – Rail**

**IRG–Rail**

**Working Group Market Monitoring**

**IRG-Rail guidelines on market monitoring**

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## **IRG-Rail guidelines on market monitoring**

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## **I. Aim of the guidelines**

1. The following guidelines intend to provide information on the IRG-Rail market monitoring process for the rail regulatory bodies, which are member of IRG-Rail, as well as for potential new members. By standardizing and defining the process, these guidelines aim to increase the comparability and the quality of rail market monitoring data.
2. In particular the guidelines give definitions of common indicators to ensure comparability between national data. The guidelines replace the IRG-Rail Common List of Indicators published at 14 October 2013.

## **II. The IRG-Rail working group market monitoring**

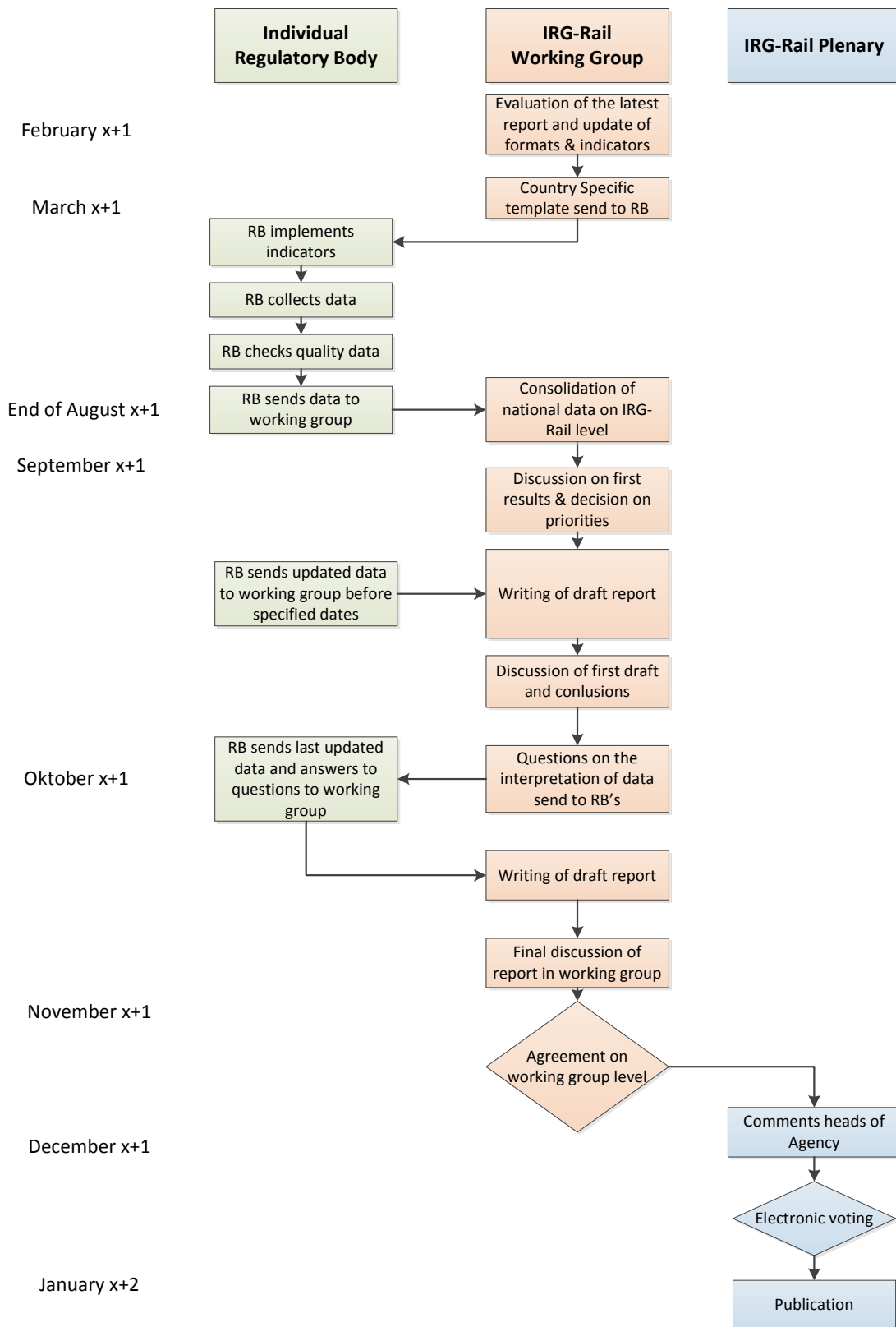
3. Rail market monitoring is an important instrument for setting direction to the activities of the Regulatory Bodies and stimulating market participants to improve their activities. Like all other IRG-Rail working groups, the working group market monitoring is open to all Regulatory Bodies; they do not need to be a member of IRG-Rail.
4. Regulatory Bodies have a formal duty to monitor competition in rail services markets and in particular the rail transport market pursuant to Article 56 (paragraph 2 and 7) of Directive 2012/34/EU (Recast). At the same time the European Commission monitors the development of the rail transport market in Europe through its rail market monitoring schedule scheme (RMMS) according to Article 15 of Directive 2012/34.
5. Cooperation of Regulatory Bodies on market monitoring within IRG-Rail aims at increasing comparability of national rail monitors, enhancing national monitoring by sharing experiences and increasing the knowledge of the European rail market by discussing the implications of new data on the market. Therefore IRG-Rail has created a dedicated working group on market monitoring.
6. The main tasks of the working group are:
  - a. Creating and setting common definitions for indicators.
  - b. Making templates and collecting and analysing data from members.
  - c. Writing and publishing the annual IRG-Rail report on market monitoring.
  - d. Discussing and commenting on new legislation on market monitoring.
  - e. Exploring innovation in market monitoring, including new areas of interest.
7. The working group has one regular yearly product, the annual IRG-Rail market monitor report which is described in detail in chapter 3 of these Guidelines.

### **III. The IRG-Rail annual market monitoring report**

8. The working group composes the IRG-Rail annual market monitoring report to present the results of the corresponding data collection process led by IRG-Rail. The report is intended to increase the knowledge of IRG-Rail members as well as of the interested audience about the European railway market and the commonalities and differences between national markets.
9. Therefore it is recommended that members of IRG-Rail and all other regulatory bodies that would like to contribute to the task of rail market monitoring at the European level apply the common indicators into their national monitoring activities, collect data on a yearly basis and send this data to IRG-Rail. In this way the annual IRG-Rail report will be based on comparable data and IRG-Rail will be able to set up a substantial database on European Railways. The more data IRG-Rail receives, the better the quality of the data-analysis.
10. The report focuses on five areas:
  - a. the general market structure,
  - b. infrastructure characteristics and its use,
  - c. the rail passenger market,
  - d. the rail freight market,
  - e. the market for rail related services.
11. The compilation of the market monitoring report starts with the use of common definitions for indicators in yearly national questionnaires where applicable. This ensures that the data collected at national level is comparable between countries. Participating Regulatory Bodies send their collected data to IRG-Rail. On the basis of the data from Regulatory Bodies and external sources, the working group assesses comparative statistics between countries and various analyses, including time-series analyses. The interpretation and findings are published by the working group in the report.
12. After agreement in the working group and by all other participants, the draft report is sent for electronic voting to the heads of the IRG-Rail members. Publication is foreseen 13-14 months after the reporting year, that is, at the start of the year which is two years after the reporting year. The cycle is closed with an evaluation of the latest market monitoring period and report and an update of the formats and indicators.

#### **IV. Schedule for the IRG-Rail annual market monitoring report**

13. The flow chart below describes the steps for the preparation of the annual IRG-Rail market monitoring report for the reporting year X. X+1 is the year in which the data is collected and most of the report is written, X+2 is the year of publication of the report.
  
14. With respect to the data collection, it is always open to regulatory bodies to send out questionnaires and collect data earlier. The working group recommends however not to collect data later than dates mentioned in the schedule in order to prevent too much changes in the data-set when the report is written.



## **V. Data quality checks at national level**

15. The results of the IRG-Rail market monitoring report are of great interest to the rail audience across Europe due to its multi-national data sources, market descriptions and comparisons. Therefore, it is important to ensure the highest possible consistency of the data basis to keep to establish the report as a reliable source of information in the railroad markets.
16. This implies that the individual values from the common list of indicators are sufficiently validated and can also be used in time series comparisons. This is a major challenge due to the large number of individual indicators and the resulting possible (versions of) evaluations. A small error in the data can have consequences for the conclusions of several indicators for several successive years. Not only inconsistent individual values may result in serious implausibility, but also by setting them in relation to others (e.g. the average passenger train load factor in pkm divided by train km), even minor variations can affect the evaluation result or even distort it.
17. Therefore it is essential to do effective quality checks on the data basis. This is primarily the responsibility of the national regulatory bodies. The following points are essential recommendations for regulatory bodies to increase the quality of the data collected:
  18. Each regulatory body should gain knowledge of the national market. Only with a fundamental understanding of its national market, regulators can bring in national particularities in the monitoring process.
  19. Each regulatory body should undertake an own national market survey and to use the IRG-Rail indicators. It is important to ensure that all relevant information, necessary to answer the questions (e.g. definitions, the focus and the background of the questions), is provided and sufficiently explained to the market. During the national monitoring process, market participants should have in principle the possibility to ask questions concerning the indicators directly to the responsible regulatory body.
    - Each regulatory body is recommended to do reality checks on the responses of market participants regarding logical consistency and consistency of content. Potential implausibilities can be solved best by consultation and discussion with the respective market participants.
20. IRG-Rail has limited capabilities to check data of regulatory bodies. It is the responsibility of the national regulatory bodies to ensure that data is of sufficient quality.

*The IRG-Rail data tool*

21. In order to reduce the effort of data validation, especially for smaller regulatory bodies, the IRG-Rail data tool includes systematical data validation routines. In addition to automatic sum tests, the tool also includes two separate comparisons with previous years. One comparison evaluates how the individual indicators have evolved over the last few years. The other comparison calculates key measures on the basis of certain indicators in the common list (e.g. the average passenger train load factor) and highlights the development of these measures in the previous years.
22. The prior year comparisons allow an assessment of the development over years and can show whether the data reflects actual market developments or not. Using the calculated ratios is another way to simplify the plausibility check as these measures represent a much larger amount of market data and it is a comfortable way to operationalize the market data and its developments and highlight potential data quality issues quickly.

*Checklist before sending data to IRG-Rail*

23. The following steps are strongly recommended for each regulatory body before sending the data to IRG-Rail for consolidation:
  - a. Perform sum checks (for example: 92% plus 7% does not equal 100%).
  - b. Check whether the collected data corresponds to the specified units and quantities according to the data tool (for example: **5.6** [Million] instead of **5,600** [Million])
  - c. The individual indicators as well as the calculated indicators should be (with a healthy eye) realistic.
    - One way, for example, is to check whether the development over the previous year corresponds to the (expected) reality in the national rail markets. Major irregularities when comparing with the previous year could indicate significant data quality issues (for example: 2011: 56 Million; 2012: 19 Million).
    - Another way is to compare the collected data with data collected from other appropriate sources of data (e.g. associations of transport companies, data from statistical offices).
  - d. Any particularities should lead to a comment in the template, or at least be communicated via e-mail when sending the template.



24. Only after performing the quality control at national level, should the data be passed to IRG-Rail for consolidation.

## VI. Common list of definitions and indicators

### Definitions

25. The following definitions are used:

- a. **Network Statement:** as defined by Article 3(26) of Directive 2012/34/EU.
- b. **Net ton:** is the weight of the load (including for example the container weight) where ton is 1000 kilograms.
- c. **Gross ton:** is the weight of the train, including the weight of the load, the weight of the locomotive and the tare weight of the wagons.
- d. **Revenue collected by the infrastructure manager:** refers to revenue for all track access charges for the minimum access package as specified in Article 13(1) of Directive 2012/34/EU excluding electricity.
- e. **Incumbent railway undertaking:** is the (former) state-controlled railway undertaking, including all related companies like infrastructure managers with an ownership relation to the incumbent railway undertaking.
- f. **Other companies:** are all companies not acting as a railway undertaking or an infrastructure manager.
- g. **Training facilities for drivers:** are all facilities where commonly rail-related training is conducted for drivers.
- h. **Passenger stations:** are facilities where passengers can embark and disembark a passenger train. Stations not in use are excluded;
- i. **Freight terminals:** all facilities in rail freight transport which are specifically built and used for the loading and unloading of freight trains. Including loading ramps and roads, intermodal terminals and all other loading / unloading facilities.
- j. **Specifically built intermodal freight terminals (only):** facilities in rail freight transport which are specifically built for intermodal transport (container, swap bodies, semi-trailer).
- k. **Marshalling yards and all other train formation facilities:** facilities for the formation, sorting, rearranging, solving and treatment of trains.
- l. **Marshalling yards (with gravity hills (only):** facilities for the formation, sorting, rearranging, solving and treatment of trains and which use gravity as a means of formation or rearrangement of trains.
- m. **Storage sidings:** rail tracks that serve only to accommodate rail rolling stock.
- n. **Maintenance facilities:** are facilities where rolling stock is maintained. Maintenance is the set of activities designed to keep rolling stock in operation. This includes both, heavy and light maintenance.

- o. **Refuelling facilities:** station for refuelling for locomotives and multiple units.
- p. **Train pre-heating facilities:** facilities for pre-heating and / or air-conditioning of passenger trains.
- q. **Supply of electricity:** facilities and infrastructure to supply trains in operation with traction current.
- r. **Supply of shunting services:** Service provider for the process of sorting items of rolling stock into complete train sets, or the reverse. This includes the provision of locomotives and / or shunting staff.
- s. **Technical inspection of rolling stock:** Activities aimed at checking the actual condition of the rolling stock.
- t. **Ticket sales at stations and other distribution channels:** Distribution channels for train tickets like counter-sale, on board-sale, online-sale, sale via travel agency etc.
- u. **International passenger traffic:** passenger traffic where the train crosses at least one border and where the principal purpose of the traffic is to carry passengers between stations located in different Member States. This definition reflects the definition of 'international passenger service' as specified in Article 3(5) of Directive 2012/34/EU.
- v. **International freight traffic:** freight traffic where the train crosses at least one border. This definition reflects the definition of 'international freight service' as specified in Article 3(4) of Directive 2012/34/EU.

## Indicators

26. The national market monitor of an IRG-Rail member includes the following quantitative indicators:

- a. **(Electrified) route length**  
Route length refers to the route length of all routes available for freight and passenger traffic on the network of the infrastructure manager, as specified by the infrastructure manager in the Network Statement, as opposed to track length. The monitor differentiates between the incumbent infrastructure manager and other infrastructure managers. In addition, the monitor differentiates between electrified and non-electrified route length. The unit of measurement for route length is kilometre.
- b. **Rail traffic movements**  
Rail traffic movements refer to the actual train kilometres for freight and passenger trains per year. Additionally, the monitor differentiates between national and international passenger and freight train movements on their own territory.
- c. **Rail traffic usage**

The monitor includes annual gross and/or net ton kilometres for freight trains and passenger kilometres for passenger trains. Additionally, the monitor differentiates between national and international passenger and freight volumes. The monitor will only report on passenger/freight usage on their own territory.

**d. User charge**

The average revenue collected per year in Euros, per:

- i. train kilometre for passenger trains;
- ii. passenger kilometre for passenger trains. Optionally, the monitor differentiates between regional and long distance passenger trains;
- iii. train kilometre for freight trains, and
- iv. gross and/or net ton kilometre for freight trains.

With regard to revenue, the monitor may differentiate between revenue collected from track and station charges. If the national currency is not the Euro, the exchange rate for the reported year has to be specified in the report.

**e. Number of active railway undertakings**

The number of active railway undertakings means any public or private undertakings which provide services for the transport of goods and/or passengers by rail network(s), as these networks are defined in Directive 2012/34/EU. The monitor specifies whether the railway undertaking is an incumbent railway undertaking (or a related company).

Excluded from the scope are railway undertakings:

- i. whose only business is to provide services for the transport of passengers by metro, tram and/or light rail,
- ii. which operate entirely or mainly within industrial and similar installations, including harbours,
- iii. which mainly provide local tourist services such as preserved historical steam railways.

The definition 'active railway undertakings' used by the working group reflects the definition of railway undertakings of Eurostat (Regulation 91/2003) whilst adding the requirement of being active on the network(s).

**f. Categories of active railway undertakings**

Next to the total number of active railway undertakings, the monitor specifies whether an active railway undertaking is a freight or a passenger railway undertaking. If the railway undertaking transports both goods and passengers, the undertaking counts as one undertaking for freight as well as one undertaking for passengers. This implies that the sum of passenger

and freight railway undertakings can be larger than the total number of active railway undertakings.

Furthermore the monitor specifies whether the railway undertaking is an incumbent railway undertaking (or a related company).

**g. Market shares**

The monitor specifies the market share of freight and passenger railway undertakings in total train-kilometres. It is recommended that the monitor specifies market share based on:

- i. gross and/or net ton kilometre and passenger kilometres; and/or
- ii. share of infrastructure managers' revenue collected through track access charges; and/or
- iii. share of operators' revenues for freight and passenger markets. Revenues from passenger operations should include potential compensation payments.
- iv. In addition, the monitor must specify between incumbent and non-incumbent railway undertakings. Optionally, the monitor lists those companies with a market share larger than 1%, as in the EU rail market monitoring survey (RMMS).

**h. Revenues of railway undertakings**

The monitor optionally specifies aggregated revenues of train operations in Euros. The monitor could specify aggregated revenues for freight and passenger operators. Further the monitor could split revenues of passenger operators into the following categories:

- i. revenues from fares and from public compensation payments; and/or
- ii. long distance and regional passenger operators.

Revenues should be limited to the specific country under consideration and exclude revenues of foreign operations.

**i. Rail related services**

- o The monitor reports on main services facilities (training facilities, passenger station, freight terminals, marshalling yards, storage sidings, maintenance facilities), as well as on secondary and additional services (train pre-heating services, supply of electricity) as well as on ancillary services (technical inspection of rolling stock, ticket sales at stations and other distribution channels). Each year there will be a focus on one or two rail related services. Please pay special attention to these categories during the data collection.
- o The description below gives guidelines on the data collection for these services facilities.

- i. For training facilities, the monitoring report only reports on training facilities for drivers. The monitor only covers training facilities and not the number of simulators in facilities. Every different place is counted as a facility. A training operator can have more than one facility.
- ii. For freight terminals, the monitor includes specifically built intermodal terminals. The number of freight terminals is not counted similar to the description in Directive 2012/34/EU: all places for loading and unloading. The monitor only looks at terminals specifically built for intermodal loading and unloading. This is consistent with current practice in corridors' Terminal Advising Groups. Terminals in harbours are included in the monitor.
- iii. For marshalling yards, the monitor shows the total of marshalling yards with gravity hills.
- iv. For storage sidings, the monitor counts storage sidings which have a link to the network, and only takes into account paid parking. The preferred way of counting is those sidings listed in the Network Statement.

Secondary/ additional services and ancillary services: If possible, the monitoring report gives a short description of the market and market developments as well as of problems encountered for these services. This information should be primarily used to gain more detailed knowledge of the different conditions in national markets for these services. This creates a basis for the development of suitable definitions, defining common questions and indicators.

o **Categories of companies operating rail services facilities**

The monitor specifies the number of companies operating rail services facilities as listed in Annex 2 of Directive 2012/34. The monitor specifies whether the operating company is an incumbent railway undertaking, including related companies like a related infrastructure managers. All other companies are specified as 'other company'. If possible, the monitor further specifies whether the company is an independent infrastructure manager or another company not related to the incumbent.

In case of shared ownership of a rail related service, the operator of the facility should be categorized in the group of companies that gives approval for access to the rail related service.

j. **General market developments**

Members of IRG-Rail are requested to give a short summary on the main market developments and the key regulatory decisions in a given year. Members could use a summary of their country's annual report, monitoring

report or ENRRB<sup>1</sup> report. Were relevant, IRG-Rail will incorporate the information in the report.

## **VII. Guidelines on qualitative survey questions**

27. The national market monitor may also report on the results of a common qualitative survey to be distributed all railway undertakings. The qualitative survey questions are recommended for regulatory bodies which want to investigate the satisfaction of railway undertakings in the rail market.
28. The qualitative survey is intended to give market participants the opportunity to report their opinion of the current situation, developments and problems in national markets and to provide impetus for potential improvements. The market participants may give their market evaluation based on the following structured questions:

*How do the following factors influence your business?  
(Please evaluate on a scale from 1 to 5).*

- a. Access to rail infrastructure – line infrastructure / train path allocation*
- b. Access to rail infrastructure – service facilities*
- c. Pricing structure of infrastructure access charges*
- d. Level of infrastructure access charges – freight*
- e. Level of infrastructure access charges – passenger*
- f. Certification of rolling stock*
- g. Licensing of railway undertaking*
- h. Safety certification of railway undertaking*
- i. Quality of existing rail infrastructure*
- j. Other ... (please specify)*

*1 = large negative impact*

*2 = negative impact*

*3 = neutral / no impact*

*4 = positive impact*

*5 = large positive impact*

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<sup>1</sup> European Network of Rail Regulatory Bodies