A DATABASE ON WORLD INFRASTRUCTURE REGULATION

A research project by WCTRS SIG-4

Deliverable 2.1: RAILWAYS Database explanation

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1. Introduction and General Information

This brief note provides some guidelines for filling the forms of the survey and eliminating possible ambiguities.

The structure of the survey deals with four modes and the same structure is used in this explanatory note. For each mode there are three areas that we consider:

- General aspects;
- Regulatory aspects;
- Regulatory Institutions.

The survey, described in the aims in Deliverable 1, is conducted via electronic forms available at the website: www.transregulation.org.

The survey refers to the infrastructures only, except some context questions (specified) that refer also to the services and to the demand.

At the end of each form few indications about the sources used and quoted are requested. It is important to indicate:

- The release date of the quoted source;
- Year to which data refer;
- A comment on source reliability;

The whole survey has been built, as far as possible, using closed questions. Nevertheless, in order to let collaborators express part of the complexity of the issue, some “open comments” fields have been introduced. Each author is welcomed to provide specific explanations concerning the data or to comment specific situations not classifiable in the closed questions.

It would be useful, at the moment of data collection, to send a copy (or the link) of the main quoted sources to the database managers in order to make them available to the users and to be
shared in the SIG website. If the document is available via payment, the website will publish the link to the seller (the journal editor, for example), otherwise the file will be freely available.
2. Railways

2.1 Railways General Aspects Database

1G. Network Management Model

- Direct state provision by national agency
- Provision by local or regional agency
- Public concession
- Private concession
- Mixed concession
- Private provision (no concession)

2G. Services Management Model

- Direct state provision by national agency
- Direct Provision by local or regional agency
- Public company
- Private company
- Mixed company

Explanation: This question considers both the type of concession and the nature of the subject that manages the infrastructure. The question is double, referring the first part to the infrastructure and the second to the rail services using it. In case of unbundling or separation of ownership, the answers to the two questions could be different (for example a public network concession where private trains run).

Since many countries will have different infrastructure companies provided in a variety of ways (e.g. one national operator plus few urban ones, or regional sub-networks, or a variety of private operators), please pick all the answers that are true. For example, in Italy one national operator is under a concession contract (→ “Public concession”), but also some local vertically integrated monopolies exist (→ pick also “Provision by local or regional agency”). The same must be done for the services side. If needed, shortly clarify in comments the situation.

Private concessions and public concession (or mixed) refer to a private owned or state owned (or public-private owned) agency that manages the infrastructure for a defined period; this situation differs from the direct (or local) state provision when the State or a Local Authority directly build and operate infrastructures and there’s no limitation in time to the direct public involvement. The private provision considers an infrastructure built and managed by a private subject without any concession. For example, EU rail networks are usually public concessions, i.e. concessions held by a public company. In the past EU states used to provide directly rail services and moreover the network (direct state provision).

In some cases the form of the concession is used, but the concession period it is actually undefined. In this case pick “concession”, but specify the fact in the next questions (see below).
3G. Total network length [route km, whole country]

Explanation: Indicate the total length of the networks in the whole country. Optionally: specify in comments the extensions according to the previous classification.

<table>
<thead>
<tr>
<th>4G. Number of network operators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

5G. Number of service operators (passenger)

5bG. Number of service operators (freight)

Explanation: this information is a proxy of the market opening. If there is the monopolist only, i.e. the sector is not liberalised at all, write “1”.

Comments

<table>
<thead>
<tr>
<th>6G. Types of network operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only one national operator</td>
</tr>
<tr>
<td>One national operator plus local public or private ones</td>
</tr>
<tr>
<td>Many operators</td>
</tr>
<tr>
<td>Other (specify in the comments)</td>
</tr>
</tbody>
</table>

Explanation: in some cases, the whole rail system is managed by one single company (“Only one national operator”), sometimes with some local ones (second answer). If the country’s network is divided in some way among many operators, without a dominant one, pick “many operators”.

7G. Duration of the concessions [years]

Explanation: Indicate how many years the concession for infrastructure can last, in particular specify if there are maximum durations foreseen by law.

If there are differences among the main network and the local ones, please provide here the info for the main network and specify the rest in the comments, if available.

If a network is formally a concession, but the concession lasts indefinitely, please write “9999”.

8G. Total passengers demand [whole country]

<table>
<thead>
<tr>
<th>Million pax km/year</th>
<th>Million pax/year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9G. Total freight demand [whole country]

<table>
<thead>
<tr>
<th>Million tons km/year</th>
<th>Million tons/year</th>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>
Explanation: provide up to date information possibly using the indicator shown above. If there are no information available for the whole country, please provide the data for the main network only. Then, specify the fact in comments.

Comments
2.2 Railways Regulatory Aspects

1R. How are the concessions (and their renewals) awarded?
   - Tendering mechanisms
   - Direct negotiation
   - Other (specify in the comments)
   - No concessions

   **Explanation:** Pick **negotiation** if the concession is awarded after a negotiation between the concessionaire and the grantor of the concession.

2R. Describe the regulatory mechanism

   **Explanation:** Provide a short description of the mechanism, possibly focusing also on the practical problems.

Comments

3R. Is there vertical separation between infrastructure and services?
   - Complete
   - Yes, but not in ownership
   - Ongoing
   - No separation
   - Other (specify in the comments)

   **Explanation:** Pick **complete** if the infrastructure manager and railways undertaking are owned by different subjects and/or if there is no societal relationship between them. For example, this is NOT the case of many European countries, where there is a true or a formal corporate division but the ownership is common (generally a public or mixed holding). In this situation pick **“yes, but not in property”**. Pick **ongoing** if the process is going in the right direction but is not complete yet.

4R. Is the access to the network open for FREIGHT services?
   - Yes, but only at a normative level
   - Yes
   - No

5R. Is the access to the network open for PASSENGER services?
   - Yes, but only at the normative level
   - Yes
   - No
Explanation: Specify if the natural monopoly component, the network, is opened to third part operators instead of one monopolist. Since in some cases the openness is legally granted but not actually possible for various reasons, an intermediate option is provided (“yes, but only at a normative level”). It might be useful to provide further comments on this topic.

Comments

6R. Is the national network geographically divided?
   - No: there is one single national network operator
   - No: there is one single national network operator, plus some local secondary networks operators
   - Yes: the main national network is functionally divided into zones managed by the same network operator
   - Yes: the main national network is divided and managed by different network operators
   - Other (specify in the comments)

7R. In particular, is the network division based on some economic/regulatory consideration?
   - Yes
   - No
   - Not Available

Explanation: Specify if the network is divided on the basis of any kind of economic consideration (for example, applying the concept of minimal efficient dimension). Otherwise pick “no”, for example if the division derives from geographical - historical evaluations.

8R. Is the Yardstick Competition / Benchmarking Regulation applied?
   - Yes
   - No
   - Not available

Explanation: The YC/benchmarking could be applied not only if there are private concessionaires but also in presence of public operators asking for the subsidy.

Comments

9R. Is the access to the stations and terminals open to any operator?
   - Yes
   - No
   - Other (specify in comments)

Explanation: indicate if it is possible for any operator to access refuelling facilities, freight terminals, marshalling yards, train formation facilities, storage siding, maintenance and other technical facilities, etc.. If necessary, specify the practical problems and the barriers faced by the operators.
Comments

10R. Pricing method (rail track fee)

☐ Construction and operating costs
☐ Construction and operating costs, with subsidies for the investments
☐ Operating costs only
☐ Other (specify in the comments)

Explanation: “construction and operating costs” refer to fares covering the full costs related to infrastructure provision. In case of public subsidies covering part of the investment costs, pick the second option. “Operating costs only” refers to the case of building costs paid by public and thus excluded by the fare.

In the answer please refer to the cost recovery rather than to principles, that might result unapplied. For example, if a principle of average cost pricing is stated, but actually the charges revenues are insufficient to repay construction, pick “Operating costs only”.

11R. Are some external costs included in the tariffs?

☐ Yes
☐ No
☐ Other (specify in the comments)

Explanation: specify if tariffs consider congestion, air pollution, noise, land take and other externalities.

Comments

The following two questions refer to the service aspects in order to better understand if the network is really opened; in fact the presence of a majority of operators can be seen as a proxy of the lack of discrimination in the infrastructure access.

12R. Presence of competition (in or for the market) for passengers services

☐ Effective competition among many competitors
☐ Competition limited on a few services
☐ Competition possible but not present (too small markets or competition expected for the future)
☐ No significant competition
13R. **Presence of competition (in or for the market) for freight services**

- Effective competition among many competitors
- Competition limited on a few services
- Competition possible but not present (too small markets or competition expected for the future)
- No significant competition
- Statutory monopoly

**Explanation:** Pick the first option if there is effective competition among some competitors, at least in some relevant sub-markets. Competition can be effective only in few services, due to their specific characteristics (for example, trains to the airports or using some high speed lines, or in one region only). In this case pick the second option. If competition is possible, but not yet present, for example because markets are too small or competition is expected for the near future, pick the third case. Finally, the competition can be simply absent because nobody is capable/interested of it or because forbidden (fourth and fifth options).

**Comments**

14R. **STRENGTH OF THE ACTUAL REGULATORY FRAMEWORK**

15R. **PROBLEMS OF THE ACTUAL REGULATORY FRAMEWORK**
2.3 Railways Regulatory Institution

This part wants to define some aspects related to the Regulatory Institutions, the structure is the same for all modes.

Name of the Regulatory Institution

1. Is the Regulatory Institution

- Independent
- Governmental (part of a Ministry)
- Part of the network operator
- No Regulatory Institution
- Other (specify in the comments)

Explanation: Pick part of the network operator if the Regulatory Institution also manages part of the network.

2. Is the Regulatory Institution

- Mode specific
- All transport modes
- Multi-sectoral
- No Regulatory Institution

3. Is the Regulatory Legislation

- Already established
- In progress
- Other (specify in the comments)

Comments

4. Tasks of the Regulatory Institutions

- Set or approve the value of tolls
- Collect tolls
- Decide or approve the investments
- Award the concessions
- Is responsible for the safety aspects
- Has a function of settle the conflicts
- Examining efficiency e.g. by Benchmarking / Yardstick Competition
- Other (specify in the comments)
Explanation: Under the name of “Regulatory Institution” single countries can include completely different tasks. Only some of them are directly related to economic regulation (set value of tolls, for example) while others are more general (safety, for example). Pick here all the functions in charge to the Regulatory Institution of the country.

5I. Staffing level of the Regulator

Explanation: provide the number or an order of magnitude for the staffing of the Regulator, dedicated to rail sector.

Comments