Questionnaire for Infrastructure Managers

If you have any further questions, do not hesitate to contact me (Mr. Andreas Lischke) at:

   E-Mail : Andreas.Lischke@dlr.de
   Telephone: ++ 49 / 30 / 67 05 5-2 36

Please send by post your completed questionnaire to
DLR- German Aerospace Center
Institute of Transport Research
Mr. Andreas Lischke
Rutherfordstrasse 2
12489 Berlin
Germany

or fill in the on-line questionnaire (www.rail-partner.org)

by March 10th, 2004
Questionnaire for Infrastructure Managers

1. General information

1.1 Name of your company: 

1.2 Contact Person of the company

Telephone number: 

E-mail address: 

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2. Current Situation about train path

Foreword:
We want to learn more about the current situation of your work. It will help us to compare the situation of the European Infrastructure Managers.

2.1 What is the current number of international trains (all trains: passenger and freight), on average, crossing daily your national borders?

- [ ] less than 10
- [ ] 11-50
- [ ] 51-100
- [ ] 101-200
- [ ] 201-300
- [ ] more than 300

2.2 What is the approximate number of international paths/train studies you have to produce per year to accommodate the real traffic, as above said?

- [ ] less than 25
- [ ] 26-100
- [ ] 101-200
- [ ] 101-400
- [ ] 401-600
- [ ] more than 600

2.3 Can you give an estimate of the current labour resources in man-days that are necessary to finalise one international train path design?

- [ ] less than ½ man-day
- [ ] ½ to 1 man-day
- [ ] 1-2 man-days
- [ ] 3-5 man-days
- [ ] more than 5 man-days
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2.4 Do you believe these labour resources can be sensibly reduced, if better tools and methods are made available?

☐ YES  ☐ NO  ☐ don’t know

2.5 Due to open railway markets, the path allocation process will in any case require:

- YES  NO  don’t know
  - more labour force
  - improved Computer Aided Design tools
  - improved processes
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3. Existing systems supporting process

**Foreword:**
The following section of the questionnaire is aimed at the current process of timetable design and path allocation between two or more independent infrastructure management organisations with regard to international route planning and the tools used to support this process.

3.1 Do you use a computer based timetable design tool to design a timetable?
- [ ] YES
- [ ] NO

3.2 Do you use the same tool for designing international routes?
- [ ] YES
- [ ] NO

3.3 How do you contact other IMs or get contacted by other IMs with regard to cross-border timetable design? (several answers are possible)
- [ ] phone
- [ ] fax
- [ ] e-mail
- [ ] Videoconferencing
- [ ] Computerizing Data
- [ ] meetings
- [ ] Internet Application
- [ ] Other (please describe) …
3.4 What kind of interfaces and/or data formats are you using to communicate with other IMs in timetable matters? Please attach the descriptions if you have one.

...  

3.5 Within the FTE (Forum Train Europe) framework, the new system PATHFINDER has been developed and is being put on the field by various companies. Are you familiar with PATHFINDER? □ YES □ NO

If “YES”, do you already use or plan to use PATHFINDER for international timetable definition? □ YES □ NO

What, in addition to PATHFINDER, should be implemented to support the international path allocation?

...
3.6 Which of the following technologies or processes could help to advance the process of international route planning in your opinion?

<table>
<thead>
<tr>
<th></th>
<th>helpful</th>
<th>not helpful</th>
<th>don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Video conferencing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Computer based workflow</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Sharing time-distance graphs</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>d) Sharing other timetable information (e.g. textual data)</td>
<td>☐</td>
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<td>☐</td>
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<tr>
<td>e) Data exchange and alignment during the design process (e.g. before a PATHFINDER dossier is created)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>f) Other cooperative methods (please specify or propose suggestions)</td>
<td>...</td>
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</tbody>
</table>
3.7 The time-distance diagram is not the only design endeavour and information that characterises an international train. In your opinion, what are the essential data or constraints that should be additionally provided to have an international path ready for validation and selling to railway undertakings?

... 

3.8 Would you be willing to share information about sparing capacity with other IMs to advance the process of international route planning?

☐ YES  ☐ NO

3.9 Do you always get all essential data from your neighbour IM in the process of international route planning?

☐ YES  ☐ NO

If “NO”, which are the essential data which are not yet managed in the process of international timetable planning? Please describe

...
Questionnaire for Infrastructure Managers

3.10 Beside formal timetable design and path allocation (e.g. within Forum Train Europe, FTE) do you currently make, or have made in the past, joint capacity analysis and studies with your neighbouring IMs?

☐ YES    ☐ NO    ☐ don’t know

If “YES”, please give experience feedback and recommendation for further practice:

…

3.11 What is (are) the timetable design tool(s) currently in use at your company for timetable design and path allocation? If possible, please name acronym and manufacturer.

…

3.12 Do you expect and/or plan for any major technological or process developments for these tool(s) in the next 2 years with regards to international route planning? If so, please briefly comment.

…
Foreword:
The following section of the questionnaire is aimed at characterizing the activities belonging to the allocation of rail capacity and charging on international routes from the point of view of business process management. Generally speaking, business processes are what the enterprise must do to conduct its business successfully. They are the actions taken to respond to particular events, convert inputs into outputs, and produce a particular result.

4.1 Who are your customers? Please name the individuals or groups that ask you for rail capacity allocation on international routes and get back the result of your work (several answers are possible).

- Railway Undertakings
- Other Infrastructure Managers
- Operator of Combined Road/Rail
- Transport Operator, forwarder
- Other (please describe)
Questionnaire for Infrastructure Managers

4.2 What are the end products of your work? (Please describe the output or attach a sample.)

output: …

What kind of output do you produce? (several answers are possible)

☐ telephone call  ☐ letter or fax  ☐ IS report

☐ Other (please describe) …

4.3 What are the resources (e.g. money, people, equipment, information, services) used by you in order to reply to a request for rail capacity allocation on international routes?

input:…

How do you get the input? (several answers are possible)

☐ telephone call  ☐ letter or fax  ☐ Information System report

☐ Other (please describe) …
4.4 What events prompt you to start to work on a request for rail capacity allocation on international routes?

☐ telephone call  ☐ letter or fax  ☐ Information System report

☐ Other (please describe)

…
Questions for Infrastructure Managers

5. Train path charging on international corridors

**Foreword:**

One of the aims of the PARTNER-project is to develop a charging method that is based upon some generalized formulation. The currently used tariff systems of the EU member states exhibit a high degree of heterogeneity, partially caused by different national legislations. In order to understand the current charging methods and in order to get a clearer picture of what a ‘fair’ charging method should look like, we would like you to answer the following questions.

5.1 Do you think that a fair charging system on international corridors...

<table>
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<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>don't know</th>
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<tbody>
<tr>
<td>a) should vary the charging fee according to the type of trains?</td>
<td></td>
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<tr>
<td>b) should vary the charging fee according to the time of the day?</td>
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<tr>
<td>c) should vary the charging fee according to the weight of the train?</td>
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<tr>
<td>d) should vary the charging fee according to the expected congestion on the route?</td>
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<td></td>
</tr>
<tr>
<td>e) should follow different national charging rules?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>f) should distinguish between international and national trains on the same line section?</td>
<td></td>
<td></td>
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<tr>
<td>g) should give discounts to faster trains which are given lower speeds?</td>
<td></td>
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<tr>
<td>h) should give discounts to trains which are subject to lower quality of service (e.g. trains with more expected delays)?</td>
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<tr>
<td>i) should impose penalties on slower trains which impose lower speeds on faster trains on the same line section?</td>
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</table>
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5.2 Does your current charging system …

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</thead>
<tbody>
<tr>
<td>a) vary the charging fee according to the type of trains?</td>
<td>YES</td>
<td>NO, depends on law</td>
<td>NO, depends on other reasons</td>
<td></td>
</tr>
<tr>
<td>b) vary the charging fee according to the time of the day?</td>
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<td></td>
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</tbody>
</table>

Please try to describe these other reasons:

...
5.3 In your opinion, what percentage of the infrastructure costs should be covered by the fees?

☐ 0-20%  ☐ 21-40%  ☐ 41-60%  ☐ 61-80%  ☐ 81-100%  ☐ don’t know

5.4 Is there something written about the capacity and the congested lines in your network statement or in any other document?

☐ YES  ☐ NO  ☐ don’t know

If „YES“, please write down in which document:

...

5.5 Considering the last two years, how many times has your charging method been changed?

☐ not yet  ☐ 1 time  ☐ 2 times  ☐ 3 times  ☐ more often  ☐ don’t know

5.6 Please add any additional comments or observations about the previous points, if you consider them appropriate for a better analysis or understanding.

....
Questionnaire for Infrastructure Managers

6. Capacity methods

**Foreword:**
The following section of the questionnaire concerns the method that is currently adopted by your company in order to design timetables and allocate capacity to the train path requests that you receive. These methods may possibly include decision support systems based on optimization algorithms.

6.1 How long does it take you to respond to a request received on short notice for a new international train path (average time)?

- [ ] less than 2 days
- [ ] 3-5 days
- [ ] 6-10 days
- [ ] 10-30 days
- [ ] more than 1 month, please specify
- [ ] ..... months

6.2 Do you require fast planning or re-planning (adaptation) of timetables (i.e. within 1 day)?

- [ ] YES
- [ ] NO

If “YES”, would you require that current performance be improved such that re-planning is carried out within:

- [ ] 6 hours
- [ ] 12 hours
- [ ] 24 hours
- [ ] .... hours

6.3 For spare or additional path allocation, does your company use:

a) dummy or pre-constructed paths, e.g. available in a public catalogue

- [ ] YES
- [ ] NO

b) dummy or pre-constructed paths, not available as public catalogue

- [ ] YES
- [ ] NO

c) paths which are constructed ad hoc on demand

- [ ] YES
- [ ] NO

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6.4 In designing timetables (train-paths) on international corridors do you think passenger and freight trains should have basically the same priority rules in capacity allocation?

☐ YES  ☐ NO

If “NO” please specify or comment.

...

6.5 In designing timetables, do you consider the main corridors first or do you consider the overall network?

☐ main corridors  ☐ particular areas  ☐ overall network

6.6 Do you use decision support systems (optimization algorithms) for timetable design and path allocations?

☐ YES  ☐ NO

Please specify in both cases:

...

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6.7 In designing the national or international working timetables, are you satisfied with current tools for capacity allocation?

☐ YES  ☐ NO

6.8 In designing and providing path allocation on international corridors, what do you think are the more important and critical business factors that should be improved and asked for by your clients in freight transport?

☐ more time flexibility  ☐ changing departure time  ☐ on route re-planning changes

6.9 Which regularity tolerance would you accept for the arrival of international freight trains?

☐ less than 15 minutes  ☐ 16-30 minutes  ☐ 31-59 minutes  ☐ 1-2 hours  ☐ more than 2 hours
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6.10 Considering that the UIC (Fiche 451-1) gives recommendations for regularity margins, do you think the definition of more international standards are required or may be useful, such as:

- a) rules for running time calculation
- b) locomotive traction power margins
- c) haulage availability
- d) standard catalogue paths
- e) others (please specify or comment)

... (Please specify or comment)

6.11 UIC has recently made available a new method for capacity evaluation (Fiche 405-1) based on the “compression method”. Are you aware of it?

- YES
- NO

If “YES”

Would you think it is useful to implement capacity algorithms based on the new UIC Fiche 405-1 (2003)?

- YES
- NO

Have you already tested the method on practical cases?

- YES
- NO

Do you consider it useful to implement the method as a software tool?

- YES
- NO
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7. Additional Questions

Foreword:
The following section of the questionnaire concerns some special questions. If you would like to give us some attachments to the following questions or to any other question, you can send it by e-mail or post. Address and e-mail address can be found on our website (www.rail-partner.org) or in the accompanying letter or e-mail.

7.1 Is the EU Directive 2001/14/CE of the first railway package transferred to national laws in your country?

☐ YES  ☐ NO

7.2 Would you be able, in principle, to provide PARTNER with data or other information to realize realistic case studies of international path-allocation? (e.g. data on past years/timetables so that confidentiality is preserved and any other constraints are satisfied)

☐ YES  ☐ NO

7.3 Can you please provide a copy in English or any other information (e.g. website) on how to get a copy of your Network Statement (if available, as required by EC Directive 14/2001)?

☐ YES, you will find it at www.railneteurope.org, or www.eicis.com

☐ YES, you will find it at www. ......................

☐ YES, I will put it as an attachment of the questionnaire.

☐ NO
7.4 Can you provide a copy or information on how to get a copy of your path charging system?  

☐ YES  ☐ NO

If “YES”, please attach the charging system or give the link.

www. …

Please add an additional contact person (if necessary) who can respond to a continued short notice request about the charging system.

Contact Person of the company for the charging system: …

Telephone number: …

E-mail address: …

I enclose the questionnaire with the following attachments:

*  
*  
*  
*  
*
Questionnaire for Infrastructure Managers

Please add any additional comments or observations regarding the previous points, if you consider them appropriate for better analysis or understanding.

... 

Thank you very much for your participation!

Your Project PARTNER Team