



Questionnaire for Infrastructure Managers

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

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Please send by post your completed questionnaire to

DLR- German Aerospace Center

Institute of Transport Research

Mr. Andreas Lischke

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Germany

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

by March 10th, 2004

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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?

- | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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?

- | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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 ?

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
•improved Computer Aided Design tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
•improved processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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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)

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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?

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

	helpful	not helpful	don't know
a) Video conferencing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Computer based workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Sharing time-distance graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Sharing other timetable information (e.g. textual data)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Data exchange and alignment during the design process (e.g. before a PATHFINDER dossier is created)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Other cooperative methods (please specify or propose suggestions)			

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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

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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 feed-back 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.

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4. Business Process

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)

...

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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)

...

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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)

...

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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...

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

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5.2 Does your current charging system ...

	YES	NO, depends on law	NO, depends on other reasons
a) vary the charging fee according to the type of trains?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) vary the charging fee according to the time of the day?			
c) vary the charging fee according to the weight of the train?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) vary the charging fee according to the expected congestion on the route?			
e) follow different national charging rules?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) distinguish between international and domestic trains on the same line section?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) give discounts to faster trains which are given lower speeds?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) give discounts to trains which are subject to lower quality of service (e.g. trains with more expected delays)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) impose penalties on slower trains which impose lower speeds on faster trains on the same line section?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please try to describe these other reasons

...



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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.

....



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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 months more than 1 month, please specify

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:

	YES	NO
a) rules for running time calculation	<input type="checkbox"/>	<input type="checkbox"/>
b) locomotive traction power margins	<input type="checkbox"/>	<input type="checkbox"/>
c) haulage availability	<input type="checkbox"/>	<input type="checkbox"/>
d) standard catalogue paths	<input type="checkbox"/>	<input type="checkbox"/>
e) others (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 web site (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](http://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

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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:

- *
- *
- *
- *
- *

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

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Thank you very much for your participation!

Your Project PARTNER Team