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Capacity Allocation

Railway Advisory Group

October 1, 2014
Rotterdam

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Fast track your rail freight

Agenda

1. Results 2015 timetable allocation
2. Forecast 2016 timetable PaP supply
3. Evolution of priority rule for the allocation of PaPs
4. Flex PaPs : concept and status
5. Train numbering for PaPs

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1. Results 2015 timetable allocation

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CORRIDOR 2
NORTH SEA – MEDITERRANEAN

1. Overview

- The deadline for placing new path requests for the timetable 2015 PaPs passed on the 15th of April.
- 51 dossiers for PaPs were received via PCS
- The real demand on corridor lines is higher but some potential customers did not succeed in requesting PaPs and thus opted for national paths
- PaP sections were requested by three different clients, two of which are not RUs
- A total of 13 partnering companies ordered paths via the C-OSS

2. Requested vs. Published / Republished

- A total of 7.6 million km of paths were published for the full TT2015

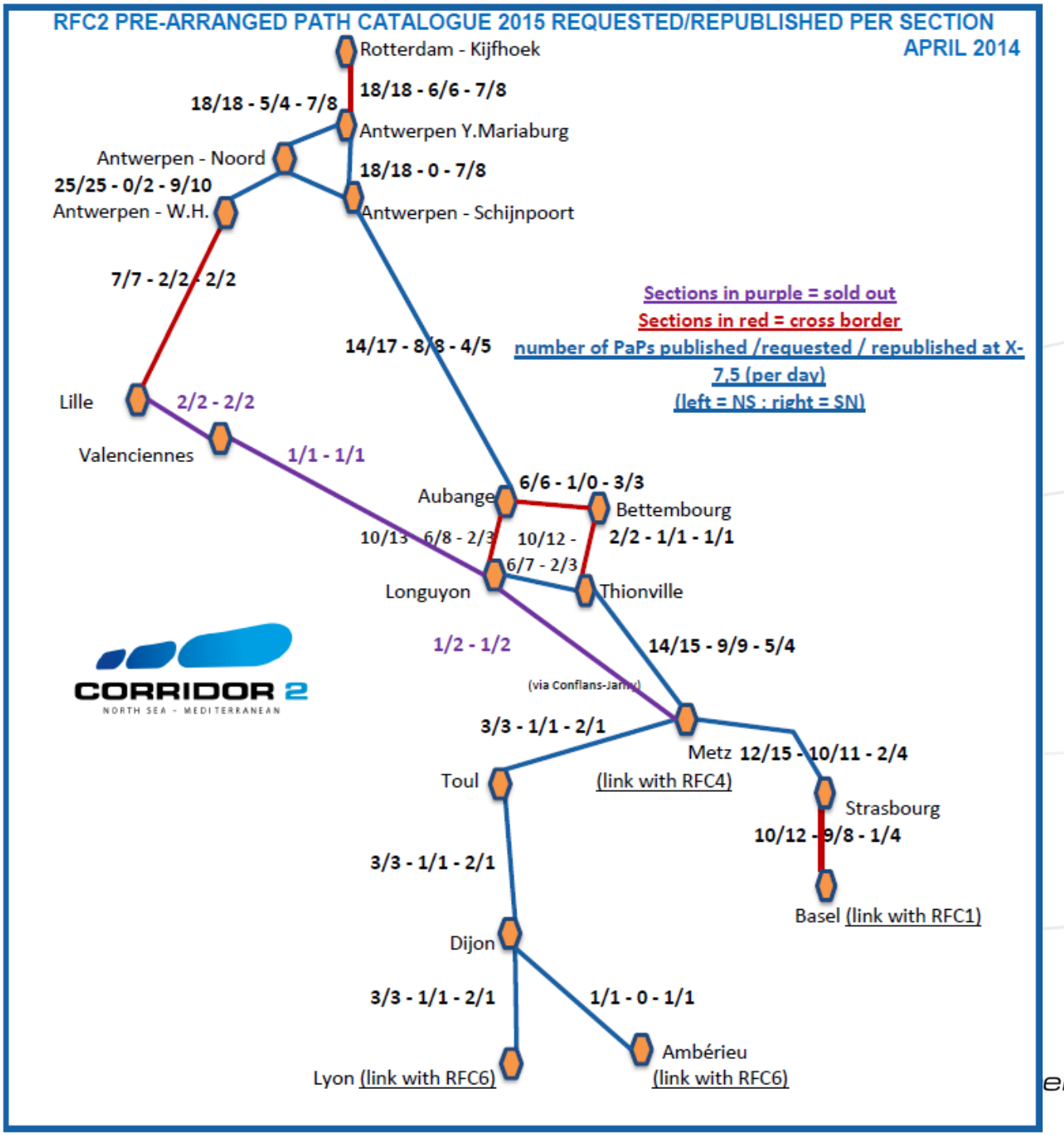
- 2.9 million km of paths were requested

- **38,6%** of all capacity published was requested

- Publication/requested ratio per country of the corridor:
  - The Netherlands: 5,3%
  - Belgium: 28,3%
  - France: 54%
  - Luxembourg: 9%
  - Switzerland: 62,9%

- **37,5%** of all capacity published was republished early May and thus still available for our clients

3. Geographical overview per section



4. Conflicts and Multiple Corridor Requests(2)

- 19 dossiers were received with traffics from Belgium to Italy
  - ➔ Potential for mutual RFC1 and RFC2 requests
  - ➔ For TT 2015, 16 of these dossiers only contained f/o sections along RFC1 lines

- One late path request was submitted to the C-OSS of RFC2 and RFC6 for traffic between Germany and Spain
  - ➔ Feeder from Forbach to Thionville
  - ➔ PaP on RFC2 from Thionville to Lyon
  - ➔ PaP on RFC6 from Lyon to Barcelona

5. Late Path Requests

- 11 dossiers have already been submitted for late path requests

- Different scenarios:
  - PaP capacity was requested via national tools before April 15, which was rejected by an IM
  - Additional days to an existing dossier are requested (treated separately)
  - New traffics

- Feeder/outflow sections were/will be constructed by the IMs after the finalisation of the requests submitted before April 15

6. Lessons Learned

- Importance of PCS training and explanation of publication method
  - ➔ The corridor will offer personal trainings for every customer in early 2015
- New procedure for the allocation of train numbers necessary
  - ➔ More info at the end of the presentation (point 5)
- Necessity to publish PaPs also during the weekend
  - ➔ Where possible
- The work windows in France, and the non-publication of PaPs caused clients more work then before + resulted in difficulties for the IMs
  - ➔ New functionality in PCS is being developed. Production foreseen for early December 2014
- Long distance PaPs were sometimes only requested partially because stop times were not sufficient
  - ➔ More flexible publication approach (see point 4 of this presentation)
  - ➔ Improved focus on customer needs during PaP construction

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2. Forecast 2016 timetable PaP supply

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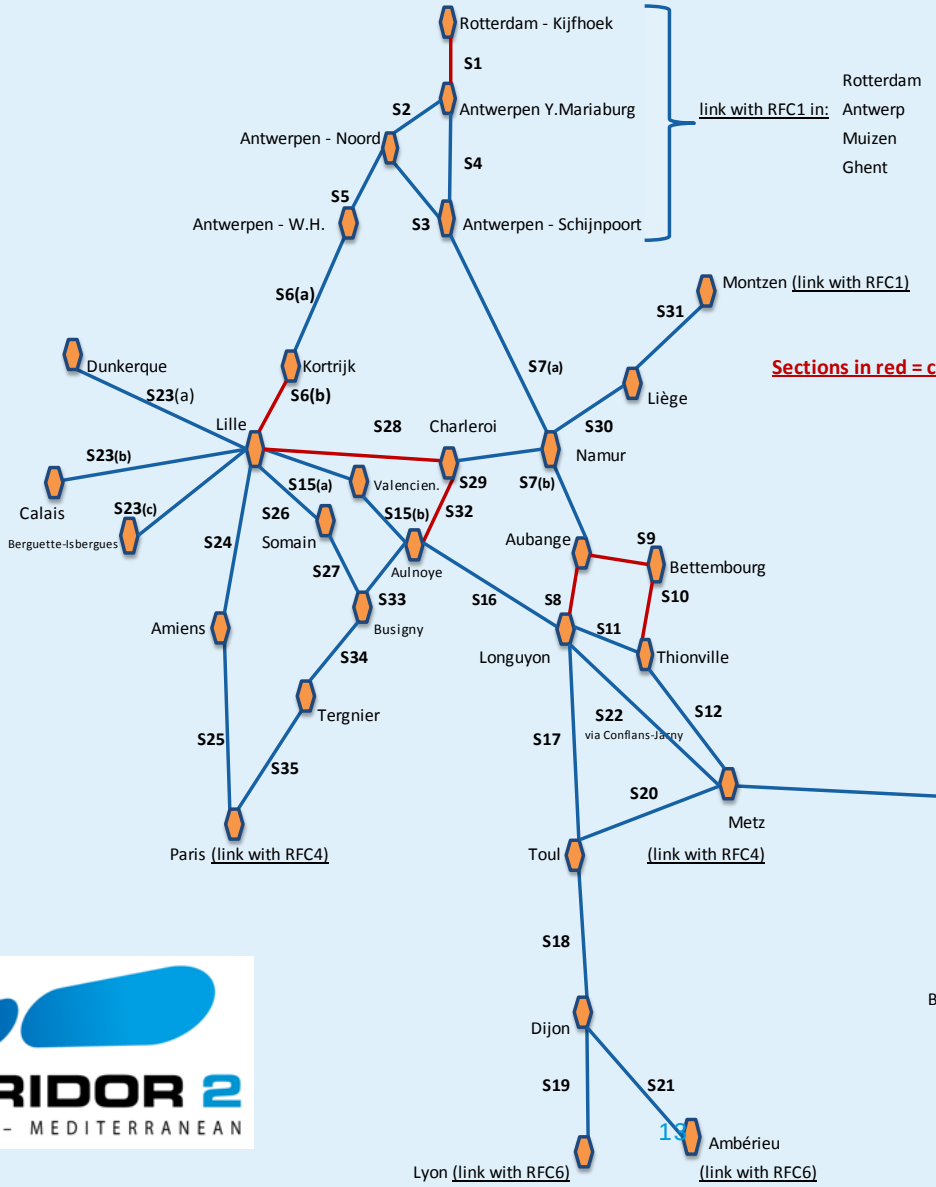
CORRIDOR 2
NORTH SEA - MEDITERRANEAN

1. Context

- During the month of May, input was gathered from customers and potential customers to be able to construct a suiting PaP catalogue for TT 2016
- The IMs were requested to analyse this information and define their wishes concerning quantities of PaPs
- The IM figures on the next slide concern the **draft** proposal from the IM
- The C-OSS will continue to harmonise the figures and to take into account the comments of all stakeholders
- The Corridor 2 Managing Board will decide on the quantity of PaPs end of October
- Final figures may defer slightly from the numbers shown due to works or unforeseen lack of (or extra) capacity

2. Overview **draft** IM proposal (1)

RFC2 PRE-ARRANGED PATH CATALOGUE 2016 SECTIONS + DRAFT NUMBER OF PAPS



section	draft proposal NS	draft proposal SN
S1	18	18
S2	18	18
S3	18	18
S4	9	9
S5	17	17
S6(a)	16-17	16-17
S6(b)	16-17	16-17
S7a	13-18	13-18
S7b	14-18	14-18
S8	9-11	10-11
S9	6-8	6-8
S10	2-4	1-4
S11	11-14	12-14
S12	15-18	15-18
S13	13-16	13-16
S14	11-14	11-14
S15(a)	4	4
S15(b)	3	3
S16	3	3
S17	1	1
S18	4	4
S19	4	4
S20	3	3
S21	1	0
S22	0	0
S23(a)	2	2
S23(b)	4	4
S23(c)	1	1
S24	1	1
S25	1	1
S26	13	13
S27	3	3
S28	4	4
S29	3	3
S30	2	2
S31	0	0
S32	1	1
S33	1	1
S34	5	5
S35	1	1

CORRIDOR 2
NORTH SEA – MEDITERRANEAN

2. Overview **draft** IM proposal (2)

Main corridor axes:

customer requests / IM proposals

RFC 2 TT 2016 PaPs	customer request		IM proposal		PaPs TT 2015	
	NS	SN	NS	SN	NS	SN
Antwerp - Basel	13	13	8-12	8-12	10	12
Antwerp - Calais	5	5	2	2	N/A	
Calais - Basel	2	2	2	2	N/A	
Antwerp - Lyon	8	8	1	1	1	1
Germany - Spain	4	4	2	2	2	2
Liège - Dunkerque	4	2	2	2	N/A	

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3. Evolution of priority rule for the allocation of PaPs

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1. Current Situation (1)

In the event of conflicting requests for PaPs for TT2015, placed until X-8 (2nd Monday in April), the following priority rule was applied in order to determine which request got the preference:

- the priority value is calculated using only total requested length of pre-arranged paths multiplied by the number of requested running days
- If the requests cannot be separated in this way, the total requested length of the complete path including f/o will also be added
- The total requested lengths of all requested PaP sections – irrelevant if just on one or several corridors – is always taken into account
- In cases, where there will be exactly the same request by two or more applicants; the following steps will be applied:
  - Coordination by the C-OSS in order to find out if the requests are referring to the same tender offer. In this case the application will stay open and be allocated to the applicant which will win the tender.
  - If the requests do not concern a tender offer, the C-OSS will allocate the path to the applicant which can forward the contract of the transport.

    A consultation phase between all applicants and the C-OSS.

1. Current Situation (2)

- **Higher priority:**

  In cases the priority rule has to be applied, the applicant of the request with the highest priority will be informed.

- **Lower priority:**

  If the priority rule has to be applied, the applicant who did not get the requested PaP(s) will be informed.

  At least one alternative PaP as close as possible to the first request will be offered.

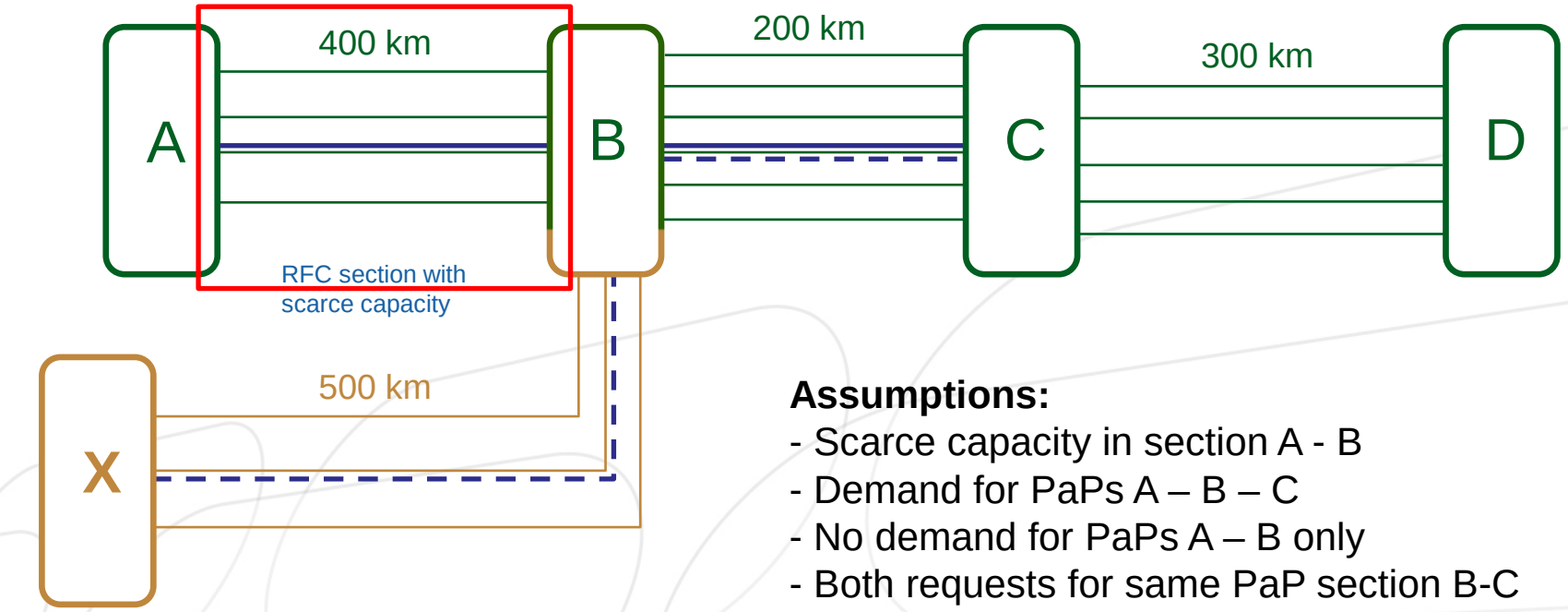
  This applicant has to accept or reject the offered alternative within 5 working days.

  When no answer by the applicant is received or the alternative will not be accepted, the C-OSS forwards the original request to the concerned IM/AB

- **Late path request and reserve capacity**

  For these types of requests, the priority rule “first come – first served” is be applied.

2. Flaws of existing priority rule



Green RFC (A-B-C-D)
Brown RFC (X-B)
PaP sections offered on RFC Green
PaP sections offered on RFC Brown
PaP request 1
PaP request 2
xxx km Distances between operation points

Assumptions:
- Scarce capacity in section A - B
- Demand for PaPs A – B – C
- No demand for PaPs A – B only
- Both requests for same PaP section B-C

Concern:
Allocation of PaP section B-C to PaP request 2 may lead to waste scarce capacity RFC section A-B

Current PaP structure and priority determination model

3. Concept Network PaPs (1)

- For better matching specific traffic demands and for supporting priority calculation – especially for capacity requests involving more than one RFC – the corridors may designate a certain number of the published PaPs as “Network PaPs”.

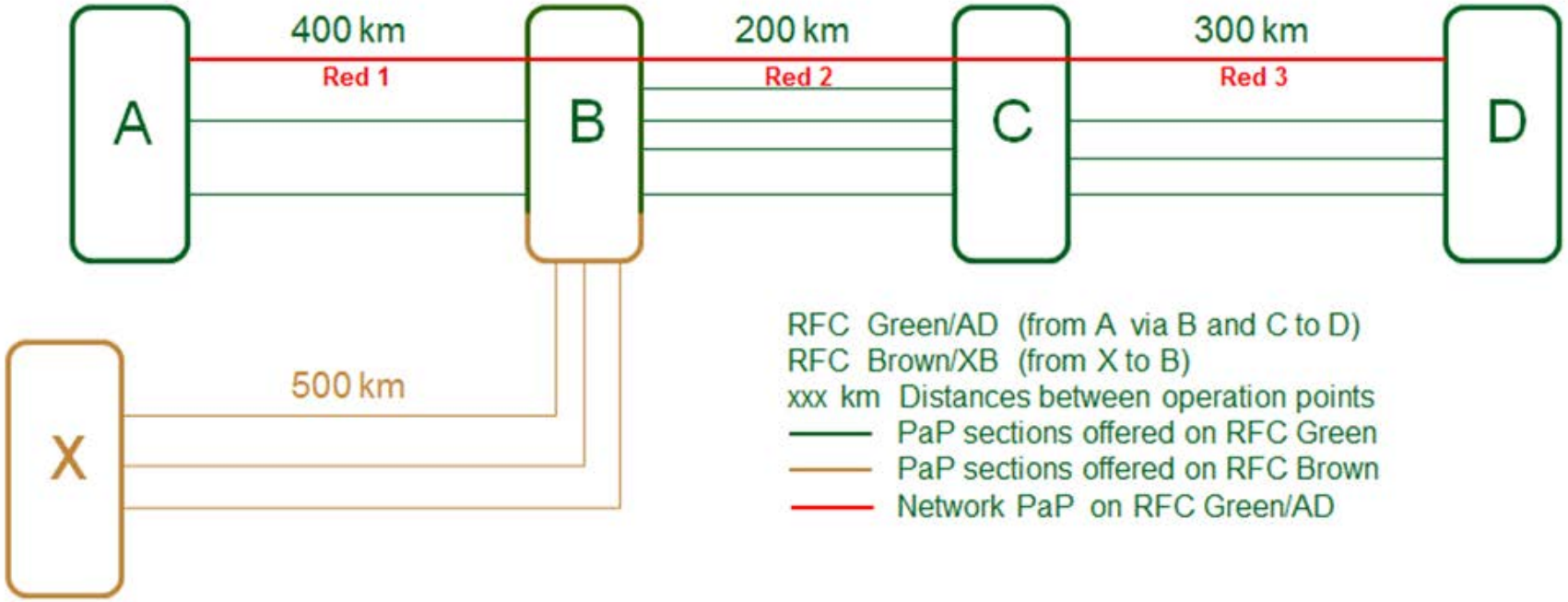
- Network PaPs are PaPs designated to foster the optimal use of infrastructure capacity and address the needs for capacity in specific geographical relations or of market segments with special requirements in train path characteristics.

- **The “Network PaPs” consist of contiguous PaP sections linked together within one single or across several corridors. They are designated to promote the optimal use of infrastructure capacity.**

- A Network PaP is a form of traditional PaP with a higher priority in case of conflicting requests

3. Concept Network PaPs (2)

A Network PaP on one RFC only:

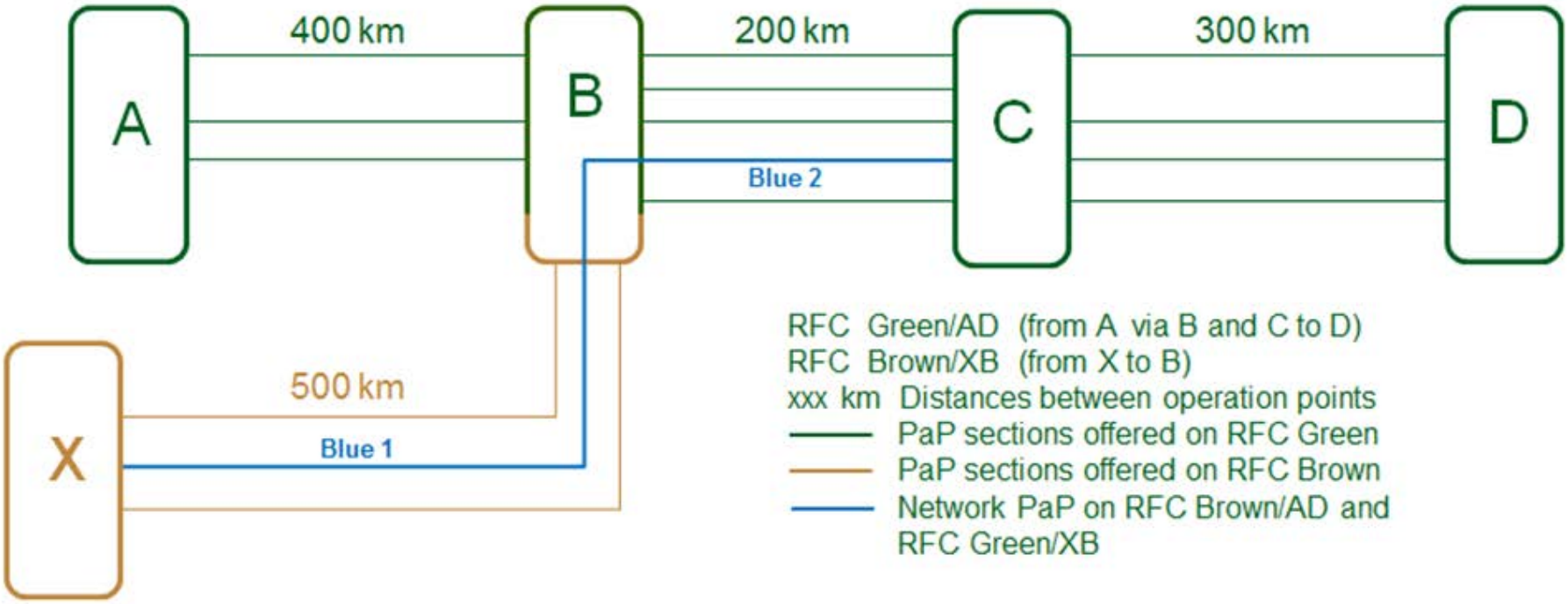


One of the PaPs of RFC Green/AD is defined as a Network PaP A-B-C-D, consisting of sections Red1, Red 2 and Red 3. The intention is to give requests for the complete Network PaP priority compared to requests for sections of the Network PaP (e.g. Red 1 and 2) and continuing on a normal (Green) section C-D.

Network PaPs may also be offered as a single entity. In this case, the Red Network PaP would be defined as running from A to D, not allowing RUs to apply for any section(s) only (e.g. A to C).

3. Concept Network PaPs (3)

A Network PaP on two connected RFCs:



PaP sections Blue 1 on RFC Brown/XB and Blue 2 on RFC Green/AD are defined as a Network, forming a contiguous PaP on both corridors. The intention is to give requests for the blue Network PaP from A via B to C (following a market demand for trains from X to C) a certain priority, ensuring that not all PaP sections form B to C will be reserved for trains running on RFC Green/AD only.

4. Proposal: Network PaPs for TT2016 (1)

- Main focus point for RFC2: Benelux – Italy traffic
  - PaPs between the Benelux and Basel generally continue to Italy
  - For TT 2015, this meant asking for a f/o path through Switzerland due to small amount of suitable RFC1 PaPs available
  - Not always could these paths be offered within the needs of the customer

- Situation PaP requests TT 2015:
  - 21 dossiers for PaPs between the Benelux and Basel
  - 17 of these requests were for a Benelux – Italy traffic
  - 15 of these requests followed the route via Domodossola
  - 2 followed the route via Chiasso
  - Typically, clients prefer the route via Domodossola because this route (currently) allows heavier trains to pass.

5. Proposal: Network PaPs for TT2016 (2)

- PaP offer RFC2:
  - RFC2 published 10 paths north to south and 12 paths south to north between the Benelux and Basel
  - We foresee a similar amount of PaPs to be published for TT 2016

- The Managing Boards of RFCs 1 and 2 have decided to construct a number of paths between the Benelux and Italy via France to be published as network PaPs, the majority crossing the Italosuisse border at Domodossola.

- Customer input is being gathered to be able to harmonise a suiting offer

6. Consultation phase in case of conflicts

- Ministries and RFCs agreed to allow the possibility of a consultation phase in case of conflicting requests

- If the following criteria are met:
  - Only one RFC involved
  - Alternative PaPs are available
  - The difference between the priority values of the conflicting requests is not more than 20% of the highest priority value
  - Only two applicants involved

- The C-OSS can contact the applicants to find a solution using the available alternatives. If no suitable solution for both applicants can be found, the calculated priority rule will be used

- Due to the limited time available (all requests have to be treated within two weeks time), consultation is an optional method for the C-OSS

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4. Flex PaPs : concept and status

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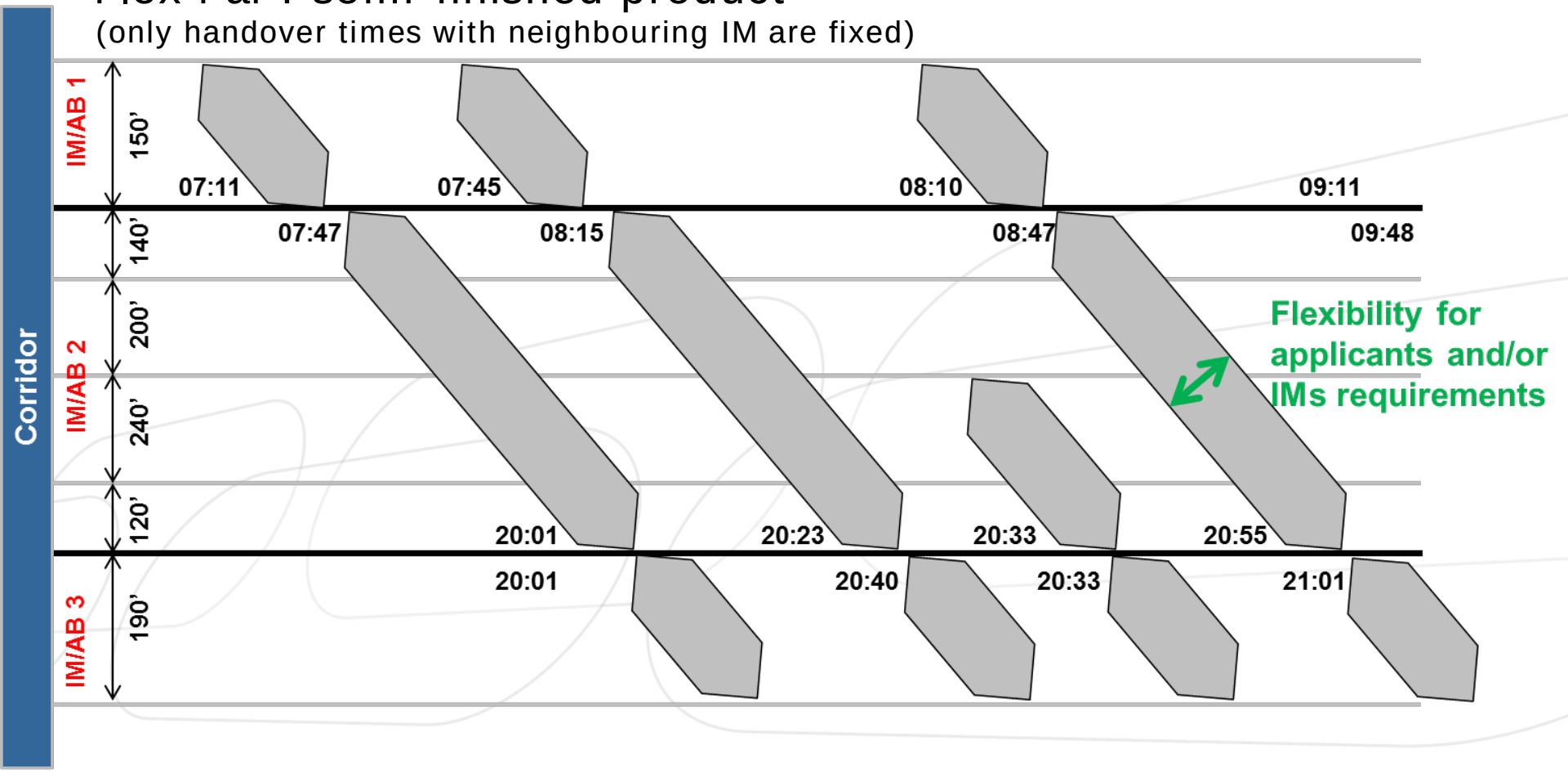
1. Concept (1)

- Flex PaPs are produced by IMs X-16 to X-12 as a semi-finished (intermediate) product
- Handover times at network borders are fixed (and harmonised between IMs)
  ↳ IMs have possibility to communicate additional, domestic times
- Published at X-11 in PCS
- Indication of standard journey times and parameters for each corridor section (defined by IMs)
- Outside fixed border times, applicants have freedom to request whatever they want (arrival/departure time if no domestic times are communicated, origin, intermediate stops, feeder/outflow) ⇨ could be a challenge for some applicants
- Application of priority rule in case of requests for same handover (border) slot
- Path offer (draft timetable at X-5) will be “elastic” (less fixed)
  ↳ possibility to adapt PaP by applicant/IM in later phases (but before Mid-Dec.)
- Final allocation (X-4) includes also some flexibility for adaptations by applicant/IM

1. Concept (2)

Flex PaP: semi-finished product

(only handover times with neighbouring IM are fixed)



1. Concept (3)

RFC2 possible example:

Antwerpen	**dp**						
MsM	**ar**	**07:11**		**07:45**	**08:10**		**09:11**
MsM	**dp**	**07:47**		**08:15**	**08:47**		**09:48**
Thionville							
Strasbourg							
Basel St.J gr.	**ar**	**20:01**	**20:06**	**20:23**	**20:33**	**20:48**	**21:00**
Basel St.J gr.	**dp**	**20:01**	**20:12**	**20:23**	**20:40**	**20:55**	**21:01**

2. Analysis (1)

- Strengths of the concept:
  - Enables individualised production concept for applicants (change of engines/driver, resting time, etc.)
  - Freedom for IM to define routing between handover points
  - Less rigid product
    - Possibility for applicant to request modifications between path request deadline and ~ X-2 (taking requirements – e.g. mandate/contract – of their customer into account, adapt path to allocated terminal slot, etc.)
    - Possibility for IM/AB to modify path (offer or allocated path) in case needed (e.g. construction works, optimal usage of capacity)
  - Possibility to increase PAP offer by at least 50%

- Weaknesses of the concept:
  - Journey times will increase by 10-20% (incl. of buffer times in the defined standard journey times for corridor sections in order to guarantee agreed handover times)
  - Real timetable might be shorter than published standard times (non-usage of buffer); this could lead to unattractive stopovers somewhere (opposition of RU)
  - Significant challenge for applicants to request the “right” border slots

2. Analysis (2)

Current situation:

- RNE has been asked to support the development of this product by:
  - Updating the guidelines for PaPs
  - Developing a function in PCS to allow publishing and allocating the flex PaPs

  ➔ Before December 2014

- RFC2 IMs have been asked their point of view, with 2 main advantages being noted:
  - Extra PaPs could be published
  - More flexibility in small alterations to the fixed PaPs ➔ formalise the use of 'pragmatic' solutions

2. Analysis (3)

Issues to be solved:

- Flex PaP construction
  - ➔ How to fix the travel times?
  - ➔ How to determine number of PaPs to allow a certain travel time during a giving time frame (night vs peak hours for ex.)?
- Technical issues
  - ➔ How will the functions in PCS look like?
  - ➔ Short amount of time to develop = short amount of time to test

3. RFC2 position

- RFC 2 fully supports the further development of the flex PaP concept. However:
  - We need to collect the opinions of applicants
  - We may not be able to implement Flex PaPs for TT2016 (or at least not to its full extent) due to technical and conceptual issues. Final decision on the usage of the concept has to be taken per IM
  - Evaluation of timetable 2016 allocation (on the different corridors) necessary before possible full implementation for TT 2017

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5. Train numbering for PaPs

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1. Current situation

- The current procedure for the allocation of train numbers is described in UIC leaflet 419-2

- For the allocation of train numbers to a PaP request for the yearly timetable, the C-OSS has to ask the responsible IM for a train number to add to the PCS dossier

  - The responsible IM will reserve this number in the international database (ITNDB)
  - The responsible IM depends on the route of the request
  - For the vast majority of requests via RFC2, the responsible IM will be RFF

2. TT2015

- For TT 2015, in order to enable identification of a train running on a PaP, RFF pre-allocated a set of train numbers in de database to be allocated to PaP requests only

- This way, protection against works could be guaranteed at all time

- However, this caused the following problems:
  - ➔ Historical train numbers of certain traffics were changed
    - ➔ Operational difficulties for some customers
  - ➔ One train number per PaP request instead of per train
    - ➔ A train running 250 days on 1 PaP in country A received 2 train numbers when he only used 230 days of that PaP in country B (PaP not available for the other 20 days in country B

- After a dialogue with customers, the allocation of train numbers was reversed during summer in cooperation with the customers

3. TT2016

- For TT 2016, RFC2 will draft a new procedure in early 2015, in cooperation with all IMs, for the allocation of train numbers to a PaP request

- To be taken into consideration:

  - ➔ Protection of the path has to be guaranteed
    - ➔ How to easily spot a train running on a PaP in real time operations?
  - ➔ Harmonisation across corridors
  - ➔ Taking into account customer input