

Rail freight traffic diagram



A new way to visualize the traffic on the corridor
30.03.2022



easier, faster, safer



Co-financed by the Connecting Europe
Facility of the European Union

~100 **O - D** to visualize

THE ISSUE

What were we facing?

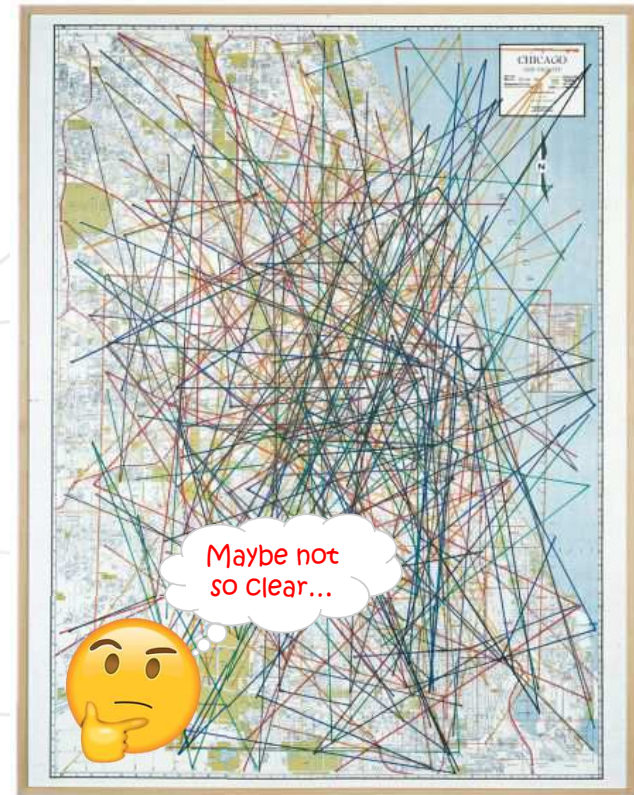


How to have a clearer view of the **Origins - Destinations** on the RFC NSM routes ?

34295019	49803 Tergnier - Bât Voyageurs	01.01.2019 09:04 DENDERLEEUV	01.01.2019 12:50
34295156	41781 ANTWERPEN-SCHUINPOORT-BUNDEL Q	01.01.2019 17:00 Padborg	02.01.2019 07:17
34295163	47851 Dunkerque-Grande-Synthe - FSC Attente	01.01.2019 18:24 KINKEMPOIS-FORMATION	01.01.2019 00:33
34290373	48430 Tourcoing - Bât Voyageurs	01.01.2019 05:51 Calais-Fréthun - Bât Voyageurs	01.01.2019 07:33
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34296930	43832 Y.SCHIJN	01.01.2019 20:18 Somain - Bât Voyageurs	01.01.2019 23:29
34296933	42900 Y.SCHIJN	02.01.2019 18:36 Strasbourg-Port-du-Rhin - Poste 1	03.01.2019 05:44
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34296980	44865 ANTWERPEN-NOORD-BUNDEL B2	02.01.2019 08:58 Woippy - Bât Voyageurs	02.01.2019 16:03
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34297384	47902 Thionville - Bât Voyageurs	02.01.2019 10:43 Y.SCHIJN	02.01.2019 16:54
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34297405	48571 ZELZATE	02.01.2019 14:46 Buna Werke	01.01.2019 09:13
34297411	44612 ANTWERPEN-NOORD-BUNDEL B2	02.01.2019 23:06 Maasvlakte West	03.01.2019 02:37
34297423	46253 Maschen Rbf	02.01.2019 04:50 GENT-ZEEHAVEN-SIFFERDOCK R.O.	02.01.2019 16:26
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34300449	40101 ANTWERPEN-D.S.-COMBINANT	03.01.2019 17:57 GALLARATE	04.01.2019 19:38
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34313896	41747 ANTWERPEN-D.S.-COMBINANT	02.01.2019 20:34 Bettendorff-Merchandise	04.01.2019 06:04
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34313994	41607 Roosendaal	03.01.2019 23:04 Y.SCHIJN	04.01.2019 00:03

A strait line
between
each O- D?

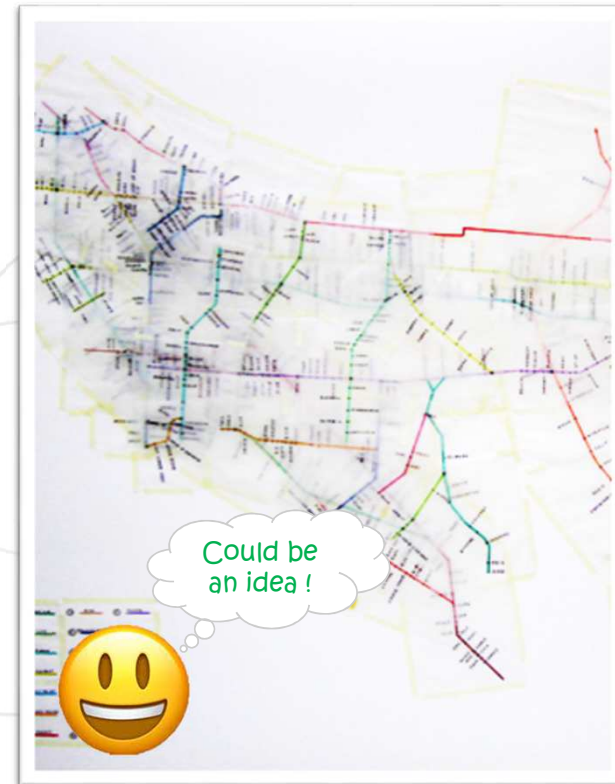
?



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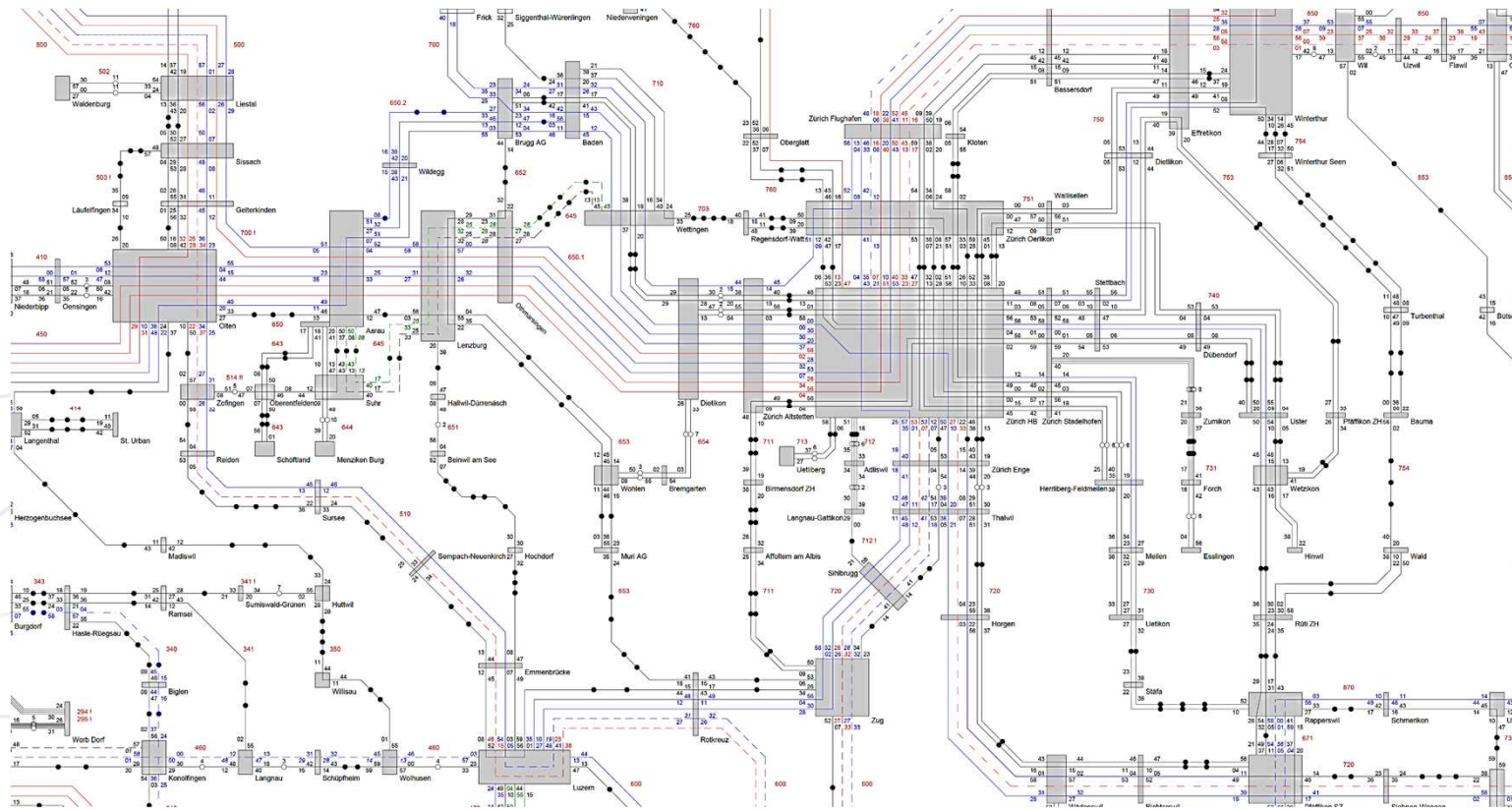
A kind of simplified Diagram ?



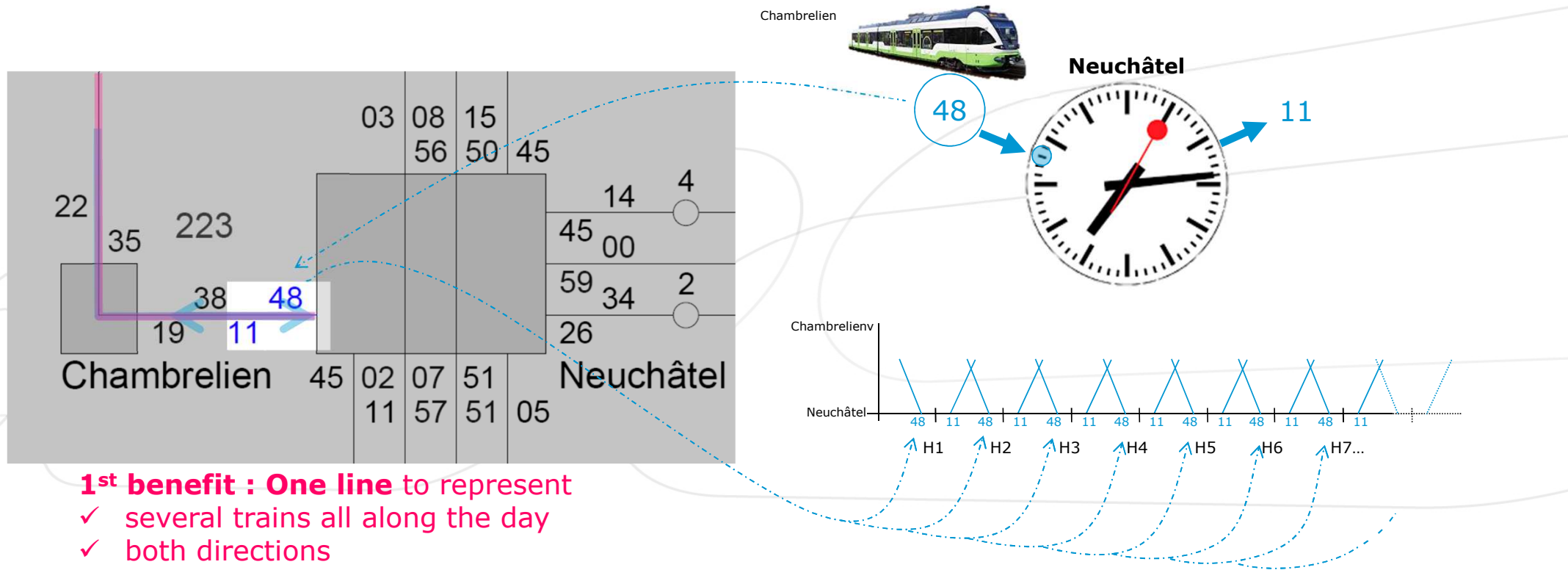
The source of inspiration

TAKTFAHRPLAN / CLOCKFACE TIMETABLE VISUALIZATION

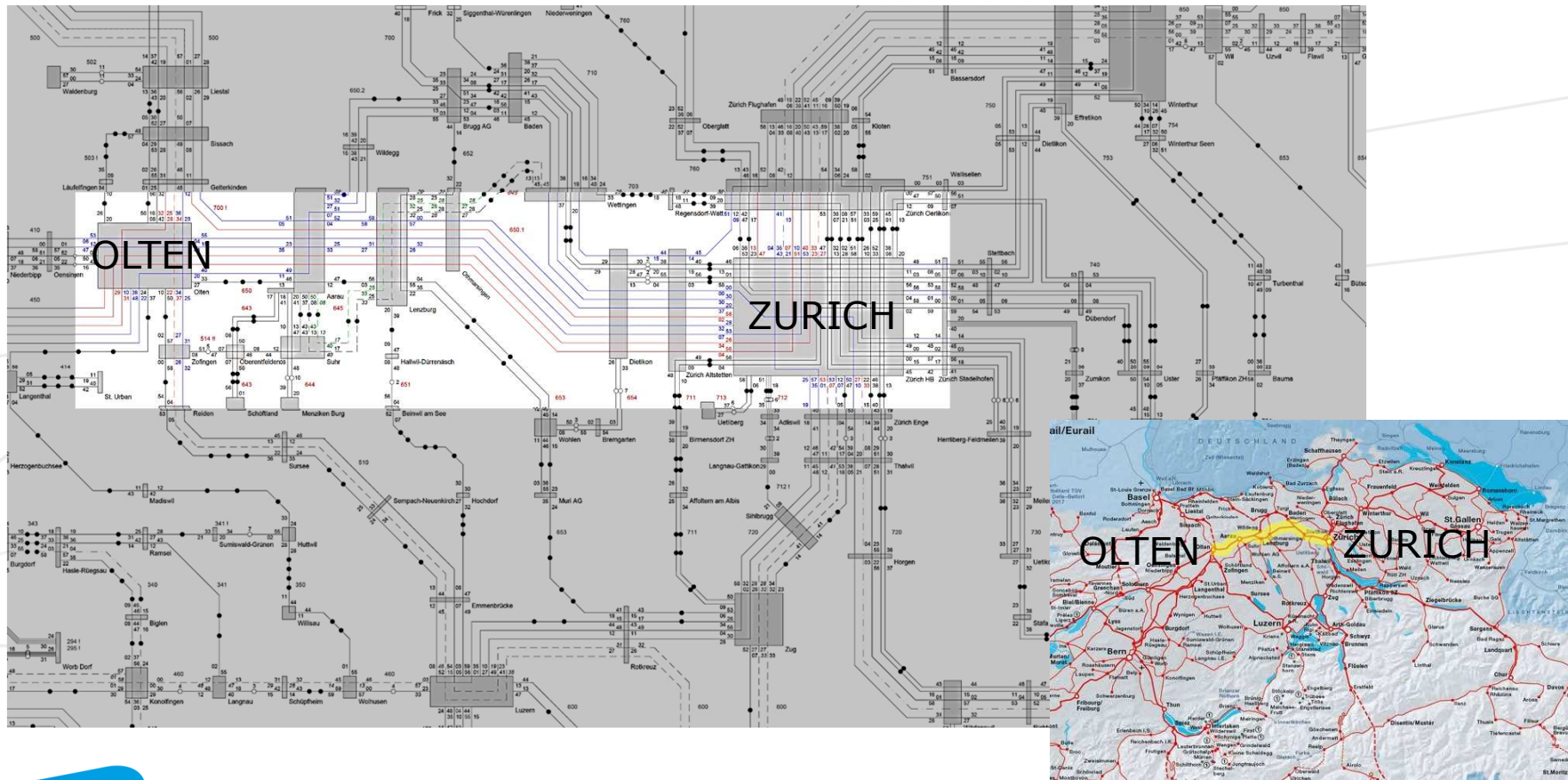
Ex : 2022 Swiss Timetable



For passenger cadenced traffic



2nd benefit of the taktfahrplan diagram : A « kind of » geographical view



Design process

THE RFC NSM TRAFIC DIAGRAM

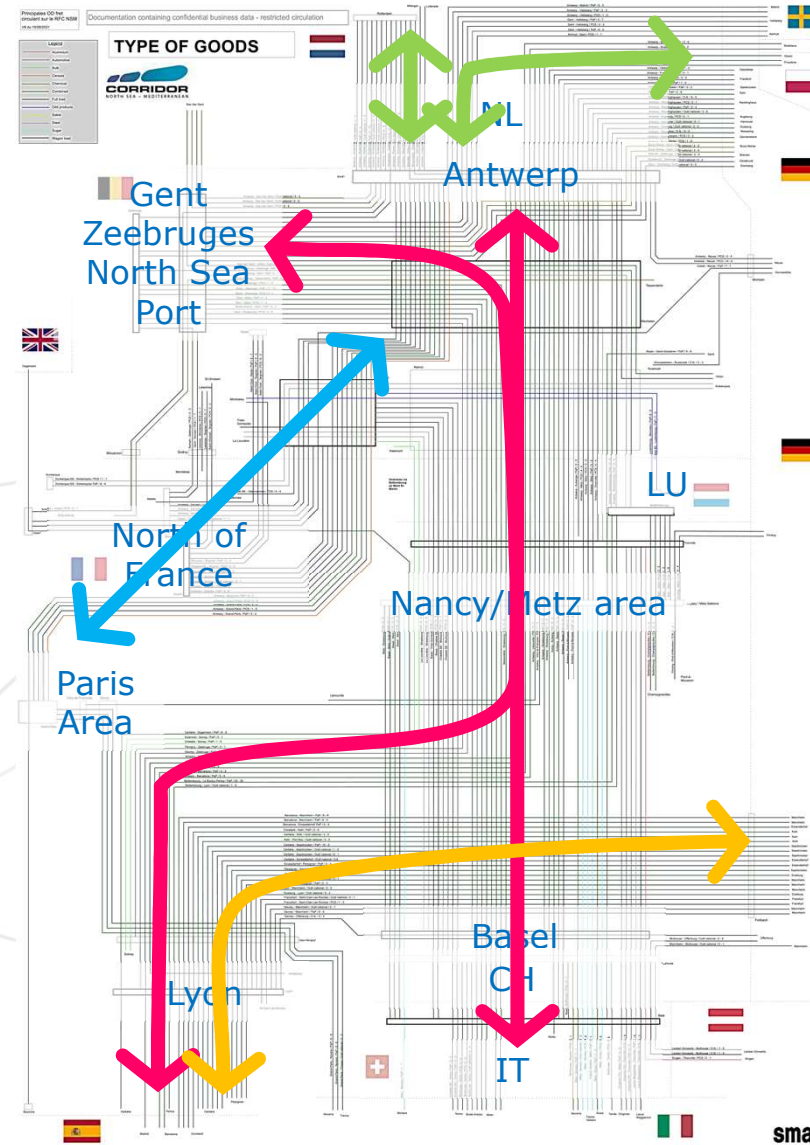
Data sources

**RFC 2
Requests
directory**

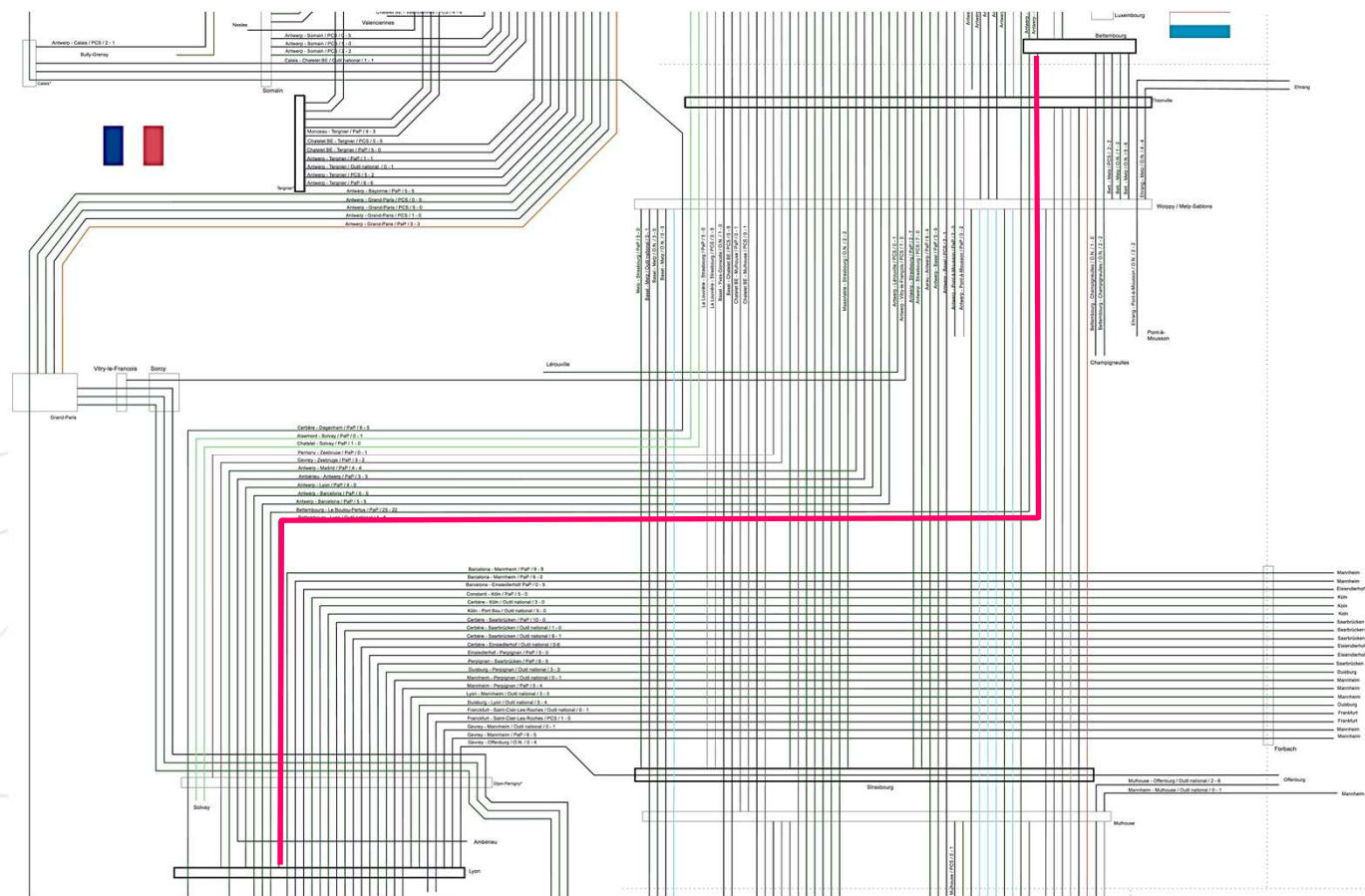
**IMs
Requests
Coordination File**

**A consolidated
Origin –
Destination
Database**

A simplified representation of the geography of the corridor's routes



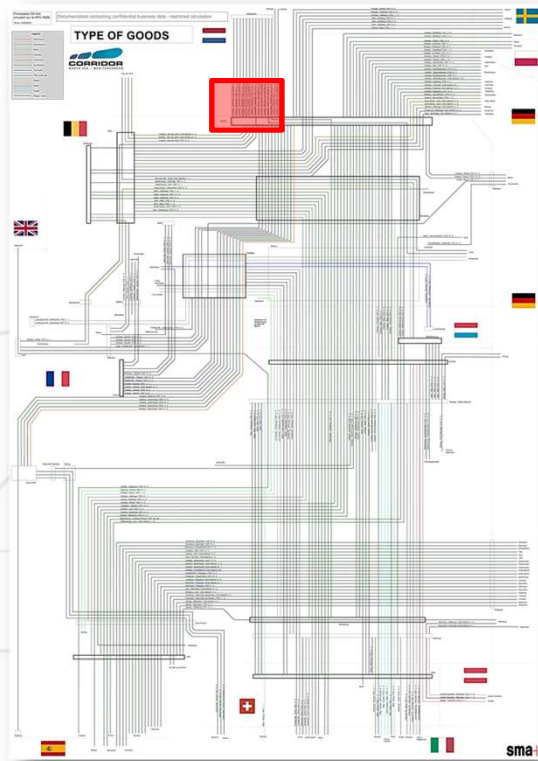
One line for one request : an example with the Lyon - Bettembourg



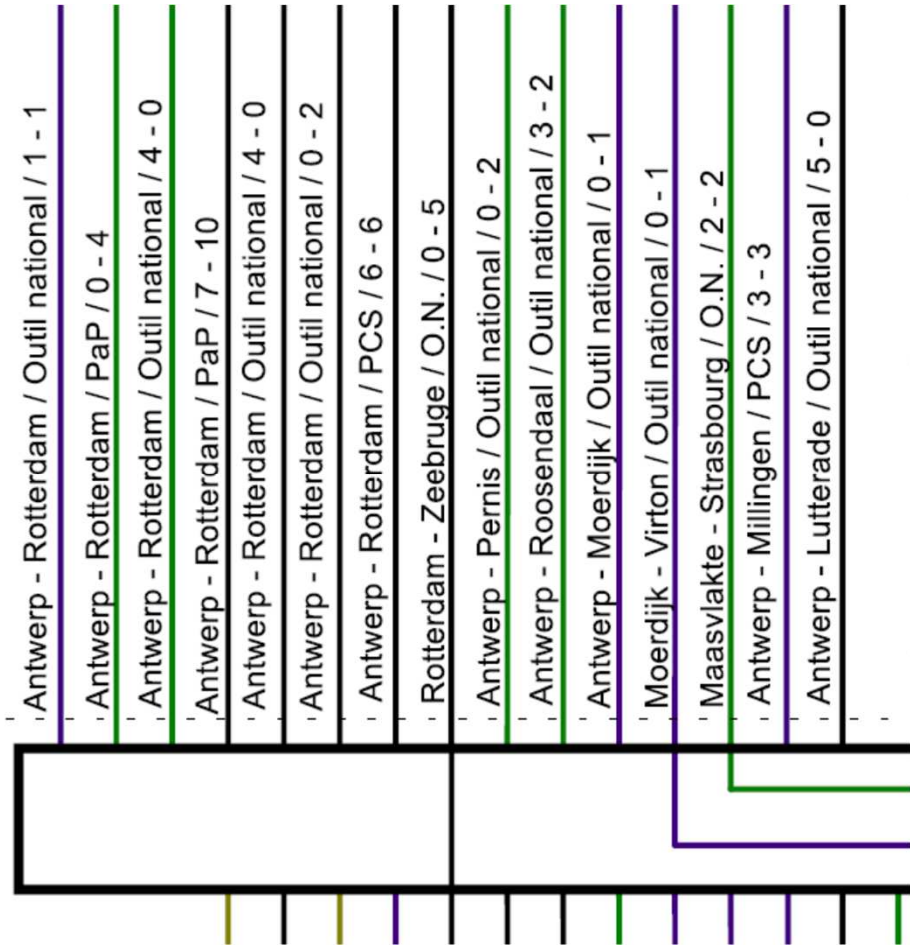
Zoom in n°1

Some Written info :

- Origine Destination
- Allocation tool
- Nb of train/week/direction



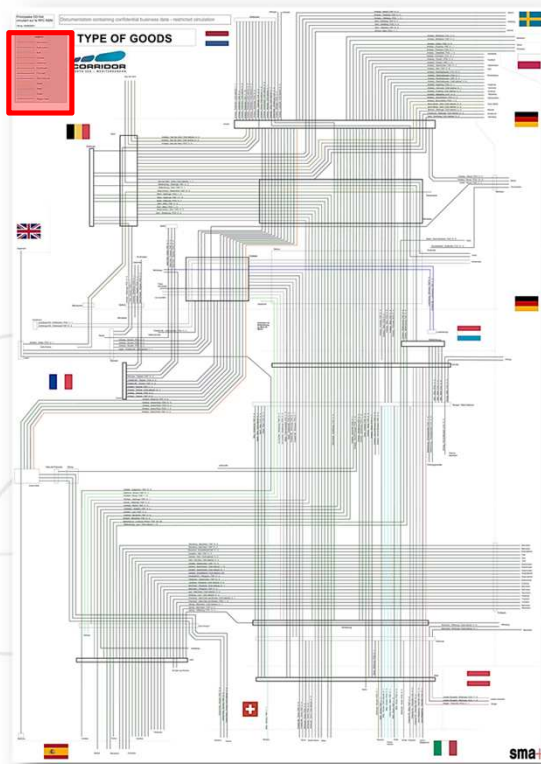
Anvers



Zoom in n°2

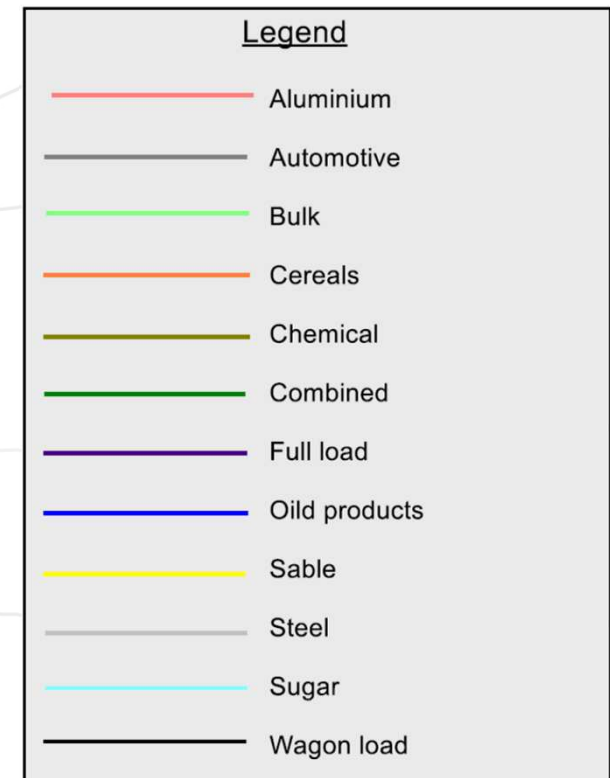
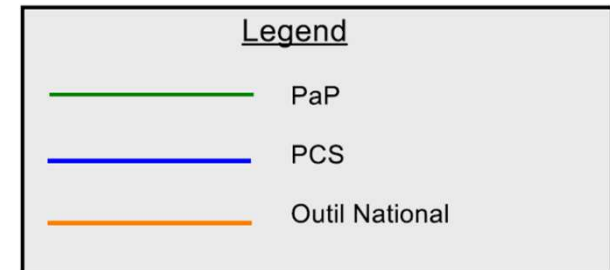
2 thematics :

- Type of goods
- Type of allocation tool



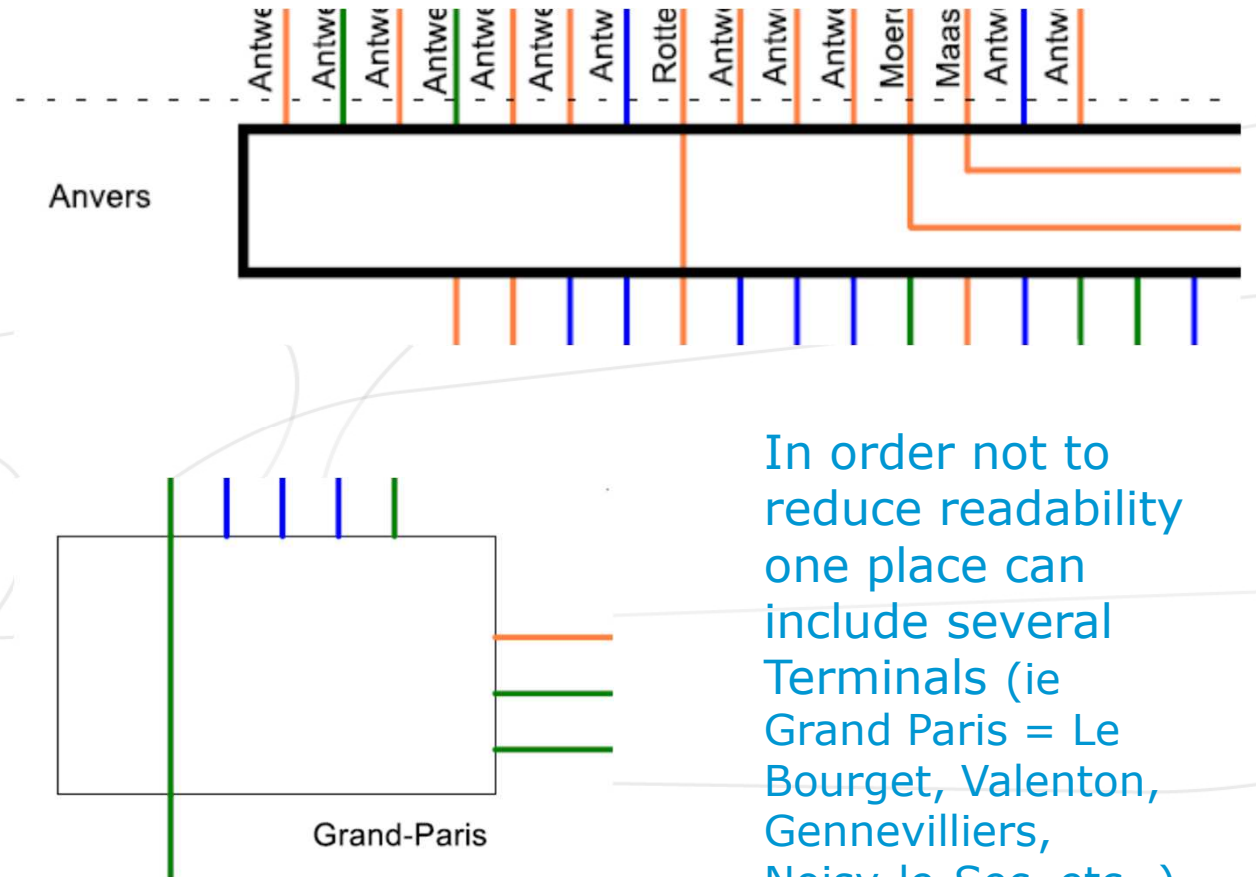
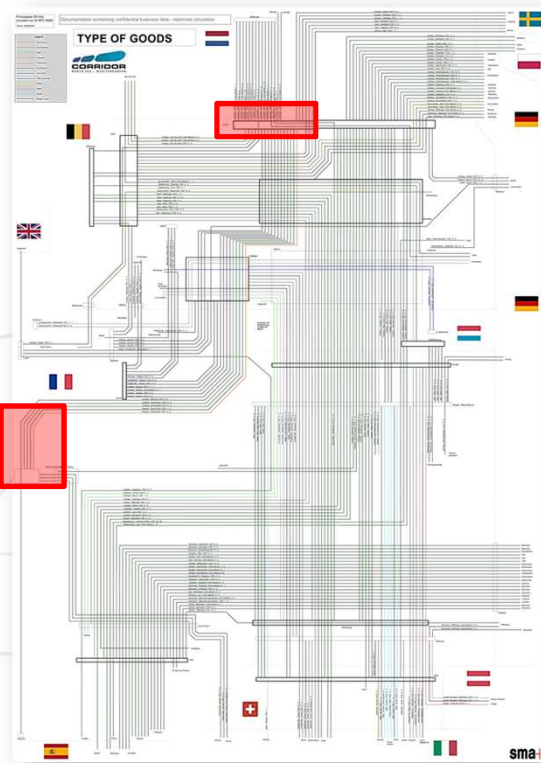
Type of allocation
tool

Type of goods



Zoom in n°2

Simplified Origin - Destination

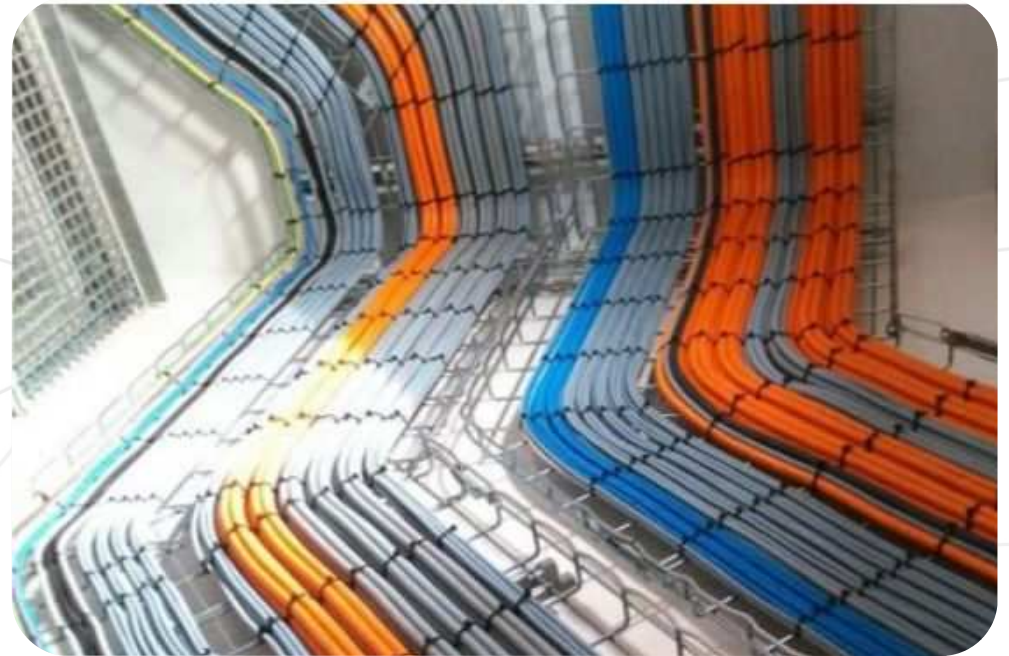


In order not to reduce readability one place can include several Terminals (ie Grand Paris = Le Bourget, Valenton, Gennevilliers, Noisy-le-Sec, etc...)

Type of allocation tool diagram

LET'S NAVIGATE INTO THE DIAGRAM

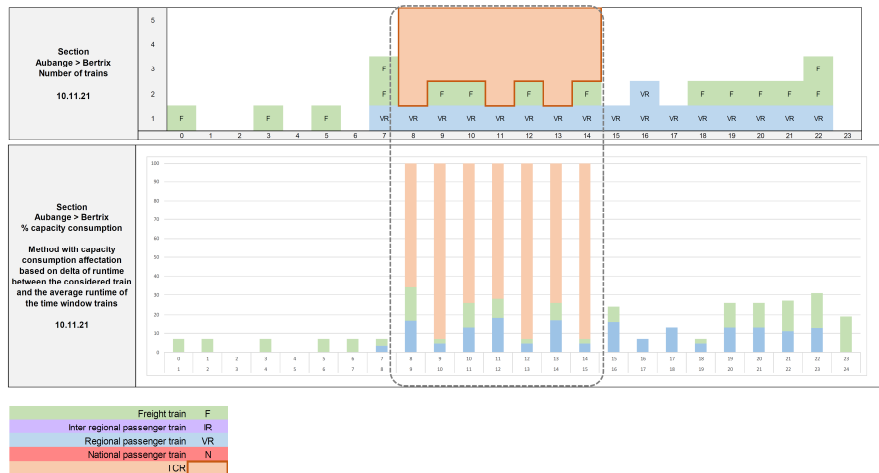
Conclusion



To go a step further...

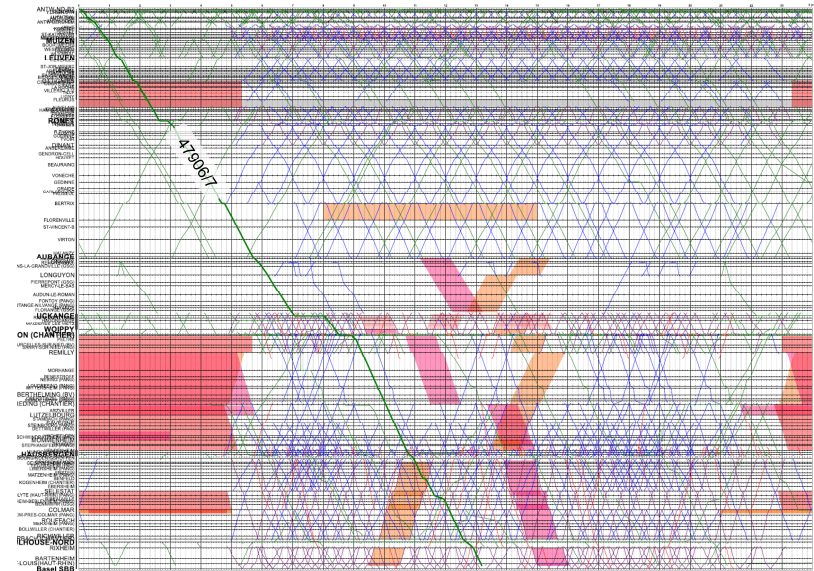
CAPACITY INTELLIGENCE

To visualize capacity issues to take appropriate decisions

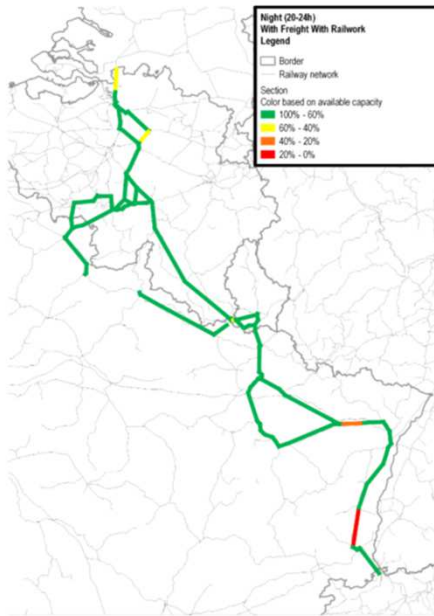


Capacity Model

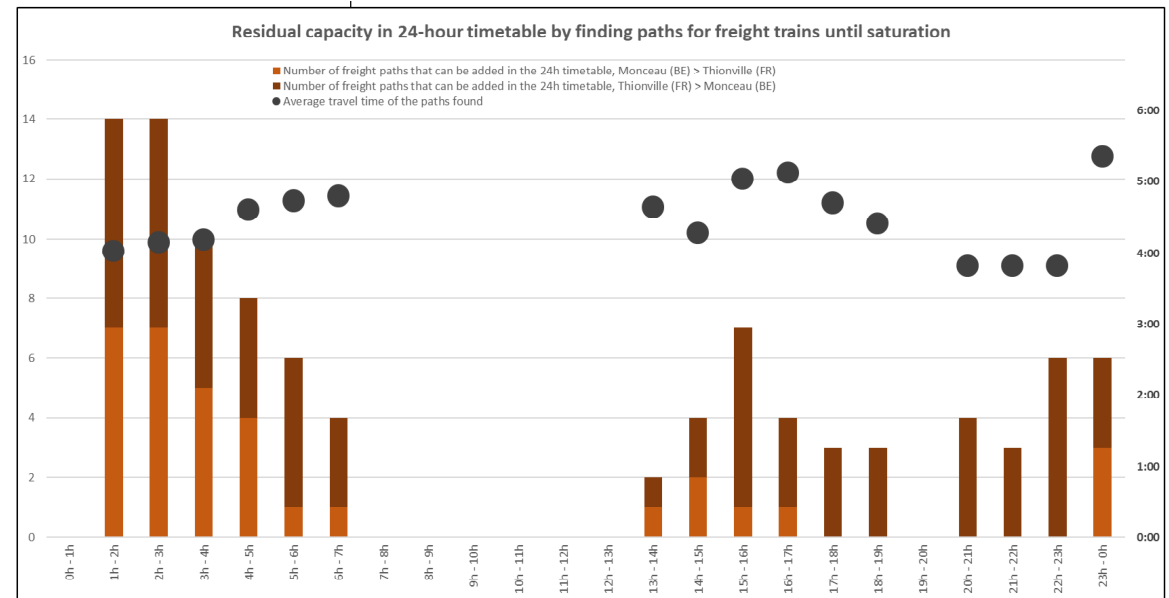
on Aubange > Bertrix section the 10 nov. 2021



To visualize capacity issues to take appropriate decisions



**Map of critical sections
via « compression » analysis**
10 nov. 2021



**Residual capacity
via « path-search » analysis**
Between Namur (BE) and Thionville (FR), the 10 nov. 2021

Thanks for your attention

The sole responsibility of this publication lies with the author.

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Contact

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Right On Track

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RÉSEAU

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**TVS
SAS
SAT**



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