



Co-financed by the European Union  
Trans-European Transport Network (TEN-T)

# Railway Undertakings Working Group Infrastructure Upgrade

**Eric Guenther**

**19 March 2014**



***Fast track** your rail freight*

# Agenda

- Needs
- Studies already launched
  - North East Line
  - Vosges tunnels
- Alternative options to the Vosges tunnels
- Wagons

# Needs

- One of the first feedback from the RAG of the RFC2 has raised the issue of the loading gauge in France which is lower than the one in Belgium and in the Netherlands and especially lower than the loading gauge on Corridor 1 (right hand side of the River Rhine).
- Most of the RAG participants stated that traffic could raise on Corridor 2 if the “P400” gauge was proposed

# Needs

- The full P400 gauge is made of a standard wagon with a pocket bottom loading plane at 33cm over the top of the rail + a trailer of 260cm wide and 400cm high
- The WG has shown that RFC2 RUs carry « P400 » trailers on pocket wagons with loading plane at maximum 27cm above the rail
- Hence, the need is P394 ( $400 - 33 + 27 = 394\text{cm}$ )

# The needs

- Some reference gauges in France could comply with this need:
- AFG: Autoroute Ferroviaire Générale
- AFM427: Autoroute Ferroviaire Modalohr with a trailer of 400cm + a 27cm plane wagon

# Studies launched

- **North East Line**

RFF started to study 5 tunnels between Calais and Thionville

These 5 tunnels are concerned by a maintenance works campaign and RFF takes this opportunity to study the cost of upgrading the gauge: AFM 423, AFM 425 and/or AFM 427.

RFF also studies the removing of a canopy in the station of St Amand les Eaux (Northern France)

These studies started in January 2014 and will take a few months.

# The studies launched

- **North East Road**

In 2014, RFF plans to launch equivalent studies on other tunnels between Longuyon and Thionville.

To support these technical studies, RFF will also perform a market study on the North East Road + the Alsace and Lorraine regions ; This study will only focus on the market of trains carrying trailers (it is not a new TMS !)

# The studies launched

- **The Vosges tunnels**

These French lines of RFC2 have a loading gauge GB which may correspond to a P364 gauge.

A request was submitted to the Exceptional Transport Bureau in France. We now know that a P394 is not allowed between Réding and Saverne.

The next step is to know what would be the maximum gauge allowed with an exceptional transport authorisation

At the end of this approach, RFF would be able to study the upgrade of the gauge and its costs.



# Two alternatives to the Vosges tunnels

- **The High Speed Line East Europe Phase 2 as an alternative route.**

The 4 to 5 km of tunnels on the conventional line in the Vosges are a major constraint. Having freight trains running on the HS line between Metz and Strasbourg will have the C gauge (which is above the P400 gauge) could be a way to solve the problem.

However, even before studying the subject, we note already strong constraints that are sufficient to not consider this option:

- gradients (+30‰)

- signalling system

- space between tracks might not allow 2 trains to cross at the max speed limit

- price of the paths

- weight constraints, etc...

# Two alternatives to the Vosges tunnels

- **Downsizing the tunnels to only 1 track**

The works on the tunnels to increase the gauge are extremely expensive

The transition to one track in these tunnels could perhaps reduce this cost

But the feasibility in terms of capacity has to be studied:

- Once the HS line is open the HS trains (TGV) will no longer use the Vosges tunnels of the classic line.
- Some of the Regional trains (TER) will also switch to the HS line

# The wagons specifications

- When requesting an Exceptional Transport Authorisation, the RUs are able to give very precise description of the rolling stock to be used and the type of ITU to be loaded.
- We need to know precisely the specifications of the wagons that you use.
- We need to understand when (in your operating process) you know these specifications.

The sole responsibility of this publication lies with the author.  
The European Union is not responsible for any use that may be made of the information contained there in.



ACF



## Contacts

### Head Office

9, place de la Gare  
L-1616 Luxembourg

### Permanent Team Office

13, Avenue Fonsny  
B-1060 Brussels

[www.rfc2.eu](http://www.rfc2.eu)



Co-financed by the European Union

Trans-European Transport Network (TEN-T)