

# RFC North Sea - Mediterranean ERTMS State of play

Railway advisory group November 26th, 2015





#### Agenda

- 1. Key lessons from MoT BE meeting
- 2. Technical Aspects
- 3. ERTMS implementation state of play
- CEF Call 2015: an opportunity for the RFC North Sea –
  Med RUs

## 1. Key lessons from the last meeting organized by the MoT BE

- Approvals will be conducted on a national basis, by Railway Undertakings, from national authorities. The aim is to prove that using ETCS does not degrade the existing safety level
- No harmonized recommendations from the NSAs on the corridor
- 2 methods have been discussed for Railway Undertakings to mitigate the risk in their demonstration to the NSAs:
  - Adjust the value of the λ to the worst braking train on the section
  - Or apply a coefficient to the λ

How to define the value of such a coefficient?:

- evaluate the level of margins in the existing system and compare them with the margins provided by the braking algorithm of ETCS
- simulate error scenarios (presented by Railway Undertakings during the last meeting further to the merger of Alain Queval and B-logistics working groups.



#### 2. Key lessons: Technical aspects

- Some control measures that can be applied at Railways Undertaking level :
  - Dynamic testing of brake after departure;
  - Checking of the 1<sup>st</sup> wagon number (by the driver);
  - Checking the position of the P / G and Empty / Loaded levers on the 1<sup>st</sup> wagon (and the 6<sup>th</sup> vehicle in case of long composition locomotive);
  - Verification of cabin actual input values (possible use of a data entry tool for comparing data calculated and data read back by the DMI);
  - Taking a safety margin (see above) on the braking performance, while remaining compatible with train type and requested path
  - For future onboard equipment, consistency test for the different train data
  - In a medium term, a database can be used to improve data quality. The database can be accessible from the cabin
- Railway Undertakings feedback : best practices in countries already implemented
- Do Railway Undertakings now have all they need to move forward?



## 3. ERTMS implementation: state of play

- ERTMS Implementation ERTMS on the corridor:
  - NL: No equipped NSMED section presently planned before 2020
  - BE: by mid 2016 all the route between Antwerpen and FR/LU border shall be equipped in Level 1, version 2.3.0d
  - LU: All routes equipped and certified by mid 2016, in level 1 version 2.3.0d
  - FR: pilot site between Bettembourg and Thionville shall be certified by mid 2016, pilot site between BE/LU border and Longuyon shall be certified by Q3 2016 Deployment project on Longuyon-Basel is started; all these sections are equipped in level 1, version 2.3.0d
  - CH: the Basel node should be equipped with L1 Limited Supervision (B3) by end 2016
- Discussions are on-going with RUs and MoT, with support of RFC NSM to get a moratorium for the mandatory use of ERTMS for operations in BE and in LU.
- Notes :
  - On the Longuyon-Basel section, SNCF Réseau intends to use punctually 1.1 eurobalises to ease the operation of B3 locomotives, without hampering the operation of 2.3.0d locomotives
  - 2.3.0d locomotives "only" will not be able to run in CH



### 4. CEF Call 2015: an opportunity for the RFC North Sea – Med RUs

- One priority on the deployment of ERTMS
  - on-board and track-side
  - Baseline 2 or 3
- Focus on projects on the Core Network Corridors (CNC) and on principal lines of the RFCs
- Maximum funding of 200 M€
- More information:

https://ec.europa.eu/inea/en/connecting-europe-facility/cef-transport/apply-funding/2015-cef-transport-general-call



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