



# **CEO Task Force: ERTMS - Big Issues & Challenges for Rail Freight**

## **12th UIC ERTMS World Conference**

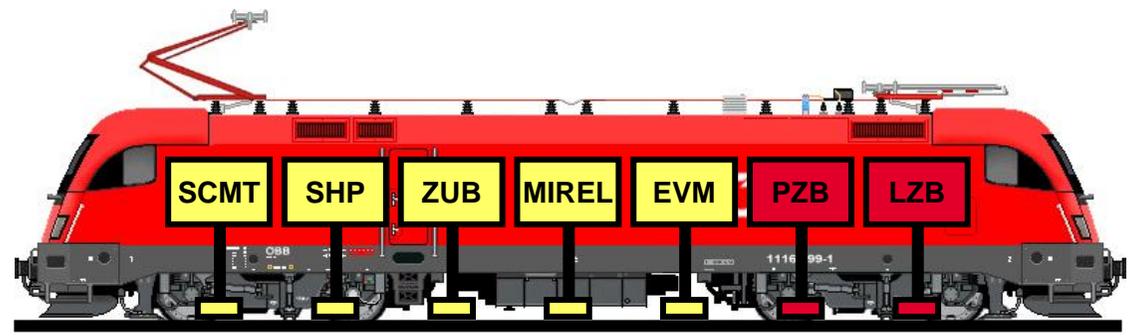
**Reinhard Bamberger (ÖBB-RCG)**

**Brussels, 1<sup>st</sup> March 2016**

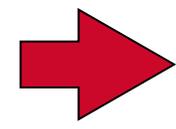


- ❖ **RU's Needs**
- ❖ ERTMS: 4 Big Issues for RUs
- ❖ RUs Demands

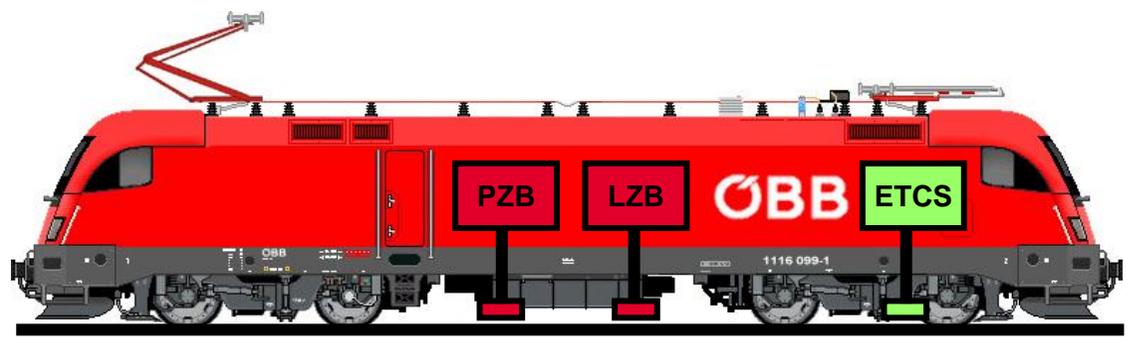
# Equipment



today...



...tomorrow



# RUs Needs for Their Trains



RUs do not ask for activities, but for **positive results**

- ETCS is a control-command system (CCS)
  - RUs need a **single, harmonised** CCS in whole Europe (at an affordable price)
  - ETCS is the **common tool** for European interoperability
- Through solutions such as ETCS, **RUs demand results** for their train operations
  - A better path availability
  - A more efficient traffic management
  - A facilitated interoperability
- But this should be **simple, rewarding and cheap** for RUs
  - A Control Command System has not to involve RUs beyond reason

A new Control-Command system shall make **users life easier**  
It must not jeopardize RUs business

- ❖ RU's Needs
- ❖ **ERTMS: 4 Big Issues for RUs**
- ❖ RUs Demands

# No Positive Business Case for RUs So Far

- **Huge costs**
  - Between 300 k€ and 1 M€ to retrofit a locomotive
  - Expensive STM/NTC integration
  - Expensive and time consuming authorization process (not European wide)
  - Can increase capital cost from 10% to 50%
- **Benefits**
  - Certainly **not in the short term**: same path availability, traffic management quality...
  - Cheaper to have **only one system** on board (ETCS). But when? And how?
  - Better fleet flexibility and operations
- **No profitability**
  - Highly **negative** for RUs (but maybe positive for IMs with trackside signalling removal)
  - Investments cannot be capitalized (**shippers will not pay for ERTMS**)
- **No sufficient funding scheme**
  - When European or national funding exists, the cap is usually 150-250 k€ per locomotive and limited to 50%
  - Pure financial solutions will **harm intermodal competition** (internalisation of ETCS costs)
  - Still huge cost on RUs, and **business cases remain negative**: Capital costs during retrofit; steady updates

**No reasonable financial possibility to retrofit locomotives**

# No Standardisation for On-Board Units So Far

- Most **networks require** additional **national “special purpose solutions”** (NTR)
  - This policy **hinders** standardisation and **interoperability**
  - It kills the “single European CCS”
- **Uncertainty** on ETCS **version** to be used on some networks
  - Makes tendering process really difficult
- A **difficult authorisation** process
  - Time and money consuming
  - No European cross acceptance
  - No single European process
- **Not a true market**
  - On-board ETCS market is characterised by a vendor lock-in
  - Monopoly structures for update and maintenance services

**Interoperability is jeopardized**

# No Stability So Far



- The newly voted TSI refers to the principle to **guarantee stability** for users.
  - The principle must be refined and transposed in roadmaps **protecting** effectively **users investments**.
  - A duration of **at least 10 years stability** must be guaranteed.
- Network **access criteria** must be **stable** and ERTMS upgrades must be avoided (or if they occur, remain exceptional and 100% funded)
  - Investments in ETCS will otherwise **not** be **future-proof** and predictable for RUs
  - It would be impossible for fleet owners to follow the constant changes made on the specification.

**No reasonable financial possibility to upgrade locomotives**

# No Centralized Steering for Migration So Far

- **What migration? Per corridor or per network?**
- **Too different migrations** between MS
  - Different dates, different versions, different national technical requirements (NTR)
  - Some legacy systems may be withdrawn in the short term, some may not
  - There is often a need to maintain expensive STM/NTC
- **Too quick migrations**
  - RUs have not enough time to have their fleet retrofitted
  - Capacity problems within suppliers workshops
- **Too expensive migrations**
  - ETCS equipment is mandatory on new locomotives (OK)
  - But *de facto* needed on current fleet (not OK if not funded!)
- **Who cares?**
  - Currently **no sufficient** global **master planning**
  - MS decide of the dates and ignore these problems
  - RFCs fail to steer migration throughout the routes
  - IMs introduce national technical rules (NTR) notwithstanding interoperability needs

**Who is in charge?**

- ❖ RU's Needs
- ❖ ERTMS: 4 Big Issues for RUs
- ❖ **RUs Demands**

# ETCS Implementation Needs 4 Vital Conditions

## 1. We demand a serious funding scheme for retrofitting for RUs

- MS and European funding must be more significant (i.e. 50% → 100% studies & implementation)
- EU funding is preferred for more flexible use of the locomotives
- IMs productivity gain (trackside signals) must have direct impact for RUs
- External funding (from road sector) would help modal shift

## 2. We strongly support a guarantee of compatibility between on-board and trackside

- On-board specifications must be compatible with trackside specifications
- Ensuring downward compatibility of baselines and forward- & downward compatibility of versions across Europe

## 3. We strongly support Baseline 3 freeze and a minimum 10 years duration of stability for operation

- To avoid costly modifications
- To develop simplified authorization process
- To enable the different ETCS versions currently used in cross-border traffic to be harmonised
- To enable manufacturers to industrialize their solutions and share benefits with stakeholders
- To get rid of national technical requirements (NTR)

→ On 10/2, the RISC voted positively the **CCS TSI revision**: An **updated ERTMS specification** is now defined called **Baseline 3 release 2** (or v3.5.0). The version is foreseen to **freeze** and be the reference for a **long period** of stability for the specification, although the **duration** for the stability period is **not reported** in the Recommendation N. ERA-REC-123-2015/REC of the European Railway Agency.

## 4. We demand a strong centralized steering by EC and ERA

- EU should ensure a coordinated European deployment
- Temporary class B overlay solutions are needed, especially on border sections

**If freight trains are to continue to circulate in Europe, RUs voice must be more listened to!**  
**“Users first approach” must come to a reality**