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ERA and Shift^{2}Rail
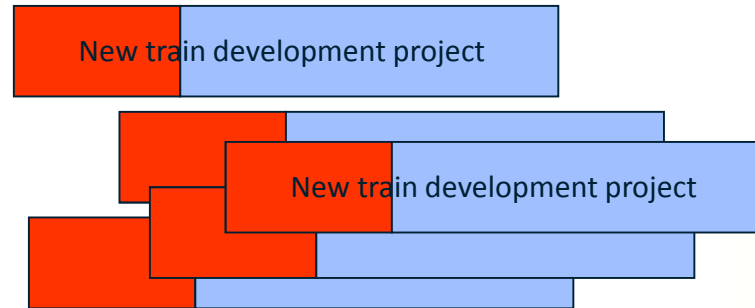
Lighthouse Projects Kick-Off
Brussels, 07.05.2015
Josef DOPPELBAUER
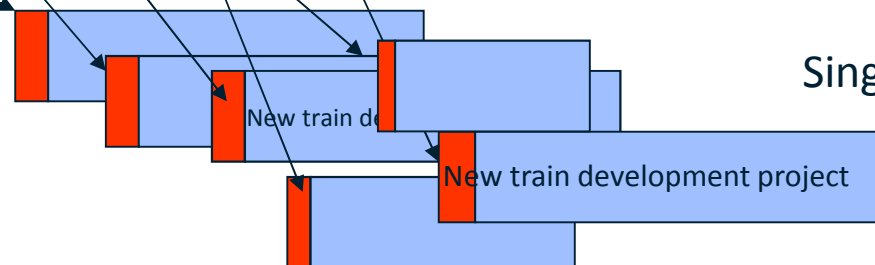
Cooperation in the European Railway Sector - the Vision

From

Development
3 years
100 MEUR cost

Delivery 5 years
1 bEUR revenue

New train development project

New train development project

Fragmented national markets

To

SHIFT²RAIL

Lighthouse Projects -> SHIFT2RAIL (and successor programmes)

New train d...

New train development project

Single European Railway Area

Lower costs, better quality for customers, better margins for suppliers

› *1 (b) to contribute to the achievement of a **Single European Railway Area**…………*

› *2*

› *(d) The removal of **technical obstacles**….., in particular by endeavouring to **close points which remain open in TSIs** due to lack of technological solutions and by ensuring that all systems and solutions developed by the JTI are fully interoperable;*

› ERA and Shift²Rail are in essence partners supporting the technical pillar of the Single European Railway Area!!!

- ERA has Observer Status
    - On the Governing Board
    - On Working Parties

- *"Shift²rail shall…………. bring in the experience and expertise of the ERA on issues relating to interoperability and safety"*

ERA shall contribute to the definition and implementation of the Master Plan in particular by performing the following advisory tasks

Proposing **amendments to the Master Plan and Work Program** to ensure research needs relating to the Single European Railway Area are covered

Proposing after consultation with the stakeholders **technical standards for research, development and validation activities** with a view to guaranteeing interoperability and safety of the results

Reviewing the common developments for the future system and **contributing to defining target systems** in regulatory requirements

Reviewing project activities and results with a view to **ascertaining their relevance to the objectives** identified in Article 2 and to **guaranteeing the interoperability and safety of research results**

ERA is a unique source of **independent advice** for the Commission in that it that combines **technical competence** (as "System Authority") with comprehensive **understanding the framework** of the Single European Railway Area

- Low knowledge of the framework in the research community is a threat to market uptake (e.g. after 19 years of Interoperability Directives many contributions still talk about concepts such as "homologation" and "railways"). Shift²Rail research work needs support to make sure the outputs
  - fit the framework
  - are interoperable and consistent with safety regulation
- ERA has the ability to take the overview and help establish
  - Proposals/projects that are re-cycling and/or duplicating earlier work
  - Proposals that will "make the most difference"

The TSIs define the common specifications for the "target (shared) system". As Shift²Rail develops new technology the TSIs will need to evolve (TSIs already have provisions for innovative solutions)

- Research must take account of the need for assessment methods for new solutions, because to be useable a project/product need to be certifiable/authorisable - bad example: composite brake blocks 10 years from production to certification.
- In order to close TSI open points researchers need to fully understand the issues
- To enable ERA to quickly assimilate new technology into the TSIs a common approach is needed to ensure it can be evaluated to be "the most viable solution"

As partners in the technical pillar of the Single European Railway Area, ERA and Shift²Rail need to work closely in parallel each sharing with the other their knowledge and progress on common issues

Roll^{2}Rail, In^{2}Rail, IT^{2}Rail, Smart Rail: introductory projects to the Techncial Demonstrators (TDs)

Each WP of any of these Lighthouse projects corresponds to a TD in the Scoping Paper/MasterPlan

The Lighthouse projects therefore should be under same governance as Shift^{2}Rail

ERA has commented on these projects during the MasterPlan review, and then during the FMs Scoping Paper review

Making the railway system work better for society.

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