FOSTER-RAIL Project:

Cooperation, Communication and Coordination with other European Technology Platforms and National Technology Platforms

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The European Rail
Research Advisory
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FOSTER RAIL

Supporting the work of the ERRAC

The **mission** of ERRAC is to:

- Promote the development of sustainable rail transport solutions *in connection with other modes of transport* where appropriate for the growing demand for transport in the European Union

- Develop and establish a common strategy which will influence all European stakeholders in the planning of research, *including national and EU programmes*

- Strengthen the competitive leadership of the European rail sector in order to optimise the rail research potential within the Union, materialising the concept of a "European Research Area" in this sector.

  - by building consensus and improving synergy between *EU, national and private rail research*

  - by supporting the implementation of the strategy through communication with the relevant political bodies, fostering joint research initiatives and common projects amongst stakeholders

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FOSTER RAIL missions:

- Strengthening the innovation and research strategies of the transport sector with emphasis in rail in line with the 2011 White Paper

- Integrating the work done so far by ERRAC and continuing to enhance the cooperation between stakeholders and now further exploit cooperation with other transport sectors

- Strengthening the effectiveness of rail research and innovation capacities of the rail transport industries in Europe while adopting also a multimodal perspective

- Promoting rail development through constant efforts towards innovation

WP1	**Cooperation, Communication and Coordination with other ETPs and national technology platforms**
WP2	**Regional and Suburban (Passenger) Rail Market Study and Rail Business Scenarios**
WP3	**Strategic Rail Research and Innovation Agenda (SRRIA)**
WP4	**Technology Roadmaps, Exploitation & Implementation**
WP5	**Fostering innovation and partnerships: ERRAC and SHIFT²RAIL**
WP6	**Monitoring to improve rail research innovation**
WP7	**Dissemination**
WP8	**Administrative, financial and technical management and coordination**

WP1 focuses on 2 specific issues:

1. The cooperation between the transport-related European Technology Platforms (ETP's) :

    • Clustering multi-modal research and innovation issues between ETPs, identifying R&D topics of common interest and related experts within the modes

2. Developing links and coordination strategies between ERRAC, EU and National Technology Platforms (NTPs):

    • analysis and recommendations for closer cooperation

Another task was to offer the logistics and administrative support of ERRAC for organizing the TRA2016 and to support the FOSTER RAIL dissemination to major events

The cooperation between the transport-related European Technology Platforms (ETP's) :

1. The cooperation between the 3 FOSTER Projects (CSAs): FOSTER RAIL, FOSTER ROAD and MESA FOSTER WATERBORNE

2. Representing the main land transport ETPs: ERRAC, ERTRAC, WATERBORNE

3. With inputs from: ALICE (logistics) and ACARE (air sector)

One common document (FOSTER RAIL D1.1 *Clustering multi-modal research and innovation issues with other ETPs*) produced by the 3 ETPs, outlining a high-level image of the results of the cooperation between these ETP representatives.

Overview of major achievements:

- A joint ERRAC, ERTRAC, WATERBORNE, ACARE and ECTP "Roadmap for cross-modal transport infrastructure innovation – Towards a performing infrastructure" (June 2013)

- Organisation of a number of joint ETP meetings and conference calls involving ERRAC, ERTRAC, WATERBORNE, ALICE and ACARE – ongoing process

- Several meetings in 2013-2014 of a joint Urban Mobility WG (ERRAC-ERTRAC-ALICE) and its common Task Force on Urban Logistics

- A workshop on Long Distance Freight (ERRAC-ERTRAC-ALICE) focussing on:
    - "European E-freight Capabilities for Co-modal Transport"
    - "Rail freight, Green Corridors and Cross Modal research topics"
    - "Building sustainable transport corridors, beyond existing paradigms"

- Cross-ETP contact persons has been set up to cooperate on the identified issues

- Initiation of cross-ETPs knowledge exchange about evaluation of past European Research projects, with a view to determine the level of market uptake of past research outcomes

Overview of major achievements:

- The successful cooperation between these ETPs is translated into the creation of the SETRIS (Strengthening European Transport Research and Innovation Strategies) project (H2020)
    - First project to reunite all major ETPs (ERRAC, ERTRAC, WATERBORNE, ALICE, ACARE) in one action
    - Aims at brining together all actors to look into the transport (R&I) needs based on the existing and future challenges, but from a systemic point of view
    - Will continue the work of FOSTER RAIL on the roadmaps, by refining and updating them
    - But <u>for cross-modal activities only</u>
- Other points touched upon:
    - Looking into creating links between ETPs and NTPs
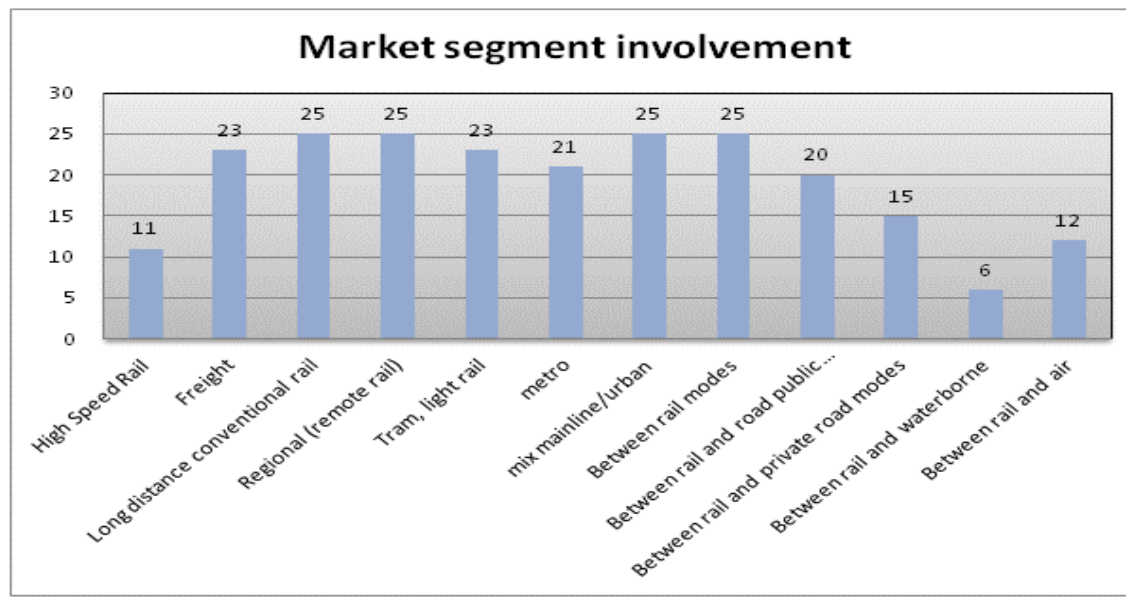   - (re-)establishing the link with TRIP (the Transport Research and Innovation Portal)

Redefine the relationship between ERRAC and information/dissemination platforms: TRIP, SPARK, ERA-NET.

Relations between ERRAC and the NTPs: 8 NTPs found and contacts established: Austria, *Czech Republic*, Lithuania, Netherlands, Poland, Slovakia, *Spain* and United Kingdom

- Communication between ERRAC and NTPs, information gathered with the help of a complex questionnaire
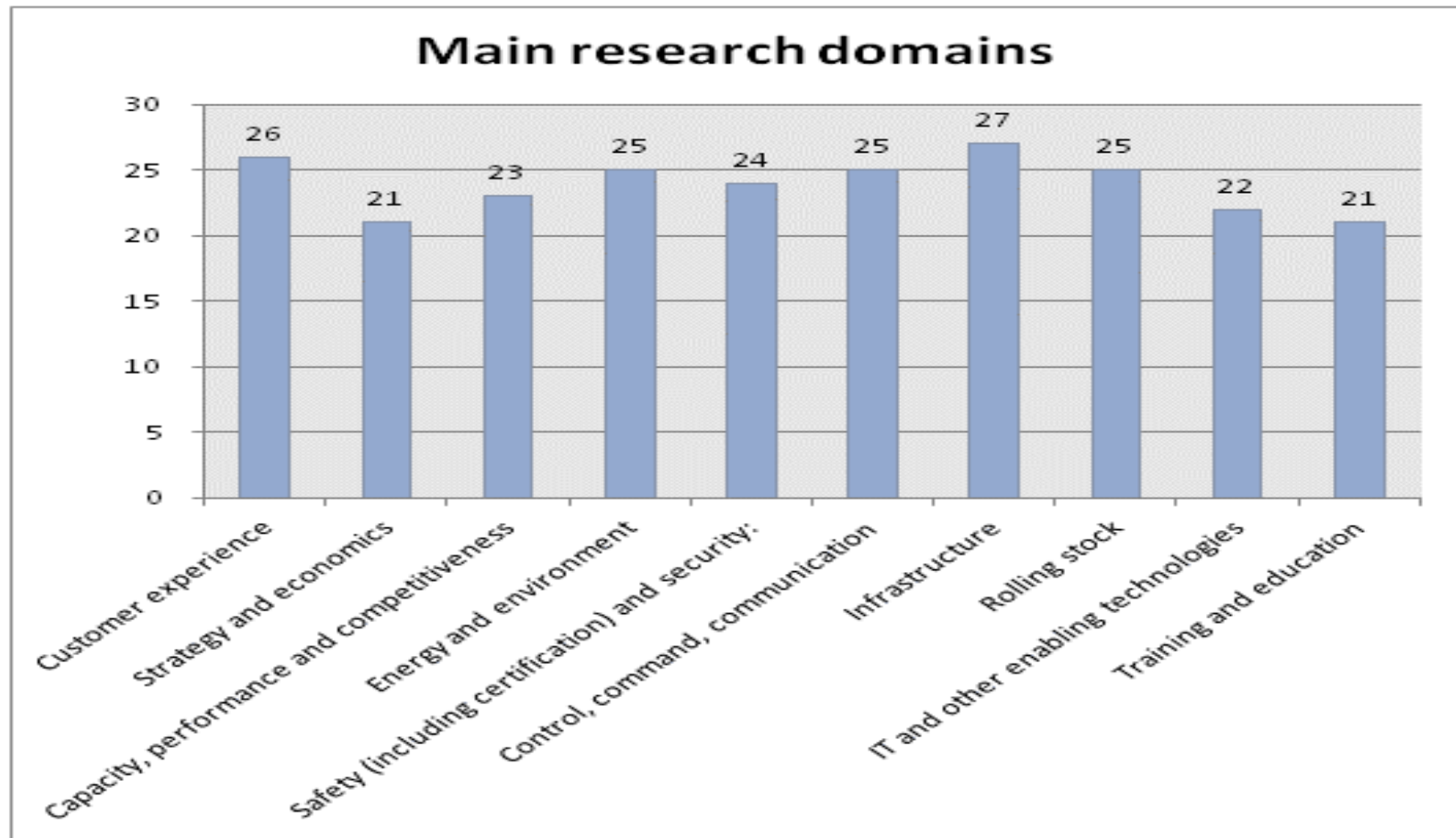
Results of ERRAC research on NTPs (questionnaire) – rankings between "0" and "4":

- Market (segment) involvement of the NTPs:

- NTPs' R&I activities and interests:

Main research domains

Domain	Value
Customer experience	26
Strategy and economics	21
Capacity, performance and competitiveness	23
Energy and environment	25
Safety (including certification) and security	24
Control, command, communication	25
Infrastructure	27
Rolling stock	25
IT and other enabling technologies	22
Training and education	21

- NTPs' interests in and potential for cooperation with ERRAC based on the SRRIA main topics:

Focus area 1 - Attractiveness of rail and public transport:
Customer experience: **6/7**
Strategy and economics: **6/7**

Focus area 2 - A whole system approach:
Capacity, performance and competitiveness: **7/7**
Energy and environment: **7/7**
Safety (including certification) and security: **5/7**

Focus area 3 - Assets:
Control, command, communication: **6/7**
Infrastructure: **7/7**
Rolling stock: **7/7**
IT and other enabling technologies: **6/7**
Training and education: **7/7**

- To the question of which domains are of interest for a future cooperation with EU and/or ERRAC – based on ERRAC top-level priorities – the aggregated answers have been

The four "top-level" ERRAC priorities ▼	Level of interest ▼
Attractiveness for passengers and goods	3,8
Competitiveness	3,7
Environmental impact	3,7
Resilience of the railway sector	3,5

- To the question of which domains are of interest for a future cooperation with EU and/or ERRAC – based on ERRAC major transversal issues – the aggregated answers have been the following ones (on a scale from "0" – no interest - to "4" – very high interest):

ERRAC major transversal issues	Level of interest
Automation in rail : operation and maintenance, new services per market segment	3,5
Digitalisation of rail services, operation and maintenance, training, management of obsolescence, resilience of rail services	3,5
Boosting innovation in rail: Time to market	3,2

Developing links and coordination strategies between ERRAC, EU and National Technology Platforms (NTPs)

- NTPs' expectation for cooperation with ERRAC and the EU:

Would your organisation be interested in participating in the following ERRAC activities on a voluntary basis?	Yes	No
Cooperation, Communication and Coordination with other ETPs and national technology platforms	7	0
Strategic Rail Research and Innovation Agenda	5	1
Technology Roadmaps, Exploitation & Implementation	5	1
Interaction between ERRAC and SHIFT²RAIL	5	1
Monitoring to improve rail research innovation	4	3
Dissemination	6	1

- NTPs' interest in Shift2Rail:

IP1: Energy and mass efficient technologies for high capacity trains - **5/7**
IP2: Advanced traffic management and control systems - **5/7**
IP3: Cost efficient high capacity infrastructure - **7/7**
IP4: Seamless attractive railway transport system - **4/7**
IP5: Sustainable and attractive European freight Transport - **4/7**

ERRAC's positioning towards the EC and Shift2Rail:

- will remain the rail sector-led stakeholder and considered the key actor in driving innovation and European competitiveness
- will continue producing strategic documents (such as research and innovation agendas and roadmaps) aiming at the identification of technologies and innovations appropriate to railways
- will take into consideration the rail challenges and demonstrate how railway transport can contribute in a positive and efficient manner to others global challenges (e.g. society, environment, decarbonisation).
- will not seek and/or create a large funded process, nor seek special funds from railways, but will rely on the support and goodwill of the Sector, with only those who are supported by their organisations activity engaged
- Will ensure thecathedral vision of railways – the big picture, the video of rail's contribution to Europe in 2030-50, especially for focused themes like:
    - The European Digital railway, a common vision and message
    - Climate Change – rail's solution to COP21 targets
    - Successful urban economic growth
    - Maximising the use of available system capacity

Thank you for your attention !

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