Stakeholders' consultation on a proposal for an EU coordinated approach to R&I in the rail sector under Horizon 2020 in support to the completion of the Single European Railway Area

This consultation asks for your informed opinions and suggestions to help improving the effectiveness of the EU research and innovation (R&I) actions related to rail under Horizon 2020. The objective is to assess if the problems identified by the Commission are accurate and to what extent stakeholders opinions are in line with and support the objectives and policy measures envisaged.
We invite you to read the background document, which explains the context of the consultation, before answering the questionnaire.
The questionnaire is structured as follows:

1. Respondent's profile
2. Problems to be addressed
3. Identification of policy objectives
4. Policy options and their impacts
5. Other

The results of this consultation will feed into the Commission impact assessment which will accompany the proposal on an EU coordinated approach.

Questions marked with an asterisk * require an answer to be given.

1. Respondent's profile

Please provide information to help us build your profile as a respondent. In accordance with Regulation 45/2001, all personal data collected through this survey will be kept securely and will ultimately be destroyed.

1.1. Are you answering as an individual or on behalf of an organisation or an institution? *

- ○ I am answering as an individual
- ○ I am answering on behalf of an organisation or institutions (business organisation, NGO, public authority, etc.)

1.2. The type of organisation you work for *

- ○ I am self-employed
- ○ I work for a private company
- ○ I work for an SME
- ○ I work in a research organisation/university
- ○ I work for a public authority/public administration
- ○ I work for non-governmental organisation
- ○ I work for an industry association or a chamber of commerce (national/regional/local)
- ○ I work for an EU institution
- ○ I work for an international organisation
- ○ Other (please specify)

1.3. Please specify "Other" *

1.4. Your field of activity *

- Rolling stock manufacturing
- Vehicle component manufacturing
- Construction/building
- Tiered supplier to the rail industry
- Railway undertakings (Freight)
- Railway undertakings (Passengers)
- Infrastructure management
- Intermodal operation
- Logistic operator
- Shipping
- Energy
- ICT
- Consultancy
- Services to the rail sector (e.g. catering, ticketing, cleaning, engineering, maintenance…)
- Other (Please specify)

1.5. Please specify "Other" *

1.6. Are you or have you been involved in any EU co-funded rail research & innovation project(s)?

- Yes
- No

1.7. Please note that as part of the European Transparency Initiative, organisations are invited to use the register of interest representatives to provide the European Commission and the public at large with information about their objectives, funding and structures (**http://europa.eu/transparency-register/index_en.htm**).

Please indicate if your organisation is registered in the Transparency Register of the European Commission. *

- Yes
- No

1.8. Please enter your registration number in the Transparency Register. *

1.9. The type of organisation you represent *

- I represent a public authority/public administration
- I represent a private company (excluding SME)
- I represent a Small or Medium Enterprise (SME)
- I represent an academic/research organisation or association of academic/research organisations
- I represent an industry association or a chamber of commerce (national/regional/local)
- I represent a non-governmental organisation/associations of NGOs
- Other (Please specify)

1.10. Please specify "Other" *

1.11. The field of activity of the organisation you represent *

- Rolling stock manufacturing
- Vehicle component manufacturing
- Construction/building
- Tiered supplier to the rail industry
- Railway undertakings (Freight)
- Railway undertakings (Passengers)
- Infrastructure management
- Intermodal operation
- Logistic operator
- Shipping
- Energy
- ICT
- Consultancy
- Services to the rail sector (e.g. catering, ticketing, cleaning, engineering, maintenance…)
- Other (please specify)

1.12. Please specify "Other" *

1.13. How much does your organisation invest in R&I (% of turnover)?

1.14. Is or has your organisation been involved in any EU co-funded rail R&I project(s)? *

- Yes
- No

1.15. If answering as an individual, please provide your place of residence.

If answering on behalf of a company/organisation/institution, please provide the country of your workplace. *

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovenia
- Spain
- Sweden
- Slovakia
- Switzerland
- United Kingdom
- Other (Please specify)

1.16. Please specify "Other" *

1.17. Name and contact details:

Please note that the questionnaire will be available for your full contribution **only if** your name and contact details are provided. If you choose not to provide your name and contact details, you still have the option of submitting a general comment (up to 2000 characters). However, if you choose to provide us with your name and contact details, you can still opt for your answers to remain anonymous when results are published. *

- Yes, I will provide my name and contact details in the box below
- No, I prefer to provide a general comment only

1.18. Comment / contact details * (maximum 2000 characters)

1.19. Received contributions may be published on the Commission's website, with the identity of the contributor. Do you agree with your contribution being published under your name? *

- My contribution may be published under the name indicated.
- My contribution may be published but should be kept anonymous.
- I do not agree that my contribution be published at all.

2. Problems to be addressed

The aim of this section is to obtain stakeholders' views on the problems currently faced by research and innovation (R&I) in the rail sector.

2.1. The core problems

The initial analysis of the Commission has shown that R&I efforts have not been sufficient to support new technologies oriented towards interoperability, integrating further rail operators, infrastructure, rolling stock, signalling and other subsystems and services of the rail system necessary for completion of the SERA. In addition, a relatively large share of projects has failed to deliver the improvements in capacity, reliability and lifecycle costs needed in the rail sector to improve its competitive position vis-à-vis other transport modes.

2.1.1. To what extent do you agree with the following core problems?

a: Strongly disagree
b: Disagree
c: Neutral
d: Agree
e: Strongly agree
f: No opinion

	a	b	c	d	e	f
2.1.1.1. The current EU rail R&I efforts are not sufficiently focused to achieve interoperability of equipment, systems and services *	○	○	○	○	○	○
2.1.1.2. The level of standardisation within the Single European Railway Area is too low *	○	○	○	○	○	○
2.1.1.3. The current EU rail R&I efforts are not sufficiently focused on the market take up of innovative solutions *	○	○	○	○	○	○

2.1.2. Would you like to identify any other core problems hindering the effectiveness of EU R&I in the rail sector?
(maximum 2000 characters)

2.2. Priority areas

Analysis recently undertaken by the EC, as well as contacts with a wide range of stakeholders, have shown that focusing R&I work in the areas listed below could yield most benefit for the sector and are best coordinated at EU level:

- Rolling stock:
  - New generation of light, energy-efficient and cost-efficient high-capacity rolling-stock, generating increased revenue potential for operators, including new approaches to vehicle body, traction, on-board management and control and passenger environment;
  - The design, production processes and certification methods and tools required to industrialise these new vehicle concepts (including streamlining railway products to avoid excessive customisation).
- Infrastructure: new infrastructure concepts, including smart interoperable infrastructure systems and

components - e.g. for purposes of infrastructure condition monitoring and predictive maintenance.

- Intelligent traffic management and control systems building on and compatible with the current European Rail Traffic Management System (ERTMS), to support its deployment along freight corridors, high-speed lines and outside Europe.
- Customer Experience Support Systems, including pan-European passenger information systems, ticketing and cargo tracking and tracing.
- Innovative supply-chain concepts supporting access of new supply partners to the rail sector.
- Talent Management Systems, for the development of skills and on-the-job training to support the deployment of the abovementioned innovations.

2.2.1. In your view, how relevant is it to coordinate and focus European R&I activities in each of these areas to achieve the objective of an integrated and interoperable EU railway system?
Rate the areas from 1-5 where 1 is not relevant at all and 5 is very relevant.

a: 1
b: 2
c: 3
d: 4
e: 5

	a	b	c	d	e
2.2.1.1. Rolling stock *	○	○	○	○	○
2.2.1.2. Infrastructure *	○	○	○	○	○
2.2.1.3. Intelligent traffic management and control systems *	○	○	○	○	○
2.2.1.4. Customer Experience support Systems *	○	○	○	○	○
2.2.1.5. Innovative supply-chain concepts *	○	○	○	○	○
2.2.1.6. Talent Management Systems *	○	○	○	○	○

2.2.2. Would you like to identify any other broad policy domains for targeted EU R&I ? (maximum 2000 characters)

2.3. Problems drivers

Three major drivers have been identified contributing to the above-mentioned core problems in rail R&I:

- Fragmentation of efforts at different levels
- High risks and low leverage of R&I investments
- Uncoordinated and non-representative participation of the different players in the rail value chain

2.3.1. Fragmentation

Background studies have shown that R&I in the rail sector is currently carried out in a fragmented manner with fragmentation lines following:

- Types of equipment or specificities of customer demands: products in the railway world are mainly driven by customer/operator demands. Rail industry innovation is mostly “project oriented” and characterised by the serviceability (as opposed the marketability) of a small series of vehicles, designed to meet the inherent constraints of unique infrastructure, electrification or control-command systems and compliance with the specific needs of clients as expressed in their call for tenders.
- National "railway ecosystems": the level of standardisation is relatively low as historically railways in Europe developed within national borders. The European rail supply industry consequently needs to cope with both national rules and procedures when it comes to manufacturing and, later on, selling rail products in various EU countries. This does not conform with common visions of the future, notably in aspects with a transnational dimension – such as networks, interoperability of services and solutions. This diversity of visions leads to a range of distinct, highly specific and expensive technology development programmes.
- The innovation life cycle: there is a gap between pre-competitive research and market uptake. The market uptake of rail innovations by the sector is very low, particularly in the freight sector where margins are very narrow. Overall only 25% of the rail research projects under FP6 and FP7 show a strong market uptake, whereas roughly half are qualified as having weak market uptake.

This leads to a situation in which:

- the absence of a critical mass in resources restricts ambitions and necessary breakthroughs;
- the rail market fails to attract more advanced, customer-focused industrial sectors as potential providers of ideas and solutions;
- when particular innovation actions are devised, the difficulties of generating equitable returns to all the players in the rail value chain hinder market deployment;
- risk sharing levels are low when developing new technologies, products and services supporting internal market goals and the European transport industry in maintaining its world leadership.

All these elements prevent R&I in rail to fully contribute to interoperability of networks, products and services that can support the sector's competitiveness in the longer term.

2.3.1.1. To what extent do you agree with the following aspects of fragmentation?

Rail R&I efforts within the EU are fragmented...

a: Strongly disagree

b: Disagree

c: Neutral

d: Agree

e: Strongly agree

f: No opinion

	a	b	c	d	e	f
2.3.1.1.1. In terms of their scope (i.e. aimed at answering clients specific needs)* *	○	○	○	○	○	○
2.3.1.1.2. In terms of their objectives (i.e. aimed at fitting in different "ecosystems") *	○	○	○	○	○	○
2.3.1.1.3. In terms of the innovation life cycle (not all R&I stages are adequately supported and/or connected) *	○	○	○	○	○	○

2.3.1.2. Which specific stages of the rail innovation life cycle should be more stimulated?

a: Strongly disagree
b: Disagree
c: Neutral
d: Agree
e: Strongly agree
f: No opinion

	a	b	c	d	e	f
2.3.1.2.1. Basic research *	○	○	○	○	○	○
2.3.1.2.2. Feasibility evaluation *	○	○	○	○	○	○
2.3.1.2.3. Development activities *	○	○	○	○	○	○
2.3.1.2.4. Prototyping *	○	○	○	○	○	○
2.3.1.2.5. Large scale demonstrations *	○	○	○	○	○	○

2.3.1.3. Would you like to identify any other aspects of fragmentation? (maximum 2000 characters)

2.3.2. Risks and leverage

The rail sector has specific financial and technical characteristics which limit innovation and impact negatively rail research.

Costs for R&I in rail are high and immediate rewards often uncertain. These costs and associated risks can be seen as disproportionate to players across the whole of the rail sector used to run product or service businesses under remarkably low operational margins. At the same time, prices for rail products remain under competitive pressure while simultaneously the complexity of these products has increased significantly. The rail manufacturing industry rarely generates sufficient operational margins to finance speculative technology-oriented research, or even to allow the renewal of its product range in the short term. This prevents the launch of major private research activities.

Another aspect is that rail transport has to face a situation in which equipment is generally ordered in relatively small series with a high-level of product customisation, again restricting return on investments and preventing economies of scale. The diversity of national requirements also adds considerable costs and delay due to the acceptance and approval processes.

Lastly, rail products often have extremely long renewal cycles. A forty-year old electric locomotive is still a modern traction tool and will be subject to intensive use for years to come. This contrasts with the other transport modes, automotive in particular with its typical seven year product life, and inhibits the rapid migration to more innovative rail technologies. This long life cycle tends to hamper innovation.

These factors make public funding of R&I in rail all the more important. However, the current budget available for EU rail R&I is limited, so to adequately respond to the challenges and opportunities facing the sector, its potential to foster step-changes at European level has to be maximised. The lack of long term earmarked funding sources affects negatively the commitment of public and private investors in R&I innovation.

2.3.2.1. The most important barrier to private investment in R&I activities in rail are

a: Strongly disagree
b: Disagree
c: Neutral
d: Agree
e: Strongly agree
f: No opinion

	a	b	c	d	e	f
2.3.2.1.1. Low operational margins and limited return on investment *	○	○	○	○	○	○
2.3.2.1.2. Limited economies of scale *	○	○	○	○	○	○
2.3.2.1.3. Long renewal cycles *	○	○	○	○	○	○

2.3.2.2. The leverage of EU funding in rail R&I activities is relatively low due to the following reasons:

a: Strongly disagree
b: Disagree
c: Neutral
d: Agree
e: Strongly agree
f: No opinion

	a	b	c	d	e	f
2.3.2.2.1. Innovation creates positive externalities to society but its benefits cannot be fully accrued by the investors *	○	○	○	○	○	○
2.3.2.2.2. Due to disparity in standards, innovations lack economies of scale to cover the initial costs of R&I investments *	○	○	○	○	○	○
2.3.2.2.3. The current set-up of EU rail R&I does not adequately allow for participation of the relevant stakeholders *	○	○	○	○	○	○

2.3.2.3. Would you like to identify any other aspects explaining the relatively low leverage of EU funds?
(maximum 2000 characters)

2.3.2.4. What are in your opinion the main risks when investing in rail R&I in Europe? (maximum 2000 characters)

2.3.3. Participation

Although EU-funded collaborative research projects have achieved significant results, the rail sector currently misses an optimal structure or the appropriate instruments to launch the major industry wide research programmes. Limitations were seen in the traditional approach of carrying-out R&I in conjunction with other actors and the research community. These limitations include:

- Short term industrial vision and annual calls for proposal in the Commission's research programme.
- Research projects are managed in an uncoordinated manner, which hampers technology validation in important demonstrators, where industry creates the necessary critical mass to provide a tangible contribution to the market;
- Rather than adopting a holistic approach to railway systems there is a tendency to involve many partners which can result in excessive fragmentation within the small or medium sized R&I projects funded by the EU.
- The entire industrial supply chain is not optimally positioned. The participation of innovative SMEs in the current research collaboration projects is limited amongst others by the absence of assurance about the programme completion and implementation of the results and by the long time to market. In addition, research labs and universities lack focus on the application of new technologies into products fostering innovation.
- Another characteristic of the sector is the strong and complex interaction between all parts of the rail system (infrastructure, control-command, electrification, vehicles). In absence of any coordination of stakeholders' participation, this makes it difficult, even for a major supplier, to raise the performance bar and propose breakthrough innovations which can really impact on the efficiency and competitiveness of the whole system.

2.3.3.1. To what extent do you agree that the following issues hinder effective R&I partnerships?

a: Strongly disagree
b: Disagree
c: Neutral
d: Agree
e: Strongly agree
f: No opinion

	a	b	c	d	e	f
2.3.3.1.1. Participation in EU rail R&I activities is not representative of the entire rail value chain *	○	○	○	○	○	○
2.3.3.1.2. Participation in EU R&I activities is not adequately coordinated *	○	○	○	○	○	○
2.3.3.1.3. Not all stakeholders are adequately committed to the EU R&I activities they participate in *	○	○	○	○	○	○
2.3.3.1.4. Financial and participation rules of Horizon 2020 framework as proposed by the EC restrict effective R&I *	○	○	○	○	○	○

2.3.3.2. Would you like to identify any other aspects of inefficiency in EU partnerships in rail R&I?
(maximum 2000 characters)

2.3.3.3. In your opinion, which actors are not sufficiently involved in EU funded rail R&I? *

- [ ] Rolling stock manufacturers
- [ ] Vehicle component manufacturers
- [ ] Railway undertakings (Freight)
- [ ] Railway undertakings (Passenger)
- [ ] Railway undertakings (Private)
- [ ] Railway undertakings (State owned)
- [ ] Infrastructure Managers
- [ ] Construction/building companies
- [ ] Infrastructure management companies
- [ ] Intermodal operators
- [ ] Logistic operators
- [ ] Shippers
- [ ] Energy suppliers
- [ ] ICT-companies
- [ ] Service providers to the rail industry (catering, etc.)
- [ ] Academic /research institutions
- [ ] Public authorities / public administration
- [ ] Industry associations/chamber of commerce (national/regional/local)
- [ ] NGOs/Users representations
- [ ] Other (Please specify)

2.3.3.4. Please specify "Other" *

2.3.4. Other problem drivers

The questions above have aimed to cover the main drivers and underlying root causes of ineffective R&I in rail.

2.3.4.1. Would you like to highlight any other drivers or root causes which have hindered the effectiveness of EU rail R&I? (maximum 2000 characters)

2.4. Other aspects

2.4.1. Would you like to highlight any specific problem(s) and/or idea(s) relevant to SME participation in EU rail R&I ? (maximum 2000 characters)

2.4.2. Would you like to highlight any specific problems and/or ideas relevant to the participation of new entrants in EU rail R&I ? (maximum 2000 characters)

3. Identification of policy objectives

Based on the consultation of Member States, as mentioned above, the Commission has drafted a number of preliminary objectives for enhancing the performance of R&I in the rail sector. In this section, the Commission seeks to identify the degree to which stakeholders agree with these objectives and to suggest other objectives that may be taken into consideration in the legislative review.

3.1. What do you see as the most important objectives for coordination of EU rail R&I?

Rate the objectives from 1-5 where 1 is of very low importance and 5 is of highest importance

a: 1

b: 2

c: 3

d: 4

e: 5

f: no opinion

	a	b	c	d	e	f
3.1.1. Improve interoperability of systems and services *						
3.1.2. Promote standardisation *						
3.1.3. Ensure continuity and long-term vision for investment for EU rail R&I *						
3.1.4. Ensure synchronicity of complementary innovations in different parts of the rail value chain *						
3.1.5. Maximise return on investment *						
3.1.6. Optimise coordination and establish sustained networks of innovation *						
3.1.7. Ensure equal access to participation to all stakeholders in particular to SMEs *						
3.1.8. Ensure equal access to participation to all stakeholders in particular to new entrants *						
3.1.9. Ensure equal access to participation to all stakeholders in particular to other actors (Please specify) *						
3.1.10. Mitigate risks linked to innovation *						
3.1.11. Accelerate market take up of innovation *						

3.2. Please specify "Other actors" (maximum 2000 characters)

3.3. Would you like identify any other policy objectives? (maximum 2000 characters)

3.4. As explained above, one key element of EU rail R&I effort is to support the completion of the SERA.
Which objectives of the SERA do you think rail R&I can support best?
Rate the objectives from 1-5 where 1 is of very low importance and 5 is of highest importance.

a: 1
b: 2
c: 3
d: 4
e: 5
f: no opinion

	a	b	c	d	e	f
3.4.1. Removal of administrative obstacles *	○	○	○	○	○	○
3.4.2. Removal of technical obstacles *	○	○	○	○	○	○
3.4.3. Removal of regulatory obstacles	○	○	○	○	○	○
3.4.4. Market opening (freight and passenger, domestic and international) *	○	○	○	○	○	○
3.4.5. Creation of international railway corridors (in particular Rail Freight Corridors) to facilitate cross-border traffic *	○	○	○	○	○	○
3.4.6. Implementation of the TEN-T network, improving and harmonising standards of the rail network across Europe *	○	○	○	○	○	○
3.4.7. Simplification of vehicle authorisation processes *	○	○	○	○	○	○
3.4.8. Harmonisation of safety certification processes *	○	○	○	○	○	○

3.5. Would you like to identify any other aspects of the relation between EU rail R&I effort and the completion of the SERA? (maximum 2000 characters)

4. Policy options and their impacts

In this section, you are invited to indicate which policy options offer the greatest potential to reach the objectives specified in the "Identification of policy objectives" section.

4.1. Institutional options

4.1.1. In your opinion, what means should be put in place at EU level?
Rate from 1 to 5, where 1 is the least effective and 5 is the most effective.

a: 1

b: 2

c: 3

d: 4

e: 5

f: no opinion

	a	b	c	d	e	f
4.1.1.1. **Option 1. Horizon 2020 collaborative research projects** All EU R&I actions are carried out through collaborative research under Horizon 2020. They are managed by the European Commission or an Executive Agency.*						
4.1.1.2. **Option 2. Contractual Public-Private Partnership** (cPPP) between the Commission and the industry. A cPPP establishes an agreement between the private partners (the industry) and the Commission allowing a fast start-up of activities and rapid implementation of programmes relevant to the needs of a specific industry*						
4.1.1.3. **Option 3. A Joint Undertaking** (JU) on the basis of Article 187 TFEU. A Joint Undertaking (JU) is an EU body with public and private membership, firmly anchored in a field of major European public and industrial interest, with large scale and long term goals. It is an independent entity with an earmarked budget and a dedicated staff.*						
4.1.1.4. **Option 4. ERA in lead** – The integration of EU coordination and concentration of R&I in the rail sector in the European Railway Agency (ERA). Under this policy option, ERA would be tasked to elaborate the work programme within each of the key areas identified above under the supervision of its Administrative Board.*						

4.1.2. Would you like to identify any other means that could be put in place at EU level to coordinate R&I efforts in rail? (maximum 2000 characters)

4.1.3. Please identify how effective **Option 1 – Horizon 2020 collaborative research** would be in achieving the following objectives.
Rate from 1 to 5, where 1 is the least effective and 5 is the most effective.

a: 1
b: 2
c: 3
d: 4
e: 5
f: no opinion

	a	b	c	d	e	f
4.1.3.1. Improve interoperability of systems and services *	○	○	○	○	○	○
4.1.3.2. Promote standardisation *	○	○	○	○	○	○
4.1.3.3. Ensure continuity and long-term vision for investment for EU rail R&I *	○	○	○	○	○	○
4.1.3.4. Ensure synchronicity of complementary innovations in different parts of the rail value chain *	○	○	○	○	○	○
4.1.3.5. Maximise return on investment *	○	○	○	○	○	○
4.1.3.6. Optimise coordination and establish sustained networks of innovation *	○	○	○	○	○	○
4.1.3.7. Allow equal access for all stakeholders to participate in EU rail R&I activities *	○	○	○	○	○	○
4.1.3.8. Mitigate risks linked to innovation *	○	○	○	○	○	○
4.1.3.9. Accelerate market take up of innovation *	○	○	○	○	○	○

4.1.4. Please identify how effective **Option 2 – contractual Public-Private Partnership** would be in achieving the following objectives.
Rate from 1 and 5, where 1 is the least effective and 5 is the most effective.

a: 1
b: 2
c: 3
d: 4
e: 5
f: no opinion

	a	b	c	d	e	f
4.1.4.1. Improve interoperability of systems and services *						
4.1.4.2. Promote standardisation *						
4.1.4.3. Ensure continuity and long-term vision for investment for EU rail R&I *						
4.1.4.4. Ensure synchronicity of complementary innovations in different parts of the rail value chain *						
4.1.4.5. Maximise return on investment *						
4.1.4.6. Optimise coordination and establish sustained networks of innovation *						
4.1.4.7. Allow equal access for all stakeholders to participate in EU rail R&I activities *						
4.1.4.8. Mitigate risks linked to innovation *						
4.1.4.9. Accelerate market take up of innovation *						

4.1.5. Please identify how effective **Option 3 – A Joint Undertaking** would be in achieving the following objectives.
Rate from 1 and 5, where 1 is the least effective and 5 is the most effective.

a: 1
b: 2
c: 3
d: 4
e: 5
f: no opinion

	a	b	c	d	e	f
4.1.5.1. Improve interoperability of systems and services *						
4.1.5.2. Promote standardisation *						
4.1.5.3. Ensure continuity and long-term vision for investment for EU rail R&I *						
4.1.5.4. Ensure synchronicity of complementary innovations in different parts of the rail value chain *						
4.1.5.5. Maximise return on investment *						
4.1.5.6. Optimise coordination and establish sustained networks of innovation *						
4.1.5.7. Allow equal access for all stakeholders to participate in EU rail R&I activities *						
4.1.5.8. Mitigate risks linked to innovation *						
4.1.5.9. Accelerate market take up of innovation *						

4.1.6. Please identify how effective **Option 4 – ERA** in lead would be in achieving the following objectives.
Rate from 1 and 5, where 1 is the least effective and 5 is the most effective.

a: 1
b: 2
c: 3
d: 4
e: 5
f: no opinion

	a	b	c	d	e	f
4.1.6.1. Improve interoperability of systems and services *						
4.1.6.2. Promote standardisation *						
4.1.6.3. Ensure continuity and long-term vision for investment for EU rail R&I *						
4.1.6.4. Ensure synchronicity of complementary innovations in different parts of the rail value chain *						
4.1.6.5. Maximise return on investment *						
4.1.6.6. Optimise coordination and establish sustained networks of innovation *						
4.1.6.7. Allow equal access for all stakeholders to participate in EU rail R&I activities *						
4.1.6.8. Mitigate risks linked to innovation *						
4.1.6.9. Accelerate market take up of innovation *						

4.2. Key aspects of the institutional options

The Commission has identified a number of key aspects on which the institutional options can be differentiated:

- **Governance** - Which stakeholders are deciding and represented at the strategic level?

- **Participation** – Which stakeholders contribute to the research programme at the project level? How is a balanced participation among stakeholders ensured?
- **Institutional form of partnership** – How is the partnership established? What is the legal form of the implementing body? What is the level of commitment of the different partners? Is the partnership open to new participants?
- **Approach to programming** – How are the strategic and operational planning procedures organised? How are research topics prioritised and projects selected?
- **Financial framework/rules** – How is the project financial aspect governed (e.g. timing, duration, level of private stakeholder contribution)?
- **Monitoring and follow-up** – How are the projects and their results followed up? How does this information impact the strategic and operational planning?

4.2.1. To what extent do you think that the following aspects should be improved compared to the current EU rail R&I set-up (i.e. collaborative research under framework programmes).
Rate from 1 and 5, where 1 is the least effective and 5 is the most effective.

a: 1
b: 2
c: 3
d: 4
e: 5
f: no opinion

	a	b	c	d	e	f
4.2.1.1. Governance *	○	○	○	○	○	○
4.2.1.2. Participation *	○	○	○	○	○	○
4.2.1.3. Institutional form of partnership *	○	○	○	○	○	○
4.2.1.4. Approach to programming *	○	○	○	○	○	○
4.2.1.5. Financial framework/rules *	○	○	○	○	○	○
4.2.1.6. Monitoring and follow-up *	○	○	○	○	○	○

4.2.2. Comments (maximum 2000 characters)

5. Other

5.1. Please add here any further comments to this questionnaire. (maximum 2000 characters)

Useful links

Europa page about this Public Consultation:
http://ec.europa.eu/transport/media/consultations/2013-shift2rail_en.htm

Background documents

Background document: http://ec.europa.eu/transport/media/consultations/doc/2013-shift2rail/background.pdf