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Proposal for a

COUNCIL REGULATION

establishing the Shift2Rail Joint Undertaking

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EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

1.1. General context

Ambitious EU goals relating to climate change, energy supply and the environment mean that the railway sector will be required to take on a significant share of the ever-increasing demand for transport in the next decades. In its 2011 White Paper on a Roadmap to a Single European Transport Area¹, the Commission underlines the importance of creating a Single European Railway Area in order to achieve a more competitive and resource-efficient European transport system. Consequently, the Commission has adopted proposals for a 4th Railway Package² which aim to remove remaining administrative, technical and regulatory obstacles holding back the rail sector both in terms of market opening and in terms of interoperability. However, the overarching goal of establishing an internal market for rail and achieving a more efficient and customer-responsive industry will necessarily imply the emergence of innovative approaches throughout the whole of the rail value chain, in business models, services and products, which will, in turn, require a dramatic increase in research and innovation efforts.

One of the main aims of Horizon 2020, the Framework Programme for Research and Innovation covering the period 2014-2020, is to strengthen European industry through actions supporting research and innovation across a range of key industrial sectors. In particular, it provides for the creation of public-private partnerships (PPPs) to support these sectors and help to tackle some of the key challenges Europe is facing. As part of its Innovation Investment Package announced in July 2013³, the Commission has already put forward a number of legislative proposals for PPPs to be established under the Horizon 2020 Framework Programme in the form of joint undertakings with a view to implementing Joint Technology Initiatives in various industrial sectors. This proposal is fully aligned with the approach to the Joint Technology Initiative joint undertakings of the Innovation Investment Package.

1.2. Reasons and objectives for a Joint Undertaking in the field of rail

Revitalising Europe's railways is a key goal of the EU's transport policy to enable rail to compete successfully with other modes of transport. New technologies can do much to help modernise Europe's railways, while also reducing operational and infrastructure costs and creating new business opportunities for the European rail supply industry. In past decades, significant investments in EU rail research and innovation have helped the European rail supply industry to retain a leading position at global level, namely with the development of high-speed trains, ERTMS, automated metro systems, etc. However, a recent Commission study on the competitiveness of the railway supply industry⁴ shows that Asia is steadily overtaking Europe as the largest rail supply market, namely thanks to a surge in research and innovation investments in countries like China and Korea.

At the same time, rail research and innovation suffers from the following important market and systemic failures that justify public intervention:

¹ White Paper on a Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, COM/2011/0144 final

² The Fourth Railway Package – Completing the single European railway area to foster European competitiveness and growth, COM (2013) 25 final

³ COM(2013) 494 final

⁴ EC, Sector Overview and Competitiveness Survey of the Railway Supply Industry, May 2012, p. 100

- High level of product customisation due to the diversity of national standards and operating frameworks;
- Lack of a system-wide approach to innovation due to limited or uncoordinated participation of actors from the full rail value chain and the complexity of interfaces between railway sub-systems;
- Limited private investment in research and innovation and limited market uptake of innovations due to low operational margins and funding gaps in the full innovation cycle;
- Heightened financial risks due to the capital-intensity of investments and long product lifecycles.

Set against these challenges, a coordinated EU approach to research and innovation in the rail sector via the establishment of a joint undertaking is proposed to support the completion of the Single European Railway Area and to increase the competitiveness of the EU rail sector vis-à-vis the other transport modes and vis-à-vis foreign competition.

The general objectives of the proposed joint undertaking on rail are to:

- facilitate joint vision development and strategic agenda setting;
- develop a programming approach in European research and innovation so as to realise a broad-based focus embracing all potential partners;
- build critical mass to ensure the scale and scope required;
- ensure an efficient use of public and private resources.

More specifically, by developing, integrating, demonstrating and validating innovative technologies and solutions for rolling stock, infrastructure and traffic management systems, the joint undertaking will serve to accelerate and facilitate the market uptake of technological breakthroughs that can be measured against the following quantifiable performance indicators, inter alia:

- Life-cycle costs and competitiveness, namely defined as a reduction in the overall costs of rail transport, thereby reducing costs for users and public subsidies for the tax payer.
- Capacity and user demand, namely defined as the frequency of trains/metro/trams per hour available on a specific route, as well as the load factors of passenger and freight travel options;
- Reliability and quality of service, namely defined as the improvement in on-time arrivals, reflecting the need for improved punctuality by rail users but also affecting investment requirements for new fleets as fewer reliable vehicles are needed.

In addition, these breakthroughs will contribute to removing remaining technical obstacles holding back the rail sector in terms of interoperability and efficiency and to reducing negative externalities linked to railway transport.

According to rail industry studies, a coordinated research and innovation effort of EUR 800 million to EUR 1 billion, under the ambit of a well-defined public-private partnership structure, would lead to an overall reduction in life-cycle costs of up to 50%, to an overall increase in capacity of up to 100%, and to an overall increase in reliability of up to 50% in the different rail market segments.

2. RESULTS OF CONSULTATIONS WITH THE INTERESTED PARTIES AND IMPACT ASSESSMENTS

2.1. Consultation of interested parties and use of expertise

Extensive consultations with stakeholders were organised. A web-based open consultation was launched on 28 June 2013. It was open for 12 weeks, until 19 September 2013, and

provided all interested stakeholders with a possibility to express their views. 372 responses were received, including 152 responses from individual citizens and 220 from representatives of organisations or institutions. Responses came from 24 different EU countries and are thus highly representative of the whole EU. 60% of responses came from the five countries that currently receive the largest shares of current EU funding for rail research, namely France, Spain, Italy, Germany and the United Kingdom.

The majority of respondents were private companies (42%), followed by research organisations and universities (21.8%), industry associations and chambers of commerce (11.5%), SMEs (10%) and public authorities (5.5%). The remainder included NGOs, self-employed people or other. Respondents were mostly from the rail supply industry (rolling stock, vehicle components, construction and building), with just 5% of responses coming from infrastructure managers and 4% from railway undertakings.

This online consultation was complemented by individual meetings with sector representatives.

A stakeholder hearing was also organised on 12 September 2013, to which 85 stakeholder representatives participated. More details on this consultation process can be found in Annex V of the impact assessment.

2.2. Impact assessment

The proposed Regulation has been the subject of a Commission Impact Assessment which is attached to the proposal. The Impact Assessment analysed different options for implementing future rail research and innovation activities, including the continuation of collaborative research, the establishment of a contractual PPP, the establishment of an institutional PPP in the form of a joint undertaking, or the coordination of research and innovation activities by the European Railway Agency. The Impact Assessment concluded that that, despite the longer set-up time, the establishment of a joint undertaking, taking into account the lessons learned from existing joint undertakings, provides the most appropriate governance structure for implementing future rail research and innovation activities.

The main benefits of the joint undertaking are that the coordination, programming and execution of rail research and innovation activities would be the responsibility of a single, dedicated administrative structure, ensuring more continuity and less fragmentation of research and innovation efforts. The development of a strategic long-term plan and of detailed work programmes, in close cooperation with all market players, will ensure the quality and relevance of future research and innovation projects in terms of supporting the competitiveness of the rail sector. The leading role played by the Commission will also ensure the alignment of the research and innovation strategy with the objectives of achieving a Single European Railway Area. The stable nature of the joint undertaking and the firm, legally binding, commitments from the EU and industry partners will ensure a stronger leverage effect than other options. The joint undertaking also ensures broad and balanced stakeholder participation, thanks to a flexible and transparent management of membership conditions and advisory roles.

The joint undertaking is also the preferred option according to the results of the public consultation. It is judged to be nearly twice as effective as any other option, with four in five respondents judging it would be effective or very effective in responding to the identified challenges.

3. LEGAL ELEMENTS OF THE PROPOSAL

3.1. Content of the proposal

This proposal concerns setting-up the Shift2Rail Joint Undertaking (S2R Joint Undertaking) under Article 187 of the Treaty on the Functioning of the European Union (TFEU). The S2R Joint Undertaking will share the standard provisions of the proposals for the five Joint Technology Initiative joint undertakings presented in July 2013. Nevertheless, public authorities are expected to play a stronger role in the S2R Joint Undertaking than is the case in the Joint Technology Initiative joint undertakings given its core objective of contributing to implement the Single European Railway Area, hence, the governance structure of the S2R Joint Undertaking will be different.

The S2R Joint Undertaking should be established for a period ending on 31 December 2024. It will be founded by the Union, represented by the European Commission, and by the Founding Members other than the Union, listed in Annex II to this Regulation. The activities of the S2R Joint Undertaking will be jointly funded by the Union and the members of the S2R Joint Undertaking other than the Union.

3.2. Legal basis

The legal basis for the proposal is Article 187 of the TFUE. The Rules for Participation and Dissemination of Horizon 2020 will apply.

3.3. Subsidiarity and proportionality

The objectives of the proposal cannot be sufficiently achieved through national programmes because the scale of the challenge exceeds the capacity of any Member State to act alone. Significant differences exist among national programmes. Their fragmentation and occasional overlapping calls for more efficient action at EU level. The pooling and coordination of research and innovation efforts at EU level stands a better chance of success, given the transnational nature of the infrastructure and technologies to be developed, and also the need to achieve a sufficient mass of resources. The involvement of the EU will help to rationalise research programmes and ensure interoperability of the systems developed, not only through common pre-normative research to support the preparation of standards, but also through the de facto standardisation which will arise from the close research cooperation and the transnational demonstration projects. This standardisation will open a wider market and promote competition. In accordance with the principle of proportionality, the provisions of this Regulation do not go beyond what is necessary to achieve its objectives.

4. BUDGETARY IMPLICATION

The maximum Union financial contribution to the Shift2Rail initiative shall be EUR 450 million⁵, including EFTA contributions, paid from the appropriations in the general budget of the Union allocated to the Horizon 2020 Specific Programme implementing the Horizon 2020 Framework Programme. This contribution will be made from the Smart, Green and Integrated Transport Challenge under the Societal Challenges pillar⁶. This amount includes EUR 52 million that has been set aside for funding collaborative rail research actions under the H2020 Transport Work Programme for 2014-2015, while awaiting the launch of the S2R Joint Undertaking. These collaborative research actions will be a precursor to the research and

⁵ Indicative amount in current prices. The amount will depend on the final agreed amount for DG MOVE and DG RTD for the theme 'Smart, green and integrated transport' which will be approved by the Budgetary Authority in the final version of the legislative and financial statement.

⁶ Except for the Union contribution to the administrative costs.

innovation actions that will be funded by the S2R Joint Undertaking. The management of these actions and the corresponding budget, as well as any amounts not committed following the calls for proposals, may be taken over by S2R Joint Undertaking once it achieves the operational capacity to implement its own budget. The funds made available by the Union to cover operational costs will be at least matched by contributions from industry.

The administrative costs of the S2R Joint Undertaking shall not exceed EUR 27 million for the duration of the S2R Joint Undertaking. These costs will be covered through financial contributions in equal parts by the Union and the S2R Joint Undertaking members other than the Union⁷.

⁷

The resources to cover the Union contribution to administrative costs of the S2R Joint Undertaking will be redeployed from Horizon 2020 administrative lines.

Proposal for a

COUNCIL REGULATION

establishing the Shift2Rail Joint Undertaking

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 187 and the first paragraph of Article 188 thereof,

Having regard to the proposal from the European Commission,

Having regard to the opinion of the European Parliament⁸,

Having regard to the opinion of the Economic and Social Committee⁹,

Whereas:

- (1) Europe 2020 Strategy¹⁰ underscores the need to develop favourable conditions for investment in knowledge and innovation, including eco-innovation, so as to achieve smart, sustainable and inclusive growth in the Union.
- (2) The White Paper on a Roadmap to a Single European Transport Area, adopted on 28 March 2011 (the "2011 White Paper")¹¹, emphasises the need to create a Single European Railway Area to achieve a more competitive and resource-efficient Union transport system, and to address major societal issues such as rising traffic demand, congestion, security of energy supply and climate change. It adds that innovation will be essential for this strategy and that EU research needs to address the full cycle of research, innovation and deployment in an integrated way through focusing on the most promising technologies and bringing together all actors involved.
- (3) Regulation (EU) No .../2013 of the European Parliament and of the Council of ... 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation for the period 2014-2020 ("Horizon 2020 Framework Programme")¹² aims to achieve a greater impact of research and innovation efforts by combining EU and private-sector funds in public-private partnerships (PPPs) in areas where research and innovation can contribute to the Union's wider competitiveness goals and help tackle societal challenges. The Union involvement in these partnerships can take the form of financial contributions to joint undertakings established on the basis of Article 187 of the Treaty.
- (4) In accordance with Decision (EU) No .../2013 of the Council of ... 2013 establishing the Specific Programme implementing Horizon 2020 (2014-2020)¹³ support may be

⁸ OJ C , , p. .

⁹ OJ C , , p. .

¹⁰ COM(2010)2020 final

¹¹ White Paper on a Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, COM/2011/0144 final

¹² OJ ... [H2020 FP]

¹³ OJ ... [H2020 SP]

provided to joint undertakings established in the Horizon 2020 Framework Programme under the conditions specified in that Decision.

- (5) The Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on Public-private partnerships in Horizon 2020: a powerful tool to deliver on innovation and growth in Europe¹⁴ identifies specific public-private partnerships to be supported, including the five Joint Technology Initiative joint undertakings and the SESAR (Single European Sky ATM Research) Joint Undertaking. In addition, it calls for a joint undertaking in the railway sector in light of the scale of research and innovation efforts required to build EU leadership in rail technologies and the policy need to complete the Single European Railway Area.
- (6) The Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Fourth Railway Package – Completing the single European railway area to foster Union competitiveness and growth (the "Fourth Railway Package")¹⁵ highlights the need for a joint undertaking in the railway sector to help develop rail as a transport mode by promoting step-change innovations for passenger rolling stock, freight transport, traffic management systems and rail infrastructure. It stresses the importance of achieving better value for money in rail given the scarcity of public funds, thanks to the creation of a single market, and calls for a more European approach to rail in order to encourage modal shift from road and air.
- (7) The Shift2Rail Joint Undertaking (hereinafter "S2R Joint Undertaking") should be a PPP aimed at stimulating and better coordinating Union research and innovation investments in the rail sector with a view to accelerating and facilitating the transition towards a more integrated, efficient, sustainable and attractive EU railway market, in line with the business needs of the rail sector and with the general objective of achieving a Single European Railway Area. In particular, the S2R Joint Undertaking should contribute to specific objectives defined in the 2011 White Paper and in the Fourth Railway Package, including the improved efficiency of the rail sector for the benefit of the public purse; a considerable expansion or upgrading of the capacity of the rail network, so as to enable rail to compete effectively and take a significantly greater proportion of passenger and freight transport; an improvement in the quality of rail services by responding to the needs of rail passengers and freight forwarders; the removal of technical obstacles holding back the sector in terms of interoperability; and the reduction of negative externalities linked to railway transport. The progress of the S2R Joint Undertaking towards meeting these objectives should be measured against key performance indicators.
- (8) The rules for the organisation and operation of the S2R Joint Undertaking should be laid down in the Statutes of the S2R Joint Undertaking as part of this Regulation.
- (9) The founding members of the S2R Joint Undertaking should be the Union, represented by the Commission, and the Founding Members other than the Union, listed in Annex II, so long as they accept the Statutes set out in Annex I to this Regulation. These Founding Members other than the Union are financially sound single legal entities who have the financial capacity and have expressed their agreement, in writing, following intensive stakeholder consultations, to make a major financial contribution

¹⁴ COM(2013) 494 final

¹⁵ COM (2013) 25 final

to pursue the research activities in the area of the S2R Joint Undertaking, within a structure well adapted to the nature of a public-private partnership.

- (10) Substantial participation from industry is an essential element of the S2R initiative. It is therefore fundamental that the public budget for the S2R initiative be at least matched by contributions from industry. Membership will therefore be open to other public or private entities willing to commit the necessary resources to carry out research and innovation activities in the area of the S2R Joint Undertaking.
- (11) The objective of the S2R Joint Undertaking shall be to manage the research, development and validation activities of the S2R initiative by combining public and private sector funding provided by its members and by drawing on internal and external technical resources. It shall establish new forms of collaboration, that are consistent with competition rules, between stakeholders from the entire rail value chain and from outside the traditional rail sector, and shall bring in the experience and expertise of the European Railway Agency on issues relating to interoperability and safety.
- (12) In order to achieve its objectives, the S2R Joint Undertaking should provide financial support, mainly in the form of grants to members and through the most appropriate measures, such as procurement or the award of grants following calls for proposals.
- (13) The S2R Joint Undertaking should operate in a transparent way providing all relevant available information to its appropriate bodies as well as promoting its activities accordingly.
- (14) The activities undertaken by the S2R Joint Undertaking are mainly research and innovation activities. Therefore, Union funding should be paid from the Horizon 2020 Framework Programme. To achieve maximum impact, the S2R Joint Undertaking should develop close synergies with other Union programmes and funding instruments, such as the Connecting Europe Facility, the European Structural and Investment Funds or the Risk Sharing Funding Facility.
- (15) Contributions from members other than the Union should be defined in a membership agreement with the S2R Joint Undertaking. These contributions should not only be limited to the administrative costs of the S2R Joint Undertaking and to the co-financing required to carry out research and innovation actions supported by the S2R Joint Undertaking. Their contributions should also relate to additional activities to be undertaken by them; in order to ensure a strong leverage effect. Those additional activities should represent contributions to the broader S2R initiative.
- (16) Participation in indirect actions funded by the S2R Joint Undertaking should comply with Regulation (EU) No ... /2013 of the European Parliament and of the Council of ... 2013 laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)"¹⁶
- (17) The Union financial contribution to the S2R Joint Undertaking should be managed in accordance with the principle of sound financial management and with the relevant rules on indirect management laid down in Regulation (EU, Euratom) No 966/2012 of

¹⁶ OJ ... [H2020 RfP]

the European Parliament and of the Council¹⁷ and Commission Delegated Regulation (EU) No 1268/2012.¹⁸

- (18) Audits of recipients of Union funds under this Regulation should be carried out in such a manner that the administrative burden is reduced, in compliance with Regulation (EU) No .../2013 [the Horizon 2020 Framework Programme].
- (19) The financial interests of the Union and of the other members of the S2R Joint Undertaking should be protected through proportionate measures throughout the expenditure cycle including the prevention, detection and investigation of irregularities, the recovery of funds lost, wrongly paid or incorrectly used and, where appropriate, administrative and financial penalties in accordance with Regulation (EU, Euratom) No 966/2012.
- (20) The Commission's internal auditor should exercise the same powers over the S2R Joint Undertaking as those exercised in respect of the Commission.
- (21) In accordance with Article 287(1) of the Treaty, the constituent instrument of bodies, offices or agencies set up by the Union may preclude the examination of the accounts of all revenue and expenditure of those bodies, offices or agencies by the Court of Auditors. In accordance with Article 60(5) of Regulation (EU, Euratom) No 966/2012, the accounts of the bodies under Article 209 of Regulation (EU, Euratom) No 966/2012 are to be examined by an independent audit body which is to give an opinion inter alia on the reliability of the accounts and the legality and regularity of the underlying transactions. Avoidance of duplication of the examination of the accounts justifies that the accounts of the S2R Joint Undertaking should not be subject to examination by the Court of Auditors.
- (22) In order to facilitate the establishment of the S2R Joint Undertaking, the Commission should be responsible for the establishment and initial operation thereof until the S2R Joint Undertaking has the operational capacity to implement its own budget.
- (23) Since the objectives of the S2R Joint Undertaking in strengthening industrial research and innovation across the Union cannot be sufficiently achieved by the Member States and can be better achieved at Union level, thereby avoiding duplication, retaining critical mass and ensuring that public financing is used in an optimal way, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives.

HAS ADOPTED THIS REGULATION:

Article 1– Establishment

1. In order to coordinate and manage Union research and innovation investments in the European rail sector, a joint undertaking within the meaning of Article 187 of the Treaty (the "Shift2Rail Joint Undertaking" or "S2R Joint Undertaking") is hereby established until 31 December 2024.

¹⁷ Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (OJ L 298, 26.10.2012, p. 1).

¹⁸ OJ L 362, 31.12.2012, p. 1.

2. The S2R Joint Undertaking shall constitute a body entrusted with the implementation of a public-private partnership referred to in Article 209 of Regulation (EU, Euratom) No 966/2012 of the European Parliament and the Council¹⁹.
3. The S2R Joint Undertaking shall have legal personality. In every Member State, it shall enjoy the most extensive legal capacity accorded to legal persons under the law of that State. It may acquire or dispose of movable and immovable property and may be a party to legal proceedings.
4. The seat of the S2R Joint Undertaking shall be located in Brussels, Belgium.
5. The Statutes of the S2R Joint Undertaking are set out in Annex I.

Article 2 – Objectives

1. The S2R Joint Undertaking shall have the following as general objectives:
 - (a) to contribute to the implementation of Regulation (EU) No .../2013 of the European Parliament and of the Council of ...2013 establishing the Horizon 2020 Framework Programme and in particular part of the Smart, Green and Integrated Transport Challenge under the Societal Challenges pillar of Decision No ... /2013 EU of the Council of ...2013 establishing the Horizon 2020 Specific Programme.
 - (b) to contribute to the achievement of the Single European Railway Area, to a faster and cheaper transition to a more attractive, competitive, efficient and sustainable European rail system, and to a modal shift from road and air to rail, through a comprehensive and co-ordinated approach addressing the research and innovation needs of the rail system and its users. This approach shall cover rolling stock, infrastructure and traffic management for the market segments of freight and of long-distance, regional, local and urban passenger traffic, as well as intermodal links between rail and other modes, providing users with an integrated end-to-end solution for their rail travel and transport needs – from transaction support to en-route assistance.
 - (c) to develop – and ensure the effective and efficient implementation of – a strategic Master Plan (the "S2R Master Plan"), as referred to in clause 1(4) of the Statutes contained in Annex I.
 - (d) to act as a central reference point on rail-related research and innovation actions funded at Union level, ensuring coordination among projects and providing all stakeholders with relevant information.
 - (e) to actively promote the participation and close involvement of all relevant stakeholders from the full rail value chain and from outside the traditional rail industry, in particular: manufacturers of railway equipment (both rolling stock and train control systems) and their supply chain, infrastructure managers, railway operators (both passenger and freight), rail vehicle leasing companies, certifying agencies, professional staff associations, user associations (both passenger and freight), as well as the relevant scientific institutions or the relevant scientific community. The involvement of small and medium sized

¹⁹ OJ L 298, 26.10.2012, p. 1.

enterprises (SMEs), as defined in Commission Recommendation 2003/361/EC²⁰, shall be encouraged.

2. More specifically, the S2R Joint Undertaking shall seek to develop, integrate, demonstrate and validate innovative technologies and solutions that uphold the strictest safety standards and the value of which can be measured against the following key performance indicators, inter alia:
 - (a) a 50% reduction of the life-cycle cost of the railway transport system, through a reduction of the costs of developing, maintaining, operating and renewing infrastructure and rolling stock, as well as through increased energy efficiency;
 - (b) a 100% increase in the capacity of the railway transport system, to meet increased demand for passenger and freight railway services;
 - (c) a 50% increase in the reliability and punctuality of rail services;
 - (d) the removal of remaining technical obstacles holding back the rail sector in terms of interoperability and efficiency, in particular by endeavouring to close points which remain open in Technical Specifications for Interoperability (TSIs) due to lack of technological solutions and by ensuring that all systems and solutions developed by the S2R Joint Undertaking are fully interoperable;
 - (e) the reduction of negative externalities linked to railway transport, in particular noise, vibrations, emissions and other environmental impacts.

Article 3 – Union financial contribution

1. The maximum Union financial contribution to the Shift2Rail initiative shall be EUR 450 million, including EFTA contributions, paid from the appropriations in the general budget of the Union allocated to the Horizon 2020 Specific Programme implementing the Horizon 2020 Framework Programme, in accordance with the relevant provisions of Article 58(1)(c)(iv) and Articles 60 and 61 of Regulation (EU, Euratom) No 966/2012 for bodies referred to in Article 209 of that Regulation. This amount includes:
 - (a) a maximum contribution to the S2R Joint Undertaking, to cover administrative costs and operational costs, of EUR 398 million. The maximum Union contribution to cover administrative costs shall be EUR 13.5 million.
 - (b) an additional amount of maximum EUR 52 million, earmarked under the H2020 Transport Work Programme 2014-2015. The management of this additional contribution may be taken over by S2R Joint Undertaking once it achieves the operational capacity to implement its own budget.
2. Additional funds complementing the contribution referred to in paragraph 1 may be allocated from other Union instruments to support actions for the deployment of mature outcomes of the S2R Joint Undertaking.
3. The arrangements for the Union contribution shall be set out in a delegation agreement and annual transfer of funds agreements, which shall be concluded between the Commission, on behalf of the Union, and the S2R Joint Undertaking.

²⁰ Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (OJ L 124, 20.5.2003, p. 36)

4. The delegation agreement referred to in paragraph 3 shall address the elements set out in Article 58(3) and Articles 60 and 61 of Regulation (EU, Euratom) No 966/2012 and in Article 40 of Commission delegated Regulation (EU) No 1268/2012 as well as *inter alia* the following:
- (a) the requirements for the S2R Joint Undertaking's contribution regarding the relevant performance indicators referred to in Annex II to Decision No .../EU [the Specific Programme implementing the Horizon 2020 Framework Programme];
 - (b) the requirements for the S2R Joint Undertaking's contribution in view of the monitoring referred to in Annex III to Decision No .../EU [the Specific Programme implementing the Horizon 2020 Framework Programme];
 - (c) the specific performance indicators related to the functioning of the S2R Joint Undertaking;
 - (d) the arrangements regarding the provision of data necessary to ensure that the Commission is able to draft its research and innovation policy and to meet its dissemination and reporting obligations;
 - (e) the use of and changes to human resources, in particular recruitment by function group, grade and category, the reclassification exercise and any changes to the number of staff members.

Article 4 – Contributions of Members other than the Union

1. Each member of the S2R Joint Undertaking other than the Union shall make or arrange for its affiliated entities to make its respective contribution. The total contribution from all members other than the Union shall be of at least EUR 470 million over the period defined in Article 1.
2. The contribution referred to in paragraph 1 shall consist of the following:
 - (a) contributions to the S2R Joint Undertaking of at least EUR 350 million, as laid down in clause 15(2) and clause 15(3)(b) of the Statutes set out in Annex I, including at least EUR 200 million from the Founding Members other than the Union and their affiliated entities, and at least EUR 150 million from Associated Members and their affiliated entities;
 - (b) in-kind contributions of at least EUR 120 million, of which at least EUR 70 million from the Founding Members other than the Union and their affiliated entities, and at least EUR 50 million from Associated Members and their affiliated entities, consisting of the costs incurred by them in implementing additional activities outside the work plan of the S2R Joint Undertaking, which are complementary to this work plan and contribute to the objectives of the S2R Master Plan. Other Union funding programmes may support those costs in compliance with the applicable rules and procedures. In such cases, Union financing shall not substitute for the in-kind contributions from the Members other than the Union or their affiliated entities.

The costs referred to in point (b) shall not be eligible for financial support by the S2R Joint Undertaking. The corresponding activities shall be set out in the membership agreement referred to in clause 3(2) of the Statutes in Annex I, indicating the estimated value of those contributions.

3. The Members of the S2R Joint Undertaking other than the Union shall report each year by 31 January to the Governing Board of the S2R Joint Undertaking on the value of the contributions referred to in paragraph 2 made in each of the previous financial years.
4. For the purpose of valuing the in kind contributions referred to in point (b) of paragraph 2 and clause 15(3)(b) of the Statutes set out in Annex I, the costs shall be determined according to the usual cost accounting practices of the entities concerned, to the applicable accounting standards of the country where each entity is established, and to the applicable International Accounting Standards / International Financial Reporting Standards. The costs shall be certified by an independent external auditor appointed by the entity concerned. The valuation of the contributions shall be verified by the S2R Joint Undertaking. In case of remaining uncertainties, the valuation may be audited by the S2R Joint Undertaking, as referred to in clause 20 of the Statutes.
5. Any member of the S2R Joint Undertaking other than the Union that fails to meet its commitments concerning the contributions referred to in paragraph 2 within six months of the time-limit set out in its membership agreement shall be disqualified from voting in the Governing Board until such time as its obligations have been met. If the obligations have still not been met upon expiry of an additional six-month period, its membership shall be revoked.
6. Further to paragraph 5, the Commission may terminate, proportionally reduce or suspend the Union financial contribution to the S2R Joint Undertaking or trigger the winding up procedure referred to in clause 23(2) of the Statutes set out in Annex I if those members or their affiliated entities do not contribute, contribute only partially or contribute late with regard to the contributions referred to in paragraph 2.

Article 5 – Financial Rules

The S2R Joint Undertaking shall adopt its specific financial rules in accordance with Article 209 of Regulation (EU, Euratom) No 966/2012 and Regulation (EU) No ... [Delegated Regulation on the Model Financial Regulation for bodies referred to in Article 209 of the Financial Regulation].

Article 6 – Staff

1. The Staff Regulations of Officials and the Conditions of Employment of other Servants of the European Union as laid down by Council Regulation (EEC, Euratom, ECSC) No 259/68²¹ and the rules adopted by agreement between the institutions of the Union for the purpose of giving effect to those Staff Regulations and Conditions of Employment of Other Servants shall apply to the staff employed by the S2R the Joint Undertaking.
2. The Governing Board shall exercise, with respect to the staff of the S2R Joint Undertaking, the powers conferred by the Staff Regulations on the Appointing Authority and by the Conditions of Employment of Other Servants on the Authority Empowered to Conclude Contract of Employment (hereinafter "the appointing authority powers").

²¹ OJ 56, 4.3.1968, p. 1

The Governing Board shall adopt, in accordance with Article 110 of the Staff Regulations, a decision based on Article 2 paragraph 1 of the Staff Regulations and on Article 6 of the Conditions of Employment of Other Servants delegating the relevant appointing authority powers to the Executive Director and defining the conditions under which this delegation of powers can be suspended. The Executive Director is authorised to sub-delegate those powers.

Where exceptional circumstances so require, the Governing Board may, by way of a decision, temporarily suspend the delegation of the appointing authority powers to the Executive Director and those sub-delegated by the latter and exercise them itself or delegate them to one of its members or to a staff member of the S2R Joint Undertaking other than the Executive Director.

3. The Governing Board shall adopt the appropriate implementing rules to the Staff Regulations and the Conditions of Employment of Other Servants in accordance with Article 110 of the Staff Regulations.
4. The staff resources shall be determined in the staff establishment plan of the S2R Joint Undertaking indicating the number of temporary posts by function group and by grade and the number of contract staff expressed in full-time equivalents, in line with its annual budget.
5. The staff of the S2R Joint Undertaking shall consist of temporary staff and contract staff.
6. All costs related to the staff shall be borne by the S2R Joint Undertaking.

Article 7 – Seconded national experts and trainees

1. The S2R Joint Undertaking may make use of seconded national experts and trainees not employed by the S2R Joint Undertaking. The number of seconded national experts expressed in full-time equivalents shall be added to information on staff as referred to in Article 6(4) of this Regulation in line with the annual budget.
2. The Governing Board shall adopt a decision laying down rules on the secondment of national experts to the S2R Joint Undertaking and on the use of trainees.

Article 8 – Privileges and immunities

The Protocol on the Privileges and Immunities of the Union shall apply to the S2R Joint Undertaking and its staff.

Article 9 – Liability of the S2R Joint Undertaking

1. The contractual liability of the S2R Joint Undertaking shall be governed by the relevant contractual provisions and by the law applicable to the agreement, decision or contract in question.
2. In the case of non-contractual liability, the S2R Joint Undertaking shall, in accordance with the general principles common to the laws of the Member States, make good any damage caused by its staff in the performance of their duties.
3. Any payment by the S2R Joint Undertaking in respect of the liability referred to in paragraphs 1 and 2 and the costs and expenses incurred in connection therewith shall be considered as expenditure of the S2R Joint Undertaking and shall be covered by its resources.

4. The S2R Joint Undertaking shall be solely responsible for meeting its obligations.

Article 10 – Jurisdiction of the Court of Justice and applicable law

1. The Court of Justice shall have jurisdiction under the conditions laid down in the Treaty as well as in the following cases:
 - (a) in any dispute between the members which relates to the subject matter of this Regulation;
 - (b) pursuant to any arbitration clause contained in agreements, decisions or contracts concluded by the S2R Joint Undertaking;
 - (c) in disputes related to compensation for damage caused by the staff of the S2R Joint Undertaking in the performance of their duties;
 - (d) in any dispute between the S2R Joint Undertaking and its servants within the limits and under the conditions laid down in the Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Union.
2. For any matter not covered by this Regulation or by other acts of Union law, the law of the State where the seat of the S2R Joint Undertaking is located shall apply.

Article 11 – Evaluation

1. By 31 December 2017, the Commission shall conduct an interim evaluation of the S2R Joint Undertaking. The Commission shall send the conclusions of the evaluation, and its observations, to the European Parliament and to the Council by 30 June 2018.
2. On the basis of the conclusions of the interim evaluation referred to in paragraph 1 the Commission may act in accordance with Article 4(5) or take any other appropriate actions.
3. Within six months after the winding up of the S2R Joint Undertaking, but in any event no later than two years after the triggering of the winding up procedure referred to in clause 23 of the Statutes contained in Annex I, the Commission shall conduct a final evaluation of the S2R Joint Undertaking. The results of that final evaluation shall be presented to the European Parliament and to the Council.

Article 12 – Discharge

1. The discharge of the budget implementation with regard to the Union contribution to the S2R Joint Undertaking shall be part of the discharge given by the European Parliament, upon recommendation of the Council, to the Commission in accordance with the procedure provided for in Article 319 of the Treaty.
2. The S2R Joint Undertaking shall fully cooperate with the institutions involved in the discharge procedure and provide, as appropriate, any necessary additional information. In this context, it may be requested to be represented in meetings with the relevant institutions or bodies and assist the Commission authorising officer by delegation.

Article 13 – Ex-post audits

1. Ex-post audits of expenditure on indirect actions shall be carried out by the S2R Joint Undertaking in accordance with Article 23 of Regulation (EU) No ... [the Horizon 2020 Framework Programme] as part of the Horizon 2020 Framework Programme indirect actions.
2. To ensure coherence, the Commission may decide to carry out the audits referred to in paragraph 1.

Article 14 – Protection of the financial interests of the members

1. Without prejudice to clause 19(4) of the Statutes set out in Annex I, the S2R Joint Undertaking shall grant Commission staff and other persons authorised by the S2R Joint Undertaking or the Commission, as well as the Court of Auditors, access to its sites and premises and to all the information, including information in electronic format, needed in order to conduct their audits.
2. The European Anti-fraud Office (OLAF) may carry out investigations, including on-the-spot checks and inspections, in accordance with the provisions and procedures laid down in Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council²² and Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996²³ with a view to establishing whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the Union in connection with an agreement or decision or a contract funded under this Regulation.
3. Without prejudice to paragraphs 1 and 2, contracts, agreements and decisions, resulting from the implementation of this Regulation shall contain provisions expressly empowering the Commission, the S2R Joint Undertaking, the Court of Auditors and OLAF to conduct such audits and investigations, according to their respective competences.
4. The S2R Joint Undertaking shall ensure that the financial interests of its members are adequately protected by carrying out or commissioning appropriate internal and external controls.
5. The S2R Joint Undertaking shall accede to the Interinstitutional Agreement of 25 May 1999 between the European Parliament, the Council and the Commission concerning internal investigations by OLAF²⁴. The S2R Joint Undertaking shall adopt the necessary measures needed to facilitate internal investigations conducted by OLAF.

Article 15 – Confidentiality

Without prejudice to Article 16, the S2R Joint Undertaking shall ensure the protection of sensitive information whose disclosure could damage the interests of its Members or of participants in the activities of the S2R Joint Undertaking.

²² OJ L 248, 18.9.2013, p.1.

²³ OJ L 292, 15.11.1996, p. 2-5.

²⁴ OJ L 136, 31.5.1999, p. 15.

Article 16 – Transparency

1. Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding access to European Parliament, Council and Commission documents²⁵ shall apply to documents held by the S2R Joint Undertaking.
2. The S2R Joint Undertaking shall adopt practical arrangements for implementing Regulation (EC) No 1049/2001.
3. Without prejudice to Article 10, decisions taken by the S2R Joint Undertaking pursuant to Article 8 of Regulation (EC) No 1049/2001 may form the subject of a complaint to the Ombudsman under the conditions laid down in Article 228 of the Treaty.
4. The S2R Joint Undertaking shall adopt practical arrangements for implementing Regulation (EC) No 1367/2006 of the European Parliament and of the Council of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies²⁶.

Article 17 – Rules for participation and dissemination

Regulation (EU) No ... [Rules for participation and dissemination in Horizon 2020] shall apply to the actions funded by the S2R Joint Undertaking. In accordance with that Regulation, the S2R Joint Undertaking shall be considered as a funding body and shall provide financial support to indirect actions as set out in clause 2 of the Statutes contained in Annex I.

Article 18 – Support from the host State

An administrative agreement may be concluded between the S2R Joint Undertaking and the State where its seat is located concerning privileges and immunities and other support to be provided by this State to the S2R Joint Undertaking.

Article 19 – Initial actions

1. The Commission shall be responsible for the establishment and initial operation of the S2R Joint Undertaking until it has the operational capacity to implement its own budget. The Commission shall carry out, in accordance with Union law, all necessary actions in collaboration with the other Members and with the involvement of the competent bodies of the S2R Joint Undertaking.
2. For that purpose,
 - (a) until the Executive Director takes up his duties following his/her appointment by the Governing Board in accordance with clause 9 of Annex I, the Commission may designate a Commission official to act as interim Executive Director and exercise the duties assigned to the Executive Director who may be assisted by a limited number of Commission officials:
 - (b) by derogation from Article 6 (2) of this Regulation, the interim Director shall exercise the appointing authority powers;

²⁵ OJ L 145, 31.5.2001, p. 43.

²⁶ OJ L 264, 25.9.2006, p. 13-19.

- (c) the Commission may assign a limited number of its officials on an interim basis.
3. The interim Executive Director may authorise all payments covered by the appropriations provided in the annual budget of the S2R Joint Undertaking once approved by the Governing Board and may conclude agreements, decisions and contracts, including staff contracts following the adoption of the S2R Joint Undertaking's staff establishment plan.
4. The interim Executive Director shall in common accord with the Executive Director of the S2R Joint Undertaking and subject to the approval of the Governing Board determine the day on which the S2R Joint Undertaking has the capacity to implement its own budget. From that day, the Commission shall abstain from making commitments and executing payments for the activities of the S2R Joint Undertaking.

Article 20 – Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in the Member States.

Done at Brussels,

*For the Council
The President*

LEGISLATIVE FINANCIAL STATEMENT

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

- 1.1. Title of the proposal/initiative
- 1.2. Policy area(s) concerned in the ABM/ABB structure
- 1.3. Nature of the proposal/initiative
- 1.4. Objective(s)
- 1.5. Grounds for the proposal/initiative
- 1.6. Duration and financial impact
- 1.7. Management mode(s) envisaged

2. MANAGEMENT MEASURES

- 2.1. Monitoring and reporting rules
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3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

- 3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected
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 - 3.2.1. *Summary of estimated impact on expenditure*
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 - 3.2.5. *Third-party contributions*
- 3.3. Estimated impact on revenue

LEGISLATIVE FINANCIAL STATEMENT

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

Proposal for a Council Regulation establishing the Shift2Rail Joint Undertaking a

1.2. Policy area(s) concerned in the ABM/ABB structure²⁷

Policy area: Title 6 - Transport

Activity: Chapter 06 03 "Horizon 2020: research and innovation related to transport"

1.3. Nature of the proposal/initiative

The proposal/initiative relates to **a new action**

The proposal/initiative relates to **a new action following a pilot project/preparatory action**²⁸

The proposal/initiative relates to **the extension of an existing action**

The proposal/initiative relates to **an action redirected towards a new action**

1.4. Objective(s)

1.4.1. *The Commission's multiannual strategic objective(s) targeted by the proposal/initiative*

The general objective of the proposed initiative is to better align EU rail research and innovation efforts to support the completion of the Single European Railway Area, while accelerating the market take-up of innovative solutions, thereby increasing the competitiveness of the EU rail sector.

1.4.2. *Specific objective(s) and ABM/ABB activity(ies) concerned*

Specific objective No

- (1) Foster focused, coordinated and long-term investment in EU rail research and innovation
- (2) Increase the leverage of EU rail research and innovation funding
- (3) Establish sustained networks and knowledge exchange between diverse stakeholders
- (4) Mitigate risks linked to innovation
- (5) Increase the operational performance and effectiveness of rail research and innovation

ABM/ABB activity(ies) concerned

06.03.03.01, Achieving a resource-efficient, environmentally-friendly, safe and seamless European transport system

²⁷

ABM: activity-based management – ABB: activity-based budgeting.

²⁸

As referred to in Article 54(2)(a) or (b) of the Financial Regulation.

1.4.3. *Expected result(s) and impact*

The initiative is expected to accelerate the penetration of technological innovations that will support the creation of a truly integrated and interoperable EU railway market, thereby increasing the competitiveness of the EU rail sector, vis-à-vis both other transport modes and foreign competitors. This will, in turn, contribute to raising the quality, reliability and cost-efficiency of EU rail services.

1.4.4. *Indicators of results and impact*

The detailed framework for monitoring and evaluation will be developed by the S2R Joint Undertaking, but the processes will include project level and work package monitoring and reporting on a regular (quarterly) basis, based on a concise set of reliable key performance indicators (KPIs).

1.5. **Programme level monitoring and reporting, based on project and work package data, and including the monitoring of the quality of deliverables against a set of satisfaction criteria; the monitoring of project management to verify its overall quality and the compliance with the strategic work programme. Grounds for the proposal/initiative**

1.5.1. *Requirement(s) to be met in the short or long term*

To set-up the Joint Undertaking as a new structure of Partnership between the Commission and Industry for research and innovation funding.

To define in a strategic Master Plan the priority research and innovation activities, including large-scale demonstration activities, required to achieve the objectives of the JU.

To mobilise public and private sector funds for financing the activities of the strategic Master Plan.

To organise competitive calls for proposals, evaluation and selection of projects.

To monitor and follow up financial and scientific aspects of projects.

To set-up and implement all procedures of the S2R Joint Undertaking including financial auditing.

To organise any other activity linked to the S2R Joint Undertaking.

1.5.2. *Added value of EU involvement*

Levels of rail R&I funding have historically been low and what investment does take place suffers from fragmentation and inefficiencies, due to significant differences among national programmes and railway systems. The pooling and coordination of R&I efforts at EU level stands a better chance of success given the transnational nature of the infrastructure and technologies to be developed in support of the SERA, and the need to achieve a sufficient mass of resources. Action at EU level will help to rationalise research programmes and ensure interoperability of the systems developed. This standardisation will open a wider market and promote competition.

1.5.3. *Lessons learned from similar experiences in the past*

Past rail research and innovation efforts at EU level have not succeeded in supporting new technologies enabling the further integration of diverse national railway ecosystems and of different rail subsystems. Furthermore, the market uptake and

impact of EU rail research and innovation projects under previous framework programmes has been low and slow.

The EU's new programme for research and innovation, Horizon 2020, underlines the need to improve the efficiency of EU funding by pooling together existing research and innovation efforts and expertise, namely through Public-Private Partnerships. EU level public-private partnerships in research and innovation were first introduced in the 7th research Framework Programme (FP7), in the form of Joint Undertakings established under Article 187 of the Treaty on the Functioning of the European Union (TFEU).

Successive evaluations of these experiences have highlighted the beneficial impacts to Europe's economy and society of better coordinating EU R&I funding.

Evaluations of existing Joint Undertakings have also raised the need for stronger commitments from industry partners, with clearer measurement of these commitments and the associated leverage effect, as well as the need to provide them with clear objectives and to ensure greater openness towards new participants.

1.5.4. Compatibility and possible synergy with other appropriate instruments

There may be synergies between funding actions in Horizon 2020 and funds of Member States and Regions. The stable nature of the Joint Undertaking will give confidence to potential outside partners, thus helping to attract funding from other sources.

Also, synergies can be considered with other EU-level instruments, such as the Connecting Europe Facility (CEF).

1.6. Duration and financial impact

Proposal/initiative of **limited duration**

- Proposal/initiative in effect from 01/01/2014 to 01/01/2024
- Financial impact from 2014 to 2020 for the commitment appropriations and from 2014 to 2024 for the payment appropriations.

Proposal/initiative of **unlimited duration**

- Implementation with a start-up period from YYYY to YYYY,
- followed by full-scale operation.

1.7. Management mode(s) planned²⁹

Direct management by the Commission

- by its departments, including by its staff in the Union delegations;
- by the executive agencies;

Shared management with the Member States

Indirect management by delegating implementation tasks to:

- third countries or the bodies they have designated;
 - international organisations and their agencies (to be specified);
 - the EIB and the European Investment Fund;
 - bodies referred to in Article 209 of the Financial Regulation;
 - public law bodies;
 - bodies governed by private law with a public service mission to the extent that they provide adequate financial guarantees;
 - bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that provide adequate financial guarantees;
 - persons entrusted with the implementation of specific actions in the CFSP pursuant to Title V of the TEU, and identified in the relevant basic act.
- *If more than one management mode is indicated, please provide details in the "Comments" section.*

Comments

No comments

²⁹ Details of management modes and references to the Financial Regulation may be found on the BudgWeb site: http://www.cc.cec/budg/man/budgmanag/budgmanag_en.html

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

Specify frequency and conditions.

The S2R Joint Undertaking will be monitored through intermediary contacts and as provided in clause 19 of the Statutes.

As an PPP body under Article 209 FR, the S2R Joint Undertaking functions under strict monitoring rules. Monitoring is performed through:

- the supervision of the Governing Board;
- mid-term and final evaluations by external experts (every 3 years and at the end of the programme, under the supervision of the Commission).

2.2. Management and control system

2.2.1. Risk(s) identified

The risks assessment was performed in the impact assessment report. Table 8 in the commission Staff Working Document provides an overview of the different risks and their assessment (pp. 39-40).

2.2.2. Internal control system set up

The Commission through the Authorising Officer by Delegation will ensure that the rules applicable to the S2R Joint Undertaking fully comply with the requirements of Article 60 and 61 of the Financial Regulation.

The internal control framework for the S2R Joint Undertaking will be built on:

- the implementation of the Internal Control Standards offering at least equivalent guarantees to those of the Commission;
- procedures for selecting the best projects through independent evaluation, and for translating them into legal instruments;
- project and contract management throughout the lifetime of every project;
- ex-ante checks on 100% of claims, including receipt of audit certificates and ex-ante certification of cost methodologies;
- ex post audits on a sample of claims as part of the Horizon 2020 ex-post audits;
- and scientific evaluation of project results.

2.2.3. Costs and benefits of the controls

The Commission's internal auditor shall exercise the same powers over the Joint Undertaking as those exercised in respect of the Commission. Moreover, the Governing Board may arrange, as appropriate, for the establishment of an internal audit capability of the Joint Undertaking.

The Executive Director of the S2R Joint Undertaking, as Authorising Officer, will be required to introduce a cost-effective system of internal control and management. He/she will be required to report to the Commission on the internal control framework adopted.

The Commission will monitor the risk of non-compliance through the reporting system that it will develop, as well as by following the results of ex post audits on the recipients of EU funds from the S2R Joint Undertaking, as part of ex post audits covering the whole of the Horizon 2020.

The control system established will need to take account of the strong feeling, amongst the recipients of EU funds as well as amongst the legislative authority, that the control burden required to attain an error limit of 2% has become too great. This runs the risk of lowering the attractiveness of the Union's Research programme, and so negatively affecting Union research and innovation.

2.2.4. *Expected level of risk of error*

As the rules of participation in the S2R Joint Undertaking are the same as those that the Commission will use, and with a population of beneficiaries with a similar risk profile to those of the Commission, it can be expected that the level of error will be similar to that established by the Commission for Horizon 2020, i.e. to give reasonable assurance that the risk of error over the course of the multiannual expenditure period is, on an annual basis, within a range of 2-5 %, with the ultimate aim to achieve a residual level of error as close as possible to 2 % at the closure of the multi-annual programmes, once the financial impact of all audits, correction and recovery measures have been taken into account.

2.3. **Measures to prevent fraud and irregularities**

Specify existing or envisaged prevention and protection measures.

The Commission will ensure that appropriate measures are in place to ensure that, when actions financed under this Regulation are implemented, the financial interests of the Union are protected by the application of preventive measures against fraud, corruption and any other illegal activities, by effective checks and, if irregularities are detected, by the recovery of the amounts wrongly paid and, where appropriate, by effective, proportionate and deterrent penalties.

According to point 2.2.1 of the Commission Anti-Fraud Strategy (COM(2011) 376 final), the Commission will develop close cooperation and synergies and also promote the relevant standards set out in this Anti-fraud Strategy within EU institutions including joint undertakings.

The S2R Joint Undertaking will cooperate with the Commission services in matters relating to fraud and irregularity. The S2R Joint Undertaking shall adopt an anti-fraud strategy, proportionate to fraud risks taking into account the costs and benefits of the measures to be implemented. Furthermore, the Court of Auditors shall have the power of audit, on the basis of documents and on-the spot, over all grant beneficiaries, contractors and subcontractors who have received Union funds under the Programme.

The European Anti-fraud Office (OLAF) may carry out on-the-spot checks and inspections on economic operators concerned directly or indirectly by such funding in accordance with the procedures laid down in Regulation (Euratom, EC) No 2185/96 with a view to establishing whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the Union in connection with a grant agreement or grant decision or a contract concerning Union funding.

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

- New budget lines requested

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number 1A [Heading Competiveness for growth and jobs]	Diff./non-diff.	from EFTA countries	from candidate countries	from third countries	within the meaning of Article 21(2)(b) of the Financial Regulation
1A	06.03.07.33 – Shift2Rail (S2R) Joint Undertaking – Support expenditure 06.03.07.34 – Shift2Rail (S2R) Joint Undertaking	Diff.	YES	YES	YES	YES

The contribution to these budget lines is expected to come from:

DG MOVE (budget lines 06.03 03 01 and 06.01.05.03): 70%

DG RTD (budget lines 08.02.03.04 and 08.01.05.03): 30%

The yearly financial contribution per budget line is indicated in the table below*.

Budget line	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	TOTAL
06.03.03.01	36.000	31.000	31.000	36.400	49.000	58.800	65.834**	308.034
06.01.05.03 ³⁰	0.336	0.947	1.137	1.136	1.137	1.136	1.137	6.966
08.02.03.04	16.000	13.000	13.000	15.600	21.000	25.200	28.215**	132.015
08.01.05.03	0.144	0.406	0.487	0.487	0.487	0.487	0.487	2.985
TOTAL	52.480	45.353	45.623	53.624	71.624	85.623	95.673	450.000

*This table includes the amount of EUR 52 million (of which 70% financed by DG MOVE and 30% financed by DG RTD) that will be committed in 2014 for funding collaborative rail research actions under the H2020 Transport Work Programme 2014-2015, while awaiting the launch of the S2R Joint Undertaking. The management of these actions and the corresponding budget, as well as any amounts not committed following the calls for proposals, may be taken over by S2R Joint Undertaking once it achieves the operational capacity to implement its own budget.

**Including EUR 2,484 million on line 06.03.03.01 and EUR 1,065 million on line 08.01.05.03, totaling EUR 3,549 million to be frontloaded in 2020 for the administrative costs of 2021-2024.

³⁰ In case there are not sufficient resources on budget line 06 01 05 03, the lines 06 01 05 01 and 06 01 05 02 will be used as a source of funding.

3.2. Estimated impact on expenditure

3.2.1. Summary of estimated impact on expenditure

EUR million (to three decimal places)

Heading of multiannual financial framework		1A	Heading 1A – Competitiveness for growth and jobs											
S2R Joint Undertaking			Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	TOTAL
Title 1 - Staff expenditure	Commitments	(1)	0.080	0.453	0.524	0.523	0.524	0.523	1.527	0.000	0.000	0.000	0.000	4.154
	Payments	(2)	0.080	0.453	0.524	0.523	0.524	0.523	0.524	0.430	0.305	0.179	0.089	4.154
Title 2 - Infrastructure and operating expenditure	Commitments	(1a)	0.400	0.900	1.100	1.100	1.100	1.100	3.646	0.000	0.000	0.000	0.000	9.346
	Payments	(2a)	0.400	0.900	1.100	1.100	1.100	1.100	1.100	0.900	0.700	0.500	0.446	9.346
Title 3 - Operational expenditure	Commitments	(3a)	52.000	44.000	44.000	52.000	70.000	84.000	90.500	0.000	0.000	0.000	0.000	436.500
	Payments	(3b)	0.000	50.000	58.000	58.000	58.000	58.000	58.000	44.000	30.000	16.000	6.500	436.500
TOTAL appropriations S2R Joint Undertaking	Commitments	1+1a+3a	52.480	45.353	45.624	53.623	71.624	85.623	95.673	0.000	0.000	0.000	0.000	450.000
	Payments	2+2a+3b	0.480	51.353	59.624	59.623	59.624	59.623	59.624	45.330	31.005	16.679	7.035	450.000

The S2R Joint Undertaking is based on a shared costs basis with industry. Expenditure in the above table relates only to the Union contribution to the S2R Joint Undertaking.

ERA will play an observer role. This role will be fulfilled with existing resources. No additional staff or appropriations will be requested for these tasks.

EUR million (to three decimal places)

Heading of multiannual financial framework	1A	Administrative expenditure in the Commission
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		Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Years 2021 and later	TOTAL
DG MOVE										
• Human resources		0.419	0.326	0.326	0.326	0.326	0.326	0.326	p.m.	2.376
• Other administrative expenditure					0.07			0.07		0.14
TOTAL DG MOVE	Appropriations	0.419	0.326	0.326	0.396	0.326	0.326	0.396	p.m.	2.516
DG RTD										
• Human resources		0.179	0.140	0.140	0.140	0.140	0.140	0.140	p.m.	1.018
• Other administrative expenditure					0.03			0.03		0.06
TOTAL DG RTD	Appropriations	0.179	0.140	0.140	0.170	0.140	0.140	0.170	p.m.	1.078
TOTAL DG MOVE & RTD	Appropriations	0.598	0.466	0.466	0.566	0.466	0.466	0.566	p.m.	3.594

TOTAL appropriations under HEADING 1 of the multiannual financial framework	(Total commitments = Total payments)	0.598	0.466	0.466	0.566	0.466	0.466	0.566	p.m.	3.594
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The Union contribution to the Joint Undertaking is shared by DG MOVE (70%) and DG RTD (30%).

EUR million (to three decimal places)

		Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Years 2021 and later	TOTAL
TOTAL appropriations under HEADING 1 of the multiannual financial framework	Commitments	53.078	45.819	46.090	54.189	72.090	86.089	96.239	0.000	453.594
	Payments	1.078	51.819	60.090	60.189	60.090	60.089	60.190	100.049	453.594

3.2.2. *Estimated impact on operational appropriations*

- The proposal/initiative does not require the use of operational appropriations
- The proposal/initiative requires the use of operational appropriations, as explained below:

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	Total
Specific objective: Coordination of all relevant rail R&I activities in the EU and in line with the S2R Master Plan.	52.000	44.000	44.000	52.000	70.000	84.000	90.500	0	0	0	0	436.500

3.2.3. Estimated impact on appropriations of an administrative nature

3.2.3.1. Summary

- The proposal/initiative does not require the use of appropriations of an administrative nature
- The proposal/initiative requires the use of appropriations of an administrative nature, as explained below:

Staffing numbers in FTEs

	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	TOTAL
Total Temporary agents	0.5	4	4	4	4	4	4	4	3	2	1	34.5
Of which AD Grades	0.5	4	4	4	4	4	4	4	3	2	1	34.5
Of which AST Grades	0	0	0	0	0	0	0	0	0	0	0	0
Contract agents	2	10	13	13	13	13	13	9	6	3	1.5	96.5
Seconded National Experts	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2.5	14	17	17	17	17	17	13	9	5	2.5	131

* In the case of PPP bodies under Article 209 FR, this table is included for information purposes.

Staffing implications of the joint undertakings have been considered in the context of the decisions on resources relating to the new management modes under the Multi Annual Financial Framework. The result ensures budget neutrality compared to the level of administrative expenditures foreseen for the implementation of Horizon 2020.

Staff numbers have been calculated based on a benchmark of existing joint undertakings. Staff numbers would rise gradually between 2014 and 2016, and then remain stable until 2020. They would then be phased out as of 2021 as the S2R Joint Undertaking enters its winding down and legacy management phase. Of course, if the decision is taken to extend the duration of the S2R Joint Undertaking, staff costs in the years 2021 to 2024 would remain similar to levels in 2020.

At full speed, staff would likely include:

- The Executive Director and an advisor/assistant → 2 FTEs
- One head of unit and one secretary for one Financial and Administration Unit and one Programme unit → 4 FTEs
- Staff in the Financial and Administration Unit, including at least one financial and accounting officer, one HR and general administration officer, one communications and stakeholder relations officer, one IT officer and a legal and contractual officer → 5 FTEs
- Staff in the Programme Unit, including at least one project manager for each of the 5 innovation programmes and one in charge of cross-cutting issues → 6 FTEs

In year 2014, it is estimated that the staff will consist of 6 members of staff (including the Executive Director, and one Head of Unit (AD Grade Temporary Agents), as well as 4 Contract agents) who will be recruited between June and October 2014, hence the equivalent of a total of 2.5 FTEs.

In 2024, the number of FTEs is also calculated on the assumption that some members of staff may not work the full year if the Joint Undertaking is phased out.

EUR million (to three decimal places)

EUR millions	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	TOTAL

Total Temporary agents	0.066	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.327	0.218	0.109	3.772
Of which AD Grades	0.066	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.327	0.218	0.109	3.772
Of which AST Grades	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Contract agents	0.094	0.470	0.611	0.611	0.611	0.611	0.611	0.423	0.282	0.141	0.071	4.536	
Seconded National Experts	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
TOTAL	0.160	0.906	1.047	1.047	1.047	1.047	1.047	0.859	0.609	0.359	0.180	8.308	

Staff costs are based on the average staff costs calculated by DG BUDG, minus staff overhead costs, leading to direct staff costs of 109,000 EUR for temporary agents and of 47,000 EUR for contract agents, except in year 2014, where the full cost of the AD grade official is taken (132,000 EUR), given the higher grades of these positions.

The human resources appropriations required will be met by appropriations from the DG that are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

3.2.3.2. Estimated requirements of human resources

- The proposal/initiative does not require the use of human resources.
- The proposal/initiative requires the use of human resources, as explained below:

Estimate to be expressed in full time equivalent units

Parent DG	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020
Establishment plan posts (officials and temporary staff)							
XX 01 01 01 (Headquarters and Commission's Representation Offices)							
XX 01 01 02 (Delegations)							
08 01 05 01 (Indirect research)	1.5	1	1	1	1	1	1
06 01 05 01 (Indirect research)	2.5	2	2	2	2	2	2
10 01 05 01 (Direct research)							
<u>External staff (in Full Time Equivalent: FTE)[1]</u>							
XX 01 02 01 (CA, SNE, INT from the 'global envelope')							
XX 01 02 02 (CA, LA, SNE, INT and JED in the delegations)							
XX 01 04 yy[2] at Headquarters[3] in delegations							
06 01 05 02 (CA, SNE, INT - Indirect research)	1	1	1	1	1	1	1
10 01 05 02 (CA, SNE, INT- Direct research)							
Other budget lines (specify)							
TOTAL	5*	4	4	4	4	4	4

*Staffing numbers within the Commission are higher in 2014 than in the following years given the need for the Commission to set up the S2R Joint Undertaking, and also to manage collaborative research projects under the Transport Work Programme 2014-2015, which will subsequently be taken over by the Joint Undertaking. From 2015 to 2020, 4 FTEs will be required including 3 AD positions and 1 contract agent. The staff numbers for the period after 2020 will be decided at a later stage.

S2R Joint Undertaking	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024
Establishment plan posts (officials and temporary staff)											
Temporary Agents (AD grades)	0.5	4	4	4	4	4	4	4	3	2	1
Temporary Agents (AST grades)	0	0	0	0	0	0	0	0	0	0	0
<u>External staff (in Full Time Equivalent: FTE)[1]</u>											

CA	2	10	13	13	13	13	13	9	6	3	1.5
SNE											
INT											
TOTAL	2.5	14	17	17	17	17	17	13	9	5	2.5

In the case if PPP bodies under Article 209 FR, this table is included for information purposes.

The human resources required will be met by staff from the DG who are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

Description of tasks to be carried out:

Officials and temporary staff	As described in the Statutes of the S2R Joint Undertaking
External staff	As described in the Statutes of the S2R Joint Undertaking

3.2.4. Compatibility with the current multiannual financial framework

- Proposal/initiative is compatible the current multiannual financial framework.
- Proposal/initiative will entail reprogramming of the relevant heading in the multiannual financial framework.

Explain what reprogramming is required, specifying the budget lines concerned and the corresponding amounts.

- Proposal/initiative requires application of the flexibility instrument or revision of the multiannual financial framework³¹.

Explain what is required, specifying the headings and budget lines concerned and the corresponding amounts.

3.2.5. Third-party contributions

- The proposal/initiative does not provide for co-financing by third parties.
- The proposal/initiative provides for the co-financing estimated below:

Appropriations in EUR million (to 3 decimal places)

	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Years 2021 and later	Total
Specify the co-financing body – contribution in cash to the administrative costs	0.480	1.353	1.624	1.623	1.624	1.623	1.624	3.549	13.500
Specify the co-financing body – contribution in kind to the operational costs*	0.000	41.000	41.000	41.000	41.000	41.000	41.000	90.500	336.500
TOTAL appropriations cofinanced	0.480	42.353	42.624	42.623	42.624	42.623	42.624	94.049	350.000
Additional activities	0.000	10.000	12.000	12.000	12.000	12.000	12.000	50.000	120.000
TOTAL third-party commitments	0.480	52.353	54.624	54.623	54.624	54.623	54.624	144.049	470.000

³¹ See points 19 and 24 of the Interinstitutional Agreement (for the period 2007-2013).

Estimated impact on revenue

- X Proposal/initiative has no financial impact on revenue.
- Proposal/initiative has the following financial impact:
 - on own resources
 - on miscellaneous revenue