



**Innovation and Networks Executive Agency**

Department C - Connecting Europe Facility (CEF)

**AMENDMENT N° 1**  
**TO AGREEMENT No INEA/CEF/TRAN/M2014/1045990**

The **Innovation and Networks Executive Agency (INEA)** ("the Agency"), under the powers delegated by the European Commission ("the Commission"), represented for the purposes of signature of this amendment by the Head of Department C of the Agency, Andreas Boschen,

on the one part,

**and**

**1. RB Rail AS (RB Rail)**  
Joint Stock Company  
Registration No 40103845025  
K. Valdemara iela 8-7  
LV-1010 Riga  
Latvia  
VAT No LV40103845025,

hereinafter referred to as “the coordinator”, represented for the purposes of signature of this amendment [REDACTED]

and the following other beneficiaries:

- 2. Ministry of Economic Affairs and Communications of the Republic of Estonia (Min EAC - EE)** - established in Estonia
- 3. Ministry of Transport of the Republic of Latvia (Min Tran - LV)** - established in Latvia
- 4. Ministry of Transport and Communications of the Republic of Lithuania (MoTC - LT)** - established in Lithuania

duly represented by the coordinator by virtue of the mandates included in Annex IV of the above-mentioned grant agreement for the signature of this amendment,

hereinafter referred to collectively as “the beneficiaries”, and individually as “beneficiary” for the purposes of this amendment where a provision applies without distinction between the coordinator or another beneficiary,

on the other part,

Having regard to the above-mentioned grant agreement concluded between the Agency and the coordinator on 19/11/2015,

Whereas:

- (1) The coordinator has requested the Agency on 11/06/2019 to amend the above-mentioned grant agreement for the following reason(s): To adjust the scope and extend the duration of the Action taking into account the developments and evolution of the Global Project and restructuring the Action's activities according to the updated planning.
- (2) The measures provided for in this amendment do not affect the award of the Union financial aid.

HAVE AGREED AS FOLLOWS:

## Article 1

- (1) In Article 1 the title of the action "Development of a 1435 mm standard gauge railway line in the Rail Baltic/Rail Baltica (RB) corridor through Estonia, Latvia and Lithuania" is replaced by "**Development of a 1435 mm standard gauge railway line in the Rail Baltica (RB) corridor through Estonia, Latvia and Lithuania**".

- (2) Article 2.2 is replaced by the following article:

"2.2 The action shall run from 01/03/2015 ("the starting date") until 31/12/2022 ("the completion date")".

- (3) Article 3 "Maximum amount and form of the grant" is replaced by the following article:

## "ARTICLE 3 – MAXIMUM AMOUNT AND FORM OF THE GRANT

The grant for the action shall be of a **maximum amount of EUR 442,230,615**.

The grant shall take the form of:

- (a) the reimbursement of the eligible costs of the action ("reimbursement of eligible costs"), which are estimated at EUR 536,720,094, according to the following conditions:
  - (a1) Reimbursement of 81% of the eligible costs for the direct costs of the following activities: Activity 15, Activity 16, Activity 17, Activity 18, Activity 19, Activity 20, Activity 21, Activity 22, Activity 26, which are
    - (i) actually incurred ("reimbursement of actual costs")
    - (ii) reimbursement of unit costs: not applicable
    - (iii) reimbursement of lump sum costs: not applicable
    - (iv) reimbursement of flat-rate costs: not applicable
    - (v) declared on the basis of an amount per unit calculated in accordance with the beneficiary's usual cost accounting practices ("reimbursement of costs

declared on the basis of the beneficiary's usual cost accounting practices”) for personnel costs

- (a2) Reimbursement of 85% of the eligible costs for the direct costs of the following activities: Activity 1, Activity 2, Activity 3, Activity 4, Activity 5, Activity 6, Activity 7, Activity 8, Activity 9, Activity 10, Activity 11, Activity 12, Activity 13, Activity 14, Activity 23, Activity 24, Activity 25, which are
- (i) actually incurred (“reimbursement of actual costs”)
  - (ii) reimbursement of unit costs: not applicable
  - (iii) reimbursement of lump sum costs: not applicable
  - (iv) reimbursement of flat-rate costs: not applicable
  - (v) declared on the basis of an amount per unit calculated in accordance with the beneficiary’s usual cost accounting practices (“reimbursement of costs declared on the basis of the beneficiary's usual cost accounting practices”) for personnel costs

(b) unit contribution: not applicable

(c) lump sum contribution: not applicable

(d) flat-rate contribution: not applicable"

(4) Article 4.1.1 "Reporting periods" is replaced by the following article:

#### **"4.1.1 Reporting periods**

The action is divided into the following reporting periods:

- Reporting period 1 from the starting date of the action to 31 December 2015;
- Reporting period 2 from 1 January 2016 to 31 December 2016;
- Reporting period 3 from 1 January 2017 to 31 December 2017;
- Reporting period 4 from 1 January 2018 to 31 December 2018;
- Reporting period 5 from 1 January 2019 to 31 December 2019;
- Reporting period 6 from 1 January 2020 to 31 December 2020;
- Reporting period 7 from 1 January 2021 to 31 December 2021;
- Last reporting period from 1 January 2022 to the completion date of the action."

(5) Article 8 "Implementing bodies" is replaced by the following article:

#### **"ARTICLE 8 – IMPLEMENTING BODIES DESIGNATED BY THE BENEFICIARIES**

For the purpose of this Agreement, the following entities are considered as implementing bodies:

- Estonian Technical Regulatory Authority, designated by Min EAC - EE;
- Rail Baltic Estonia OU, designated by Min EAC - EE;
- SIA Eiropas dzelzceļa līnijas, designated by Min Tran - LV;
- UAB „Rail Baltica statyba”, designated by MoTC - LT;
- AB "Lietuvos Geležinkelių Infrastruktūra", designated by MoTC - LT;" from December 8, 2019

(6) Annex I shall read as follows:

## **"ANNEX I DESCRIPTION OF THE ACTION**

### **ARTICLE I.1 – IMPLEMENTATION OF THE TEN-T NETWORK**

The action contributes to the implementation of the:

- the core network
  - Corridor(s): North Sea - Baltic
  - Pre-identified section(s) on the core network corridor(s):
    - Tallinn - Riga - Kaunas - Warszawa

### **ARTICLE I.2 – LOCATION OF THE ACTION**

I.2.1 Member State(s): Estonia, Latvia, Lithuania.

I.2.2 Region(s) (using the NUTS2 nomenclature): Latvija (LV00), Lietuva (LT00), Eesti (EE00).

I.2.3 Third country(ies): not applicable.

### **ARTICLE I.3 – SCOPE AND OBJECTIVES OF THE ACTION**

The Action is part of the pre-identified, cross-border "Rail Baltica" project connecting the three Baltic States with Central Europe along the North Sea – Baltic Corridor. The aim of the Global Project "Rail Baltica" (Tallinn-Riga-Kaunas-Warsaw axis) is to develop a new, EU gauge, double-track, electrified, fast conventional railway line to eliminate the technical bottleneck due to the gauge differences (1520 mm vs. EU 1435 mm).

The aim of this Action is to implement the necessary preparatory activities (for example studies, technical designs, land acquisition, building permit, etc.), for the first phase of construction works (preparatory construction works, start of construction of railway and civil structures in pre-selected sections of the railway line) and to prepare for the main construction phases of the railway line. The activities of the Action are located on several sites in Estonia, Latvia and Lithuania.

The railway's main technical parameters shall meet the requirements of traffic code P2-F1 as per INF TSI (Commission Regulation 1299/2014/EU) and shall also comply with the Rail Baltica Design Guidelines which were approved by all stakeholders.

The main objectives of this Action are the following:

- Implementation of the railway route related studies to ensure a successful implementation of the project;
- Preparation and application of common technical standards and parameters for the Global Project
- Preparation of the technical design of the track and railway related structures from Kaunas

(RRT) to Tallinn;

- Technical consultancy for designs vis-à-vis the technical requirements;
- Planning of the land acquisition activities alongside the planned RB route and land acquisition (Phase I);
- Construction of civil structures (grade-level crossings, ecoducts) on Tallinn – EE/LV border section;
- Construction of the first phases of Ülemiste and Pärnu passenger terminals, of Riga Central terminal and Riga International Airport passenger terminal; first phase of construction of the railway connection between Riga Central Station and Riga International Airport;
- Construction of a first section of the alignment Kaunas (RRT)- Panevėžys - Lithuanian/Latvian border (Phase I, [REDACTED]);
- Implementation of a communication plan and PR activities in order to keep stakeholders and the public informed of the progress of the project;
- Supervision of works to ensure that the construction is in compliance with technical design;
- Project management and coordination, including the development of a Building Information Modelling system and a Geographic Information System for the Global Project ensuring a technically coherent and interoperable deployment of the railway;
- Contribution to the implementation of the North Sea-Baltic Core Network Corridor and the development of the EU internal market.

The fulfilment of EU environmental law, in particular, the provisions of Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, Directive 2009/147/EC on the conservation of wild birds, Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna, Directive 2000/60/EC establishing a framework for community policy in the field of water, is a pre-condition for the disbursement of EU financial aid to the Action. The compulsory assessments must be duly completed and approved by the competent authorities according to national law and in line with requirements of relevant EU legislation before the start of the physical intervention. If this information is not provided or is not positively assessed by the Commission services, the Agency may suspend, reduce, recover or terminate financial assistance in accordance with articles II.15, II.16, II.24.5 and II.25.4.

The milestones no. 33, 36, 39, 43, 44, 48, 65, 73, 80, 81, 87, 89, 95, 98, 101, 104, 106, 109, 115, 150, 162, 163 are considered critical for the timely completion of the Action. A delay in their achievement, if not properly mitigated by the beneficiaries, may therefore result in the non-completion of the Action by its end date. Consequently, the Agency may take appropriate measures in accordance with the provisions of the grant agreement.

## ARTICLE I.4 – ACTIVITIES

### I.4.1 Activities timetable

Activity number	Activity title	Indicative start date	Indicative end date	Milestone number
1	Development of new cost-benefit analysis of Rail Baltica Global Project (RB Rail)	[REDACTED]	[REDACTED]	1, 2
2	Preparation of the Rail Baltica Operational Plan (RB Rail)	[REDACTED]	[REDACTED]	3, 4

3	Preparation of business plan (RB Rail)			5, 6
4	Study on contracting scheme for the RB works across all Baltic States (RB Rail)			7, 8
5	Preparation of common Rail Baltica Design Guidelines (RB Rail)			9, 10, 11, 12, 13
6	Commercialization studies and market analysis, Phase I (RB Rail)			14, 15
7	Study of ensuring the supply of raw materials and mineral resources in Estonia (EE)			16, 17
8	Environmental mitigation measures preparation and implementation (EE)			18, 19, 20, 21, 22, 23
9	Archaeological studies of relevant areas along the planned route (EE)			24, 25, 26, 27
10	Study and detailed plan on technical parameters and functionalities for infrastructure maintenance facilities (EE)			28, 29, 147, 148
11	Development of land acquisition plan for Central section in Latvia (LV)			30, 31
12	Detailed technical design of entire railway line and local facilities in Estonia (EE)			32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158
13	Detailed technical design of the railway line including two multi-modal passenger terminals in Latvia (LV)			56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78
14	Detailed technical design of the railway line in Lithuania, Phase I (LT)			79, 80, 81, 82, 83, 84
15	Construction of Rail Baltica railway line in Estonia, Phase I (EE)			85, 86, 87, 88, 89, 90, 159
16	Construction of Tallinn Ülemiste passenger terminal, Phase I (EE)			91, 92, 93, 94, 95, 96
17	Construction of Pärnu passenger station, Phase I (EE)			97, 98, 99
18	Riga Central Station railway section construction works, Phase I (LV)			100, 101, 102, 160

19	Construction of Rail Baltica Terminal at Riga International Airport and railway section, Phase I (LV)			103, 104, 105, 161
20	Construction of the section Kaunas (RRT)-Panevėžys-LT/LV border, Phase I (LT)			106, 107
21	Land acquisition in Estonia (EE)			108, 109, 110, 162
22	Land acquisition in Latvia, Phase I (LV)			111, 112, 163
23	Global project and action implementation support measures (RB Rail, EE, LV, LT)			113, 114, 115, 116, 117, 118
24	Communication and PR with public (RB Rail, EE, LV)			119, 120, 121, 122, 123, 124, 125
25	Technical Assessment of the detailed technical design (RB Rail, EE, LV, LT)			126, 127, 128, 129, 130, 131, 132, 133, 134
26	Supervision services and assessments of construction works (RB Rail, EE, LV, LT)			135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146

#### I.4.2 Activities description

With the purpose to: i) ensure technical coherence and interoperability of this Action with the Global Project through compliance with the Rail Baltica Design Guidelines (DG), and ii) assess the eligibility of the costs, INEA will take into account the following conditions:

(1) Contracts signed after the adoption of the DG, i.e. as of 24/04/2018, must:

- a. either be compliant with the DG;
- b. or possess an approved derogation as per the change management procedure of the DG, including where necessary a roadmap to comply with the DG.

In case, to comply with the DG, it will be necessary to demolish, dismantle and/or reconstruct any element of a railway (sub)section built during and covered by the present Grant Agreement, then costs incurred under the present Grant Agreement for such (sub)section are not considered eligible.

The derogation and substantiated elements demonstrating that demolishing, dismantling and/or reconstruction will or will not be necessary has to be approved in line with the DG procedures and submitted to INEA as soon as possible and at the latest with the submission of the final report and financial statement of the Action.

(2) For i) contracts completed before the adoption of the DG, and ii) contracts under

implementation when the DG were adopted (24/04/2018):

- a. The concerned beneficiary has to identify, in cooperation with RB Rail (the coordinator of the Global Project Rail Baltica), any deviation from the DG, and where applicable shall define a clear roadmap to be approved by RB Rail to identify the measures and timetable to align with the DG.
- b. Such identification and any future roadmap developed and approved as described under (2) a. must be submitted to INEA as soon as possible and at the latest with the submission of the final report and financial statement of the Action.

RB Rail must establish a DG compliance register and maintain an overview of compliance with the DG of the complete Global Project in Estonia, Latvia and Lithuania.

As a general remark and not contradicting the DG, when assessing derogations and/or roadmaps resulting from identified deviations from the DG (points 1 and 2 above), the concerned parties involved in this process could, if deemed necessary, properly justified and approved by RB Rail, take into account the following points:

- a) the identified deviations from the DG have occurred as a result of contracts that had been procured/signed before the approval of the DG;
- b) the necessary corrective measures to ensure compliance of the design and/or construction with the DG would necessitate new permitting procedures.

The estimated costs referred to in Annex III of this grant agreement do not include VAT.

#### **Activity 1: Development of new cost-benefit analysis of Rail Baltica Global Project (RB Rail)**

The activity concerns the updating of an existing cost-benefit analysis (CBA) of the Global Project (AECOM study of 2011) along the entire Rail Baltic (RB) line. The activity also includes demand forecast, investigation on interoperability assessment, financial analysis, coordination with national CBA studies and an implementation plan.

The result of the activity will be the new CBA of the Global Project.  
(Responsible beneficiary: Joint Venture RB Rail AS)

#### **Activity 2: Preparation of the Rail Baltica Operational Plan (RB Rail)**

The activity aims at preparing the Operational Plan in accordance with a revised traffic modelling acquired through the updated CBA.

The Operational Plan includes the study of interoperability, organization of maintenance and management of traffic flows. The study analyses the services of the railway and the resulting need for amendment of environmental impact models (e.g. impact on revised traffic models on noise, vibration, etc.).

The Operational Plan will define all relevant aspects of railway operations on a fully interoperable railway line in the post-construction phase, thus providing inputs for design and construction phases (standards, specifications, requirements etc.) The Operational Plan will be prepared according to the results of technical studies, SEA / EIA procedures and preliminary design.

The Operational Plan will be subsequently updated after completion of the detailed technical design and further studies. The Operational Plan will give input for risk analysis of the



infrastructure manager, planning the traffic of the railway as well as organization of the services.

The need for an update of the Operational Plan shall be analyzed based on recommendations issued in this respect by the Railway Operations Reference Group (established as a part of the project delivery organization activity under Action 2016-EU-TMC-0116-M).

The result of the activity is the up to date Operational Plan.

(Responsible beneficiary: Joint Venture RB Rail AS)

### **Activity 3: Preparation of business plan (RB Rail)**

The business plan includes market overview (incl. market demand analysis), customer and competitive analysis, market and financial plan (incl. finance and revenue model, sales projections and readiness). Business plan is a prerequisite for the successful implementation of the current action and for the future funding applications for the activities of the Global Project.

After completion of the updated/new CBA, as part of the business plan, a consolidated analysis of the cargo flows between the freight terminals shall be carried out, in order to facilitate the movements of additional freight flows through the multimodal freight terminals and crossing different transport modes.

The result of the activity is a completed business plan.

(Responsible beneficiary: Joint Venture RB Rail AS)

### **Activity 4: Study on contracting scheme for the RB works across all Baltic States (RB Rail)**

This study will include analyses on governance model, legal structure, funding/financing flow, procurement strategy, tax implications. The study on the contracting scheme is a prerequisite for the successful implementation of the current Action and division of roles and responsibilities.

The result of the activity is the study on contracting scheme and resulting standard cooperation agreements between the Coordinator, beneficiaries and implementing bodies (if required by the contracting scheme) for Rail Baltica.

(Responsible beneficiary: Joint Venture RB Rail AS)

### **Activity 5: Preparation of common Rail Baltica Design Guidelines (RB Rail)**

The aim of activity is preparation of common Design Guidelines for the Rail Baltica project.

Design Guidelines includes definition of detailed technical requirements, operational standards and as well as functional requirements. The Design Guidelines are compliant to relevant TSI and define main technical parameters as design speed of up to 249 km/h for passenger traffic and up to 120 km/h for freight traffic, axle load 25 t and length of freight trains 1050 m, 2x25 kV energy system and ETCS L2 command-control and signalling system.

The preparation of Design Guidelines is prerequisite to start the Detailed Technical Design for the railway line under activities 12, 13 and 14.

Design Guidelines will be updated when necessary and derogation requests evaluated by

involving the Technical Reference Group as part of the Design Guidelines' Change management procedure. Multiple studies prepared under this Action (e.g. Activity 6) as well several activities under Action 2015-EU-TM-0347-M and Action 2016-EU-TMC-0116-M will be used to update Design Guidelines for further implementation of design activities through Rail Baltica Global Project implementation process.

The result of the activity is the prepared and subsequently updated Rail Baltica Design Guidelines.

(Responsible beneficiary: Joint Venture Rail Baltic AS)

### **Activity 6: Commercialization studies and market analysis, Phase I (RB Rail)**

This activity aims at providing a proactive and forward-looking commercialization effort to ensure the future commercial viability of the Rail Baltica infrastructure, promote traffic development, strengthen the long-term business case, maximize the gross value added (GVA) along the entire Rail Baltica economic corridor, as well as to ensure infrastructural compatibility with the needs of the future users and the wider economy.

RB Rail, therefore, deploys a comprehensive approach in this area, consisting of mutually reinforcing a) study-type activities (covered by this Activity) and b) practical activities (covered by Action 2016-EU-TMC-0116-M).

This Activity comprises studies and market analysis. The concrete studies are identified and dynamically added in line with the needs of the development of the Global Project, not least in direct relation or as a follow-up to other key activities (including CBA (Activity 1), long-term Business Plan (Activity 3), Operational Plan (Activity 2), Infrastructure Management Study (Action 2016-EU-TMC-0116-M) , detailed technical design (e.g. stations' design, terminal layouts and capacities, modal integration, value added operations – prepared under Activities 12, 13 and 14), etc.

Furthermore, the findings of these studies and market analysis are subsequently used in both promoting and incubating long-term competences required for future management and operation of Rail Baltica, as well as to help identify relevant practical follow-up activities such as (but not limited to) pilot projects in the field of railway and logistics infrastructure development, commercialization, digitalization and innovation, as well as maximization of the long-term gross value added (GVA) and socio economic benefits of Rail Baltica.

Commercialization is a continuous and recurring activity throughout project delivery phase and beyond. Therefore, this Activity constitutes the 1st phase (2016-2020).

Based on the above, the following ongoing or planned sub-activities are foreseen:

- a) intermodal studies regarding the infrastructural and commercial aspects and pre-requisites for the development of intermodal passenger and freight mobility (including piggyback transportation services, seamless air-to-rail intermodal connectivity, as well as integration between Rail Baltica and the 1520mm existing networks);
- b) GVA and benchmarking studies related to the development of international passenger stations, promotion of secondary economic benefits from high-speed rail development;
- c) logistics studies (including traffic development, freight village development, e-commerce solutions, industry supply chain management, urban/last mile logistics, project cargo);
- d) digitalization & innovation studies and strategy development;
- e) sustainability studies and strategy development.

The outcomes and findings of these studies and strategies shall, among other, be used as input to practical commercialization and business development activities (including to Action 2016-EU-TMC-0116-M) and related future activities of the Rail Baltica Global project.  
(Responsible beneficiary: Joint Venture RB Rail AS)

**Activity 7: Study of ensuring the supply of raw materials and mineral resources in Estonia (EE)**

The aim of the activity is to determine technical and physical-chemical quality of available active and passive mineral deposits and mines (mainly sand, gravel, limestone) in Estonia.

The activity will be implemented by conducting several studies to determine the availability of mineral materials for the construction of Rail Baltica, determine the quality of materials in existing quarries and possible new materials that can be used for RB construction, enforce possibilities of using oil shale residue limestone for RB construction etc.

In the frame of the activity the following studies will be conducted:

**1. Study on mineral resources availability and quality for RB construction in Estonia**

The result of the study will determine the needs, availability and quality of mineral materials for construction of Rail Baltica line in Estonia.

Analyses of using alternative materials and provision of solutions for areas with lack of materials will be conducted.

The properties of various aggregates produced in Estonia and their suitability and accordance to the Rail Baltic Design Guidelines, standard UIC 719R and the other requirements like type and grain composition, fracture toughness and durability, moisture sensitivity, cold-resistance will be determined. The study is conducted by means of sampling and laboratory analyses.

The study shall focus on the aggregates used in the construction of railway sub-ballast, railway prepared subgrade and railway track bed.

Outcome of the study will be used as input for the Detailed Technical Designs as well as for planning and scheduling of construction works.

**2. Study for technical solutions for construction of RB on Rääma bog**

The result of the study will determine geological conditions for construction in the Rääma bog in Pärnu county. Several penetration tests and drillings will be made with laboratory analyses of the test pieces to determine the different soil layer conditions.

Based on the results of the analyses data interpretations into the geotechnical characteristics (load model etc) and sketch solution for railway construction will be prepared, which is the necessary precondition of the final technical solution for Rääma bog area.

The results of the study will be used in the Detailed Technical Designs of the RB main line on the section between Pärnu and EE/LV border.

**3. Usage of oil shale production mineral residue produced construction materials in the embankment construction – applying circular economy**

The result of the activity will determine the technical usability and economic feasibility for usage of limestone rubble and ash derived from Eesti Energia Estonia quarry as certified construction materials for Rail Baltica embankment and side roads embankment or stabilization, in order to introduce more intensively the circular economy in reality.

These materials can be used as alternative to acquiring limestone as a filler material from new quarries or extending existing quarries. Materials mined with oil shale are currently seen as

residue yet, but with proper treatment they can be used as construction materials.

The goal of the study is to determine the physical parameters of the residue limestone rubble fractions and to set proportions for mixing with other materials to comply with the standards of railway construction layers with lower demanded load indicators.

The outcome of the study will be used for the Detailed Technical Design activities as well as in the preparation of construction tender documentation.

Overall results of the activity are detailed laboratory results and study reports determining and indicating the quality and availability of the usage of local raw materials and products created from them for RB construction. Results of the studies are considered in the construction logistics setup for RB on Estonian soil, the master design of Rail Baltica (prepared under activity 12) and in construction material sourcing during construction (study prepared under Action 2016-EU-TMC-0116-M).

(Responsible beneficiary: Ministry of Economic Affairs and Communications of the Republic of Estonia)

### **Activity 8: Environmental mitigation measures preparation and implementation (EE)**

Aim of the activity is ensuring compatibility of further Global Project phases (technical design and environmental impact assessment, construction and operations of the railway) with the strategic environmental impact assessment (SEA; prepared under Action 2012-EE-27001-S) adopted together with the RB spatial plans in Estonia. Altogether three sub activities are defined:

#### **Sub-activity 1: Environmental studies**

Aim of the sub-activity is to implement the conditions set by SEA (prepared under Action 2012-EE-27001-S) and which need to be implemented during technical design phase (Activity 12) and construction phase (Activities 15, 16 and 17 of this Action and subsequent construction activities which are not part of this Action).

SEA determined for following studies to be prepared: animal passes technical feasibility study, capercilliae monitoring and possible rehabilitation program, testing alternatives for fencing, water regime surveys in endangered areas, replanning of sand lizard habitats, development of migratory passes for bat species, replanning of amphibian spawning ponds, development of semi-natural meadows in the vicinity of RB railway, etc.

The studies will be started in the course of the RB preparations and finalized depending on the study and its impact before, during or after the design phase. The results of the studies will be used as input in the Detailed Technical Design (Activity 12) and construction (Activities 15, 16 and 17 of this Action) activities.

#### **Sub-activity 2: Application of non-construction mitigation measures**

Aim of the sub-activity is to implement the conditions set by SEA (prepared under Action 2012-EE-27001-S). Such mitigation measures are of a non-constructive manner (as opposed to e.g. construction of noise barriers). Example of measures are relocation of certain species to adjacent areas, etc.

The outcome of the application of non-construction mitigation measures will be coherence of Rail Baltica to certain environmental conditions imposed by the SEA.

#### **Sub-activity 3: Environmental management plan development**

Aim of this sub-activity is to prepare an environmental management plan for RB on Estonian

territory as required by the SEA.

The outcome of the sub-activity is the environmental management plan for RB construction and operations phase.

The overall result of the activity is coherent Rail Baltica construction and operations phase with the SEA as part of the adopted spatial plans. Coherence to the adopted spatial plans is a prerequisite for application of building permits for RB construction.

It is foreseen that part of the tasks will be carried out by in-house personnel [REDACTED].

(Responsible beneficiary: Ministry of Economic Affairs and Communications of the Republic of Estonia)

### **Activity 9: Archaeological studies of relevant areas along the planned route (EE)**

Aim of the activity is to perform archaeological studies in [REDACTED] pre-determined locations for possible on-site findings.

The activity is based on two previous archaeological study phases completed in 2017 and outside the scope of this Action. They handled general needs of archaeological excavations needed according to performed SEA/EIA.

The activity can be seen therefore as the third phase of archaeological studies on the Rail Baltica route in Estonia. This third phase deals with measurement of the defined locations for excavation purposes and the excavations themselves. The activity is divided in two sub-activities.

#### **Sub-activity 1: Measurement of the pre-determined locations**

Aim of this sub-activity is to define exact geographical locations for excavation. Previous studies have determined the excavation areas, as part of the current sub-activity the locations will be measured precisely for the exact locations for excavation.

The outcome of the measurement of the pre-determined locations will be the location plans for excavation.

#### **Sub-activity 2: Excavations in the predetermined and measured locations**

Aim of the sub-activity is to perform archaeological excavations in the measured areas.

The outcome of the excavations are reports determining findings. In case of findings the areas will be surveyed and further actions for the detailed technical design and construction works determined.

Results are study reports on the archaeological findings. The results will be considered for the design and construction phases of Rail Baltica on Estonian territory. It will ensure risk mitigation for unforeseen extension of construction activities due to unplanned archaeological findings and eventual need for additional archaeological investigations.

(Responsible beneficiary: Ministry of Economic Affairs and Communications of the Republic of Estonia)

### **Activity 10: Study and detailed plan on technical parameters and functionalities for infrastructure maintenance facilities (EE)**

Aim of the activity is to propose technical parameters and functionalities for the infrastructure management facilities and maintenance depot, and for locations of the facilities in Estonia. Based on these proposals then the spatial planning of the facilities will be conducted.

The parameters, functionalities and locations will be analysed based on the Rail Baltica Global Project requirements and considering the necessities for the whole route. An infrastructure maintenance depot is necessary to perform maintenance of the RB railway tracks on Estonian territory.

The activity consists of two sub-activities:

Sub-activity 1: Study of the infrastructure management facilities (spatial and technological needs)

Aim of this sub-activity is to analyze technological needs of the Rail Baltica railway maintenance facilities and to propose an optimal solution to cover these needs on the Estonian territory. The study will be used as an input for the Global Project infrastructure maintenance study (prepared under Action 2016-EU-TMC-0116-M) which will then determine the facility locations throughout the three Baltic States.

Sub-activity 2: Detailed spatial plan of the infrastructure maintenance facilities in Estonia

Aim of this sub-activity is to provide for a spatial plan as one of the prerequisites for receiving a building permit for the infrastructure maintenance facilities.

The process will be conducted according to the Estonian Planning Act after the locations have been fixed as a result of the Global Project infrastructure management study. At least sketch design for the facilities will be conducted in the course of the detailed spatial planning process to allow for an effective planning process.

The sub-activity will be implemented once the Global Project study (prepared under Action 2016-EU-TMC-0116-M) is finalized and the locations throughout the whole RB route throughout the Baltic States are fixed.

The results of the activity are the study on technical parameters and functionalities for the infrastructure maintenance facility (study reports), design documents and accepted detailed plans. The results will be used in the design and construction phases of the infrastructure management facilities.

Results of activity will be used as input data for further implementation of the related design activity under Action 2016-EU-TMC-0116-M.

It is foreseen that part of the tasks will be carried out by in-house personnel [REDACTED]

[REDACTED]  
(Responsible beneficiary: Ministry of Economic Affairs and Communications of the Republic of Estonia)

### **Activity 11: Development of land acquisition plan for Central section in Latvia (LV)**

The Activity will include the studies of the land ownership along the approved RB alignment in the Central section of Latvia (Riga area from Upeslejas/Salaspils through Riga to Iecava) in order to identify the necessary procedures for the land acquisition.

The result of the activity is the completed land acquisition plan for the whole Central Section, submitted to and approved by the Ministry of Transport.

(Responsible beneficiary: Ministry of Transport of the Republic of Latvia)

## **Activity 12: Detailed technical design of entire railway line and local facilities in Estonia (EE)**

The aim of this activity is the development of the Detailed Technical Design (DTD) of Rail Baltica railway line in Estonia, including for the two multi-modal passenger terminals (Ülemiste and Pärnu), Muuga TEN-T Port freight terminal and Ülemiste rolling stock maintenance depot.

Design documentation shall be prepared according to Building Information Modelling (BIM) requirements (BIM strategy developed under Action No. 2016-EU-TMC-0116-M).

The design process will include site investigations (including geotechnical surveys), value engineering (including multicriteria analysis as decision making tool), the Master Design and detailed technical designs.

The quantities and elements of the design sections and its objects are indicative based on the spatial plans, SEA/EIA, Preliminary Design and considering Consolidated Preliminary Design solutions, which may vary during design.

Chainage of the design and construction work sections is provided for information purposes as overall Rail Baltica chainage based on Operational Plan developed under Activity 2. This chainage will be updated during Master Design, Detailed Technical Design and construction until the project is implemented, and as built chainage is available. The Coordinator maintains chainage correspondence table to ensure traceability during all project phases.

Detailed technical design scope will contain all the parts required under national legislation and will cover design of railway track, passenger platforms, access and terminals buildings, alignment and structures, necessary road structures, other civil structures and buildings. Detailed technical design will also include, where necessary: (1) relocation and/or reconstruction of the existing 1520mm railway infrastructure (tracks, structures and facilities, signalling, electrification and other sub-systems); (2) relocation or crossing of main state roads and viaducts, municipality roads and viaducts, construction of access roads to land plots; (3) construction of grade separated pedestrian walkaway and cyclist path crossings; (4) relocation of crossing utilities (gas, electric power, telecommunication) transmission and supply infrastructure as well as (5) relocation of crossing municipality utilities (water and sewage networks, centralized heating networks); (6) demolition of civil structures and buildings to accommodate the railway and other necessary works and designs, (7) construction of noise barriers, relocation of species, recreation of bog areas and other environmental impact mitigation measures, (8) other works that will be known after completion of all necessary investigations and surveys and once all requirements from Authorities and Affected Parties are received, including, but not limited to amelioration designs, landscaping designs, designs to retain structural stability of nearby buildings and structures, plans for relocation of fencing, relocation of housing and other necessary impact compensatory measures.

If necessary, EIA procedures might be performed on the railway sections where substantial changes to the preliminary technical solutions are identified.

Signaling and energy system design will be developed at conceptual level necessary for railway infrastructure and civil works design only. For sections where existing 1520 mm infrastructure needs to be redesigned in order to place 1435mm infrastructure, full design of

1520mm signalling and energy systems of the sections affected (to the minimum extent possible) will be completed under this Activity in order to allow for a continuous operation of the 1520mm railway network.

To complete the design the land necessary for the infrastructure needs to be acquired. Furthermore it is necessary to perform the assessments and verifications arising from requirements of EU and national law as well as from necessity to ensure design compliance with Design Guidelines and addressing the findings of Operational Plan.

This activity foresees eight sub-activities:

Sub-activity 1: Detailed technical design of the railway line section Tallinn to Rapla [REDACTED] and Soodevahe to Muuga [REDACTED]

The total length of this section is approximately 48 kilometers and includes design of bridges [REDACTED], road and railway viaducts [REDACTED], eco-ducts [REDACTED], operational points (stations or passing loops: Ülemiste passenger station, Ülemiste car shuttle loading station, Ülemiste rolling stock service depot, Rae station (design of passing loops), Muuga freight (connection to freight station), Assaku (emergency passenger platforms), Luige (local passenger platforms at conceptional levels), Saku (local passengers platform at conceptional level), Kurtna (passing loops), Kohila (passing loops)).

Sub-activity 2: Detailed technical design of the railway line section Rapla to Pärnu [REDACTED]

The total length of this section is approximately 71 kilometers and includes design of bridges [REDACTED], road and railway viaducts [REDACTED], eco-ducts [REDACTED], operational points (stations or passing loops: Rapla, Järvakandi, Kaisma, Tootsi).

Sub-activity 3: Detailed technical design of the railway line section Pärnu to Estonia/Latvia border [REDACTED]

The total length of this section is approximately 93,5 kilometres, includes design of bridges [REDACTED], road and railway viaducts [REDACTED], eco-ducts [REDACTED], and following operational points (stations or passing loops): Tootsi local stop with passing loop (local passenger platforms at conceptional level), Pärnu freight station with passing loop, Pärnu international passenger terminal with passing loops (including platforms and underpasses under the railway), Häädemeeste local stop with passing loop (local passenger platforms at conceptional level) (Häädemeeste, Pärnu passenger, Pärnu freight).

Sub-activity 4: Detailed technical design of Ülemiste passenger terminal building and related civil structures [REDACTED]

Ülemiste passenger terminal is one of the two Rail Baltica international passenger terminals in Estonia. The terminal will be situated in the current Ülemiste 1520 mm gauge train stop. It will be designed and built together with facilities necessary for train operations in accordance with Operational Plan recommendations and for fitting the terminal into the surrounding area as determined in the detailed spatial plan in preparation (detailed spatial planning started as



part of Action No 2012-EE-27001-S). The area of design is determined in the detailed spatial plan initiation order, taking into account the need to cover the immediate surrounding area of the new terminal building and railway to enable full integration of the new structures into the existing urban environment.

The detailed technical design will cover the following elements:

- design (DTD) of the 1435 mm gauge railway tracks, with relocation of the existing 1520 mm gauge railway tracks together with signalling,
- design (DTD) of the terminal building,
- design (DTD) of necessary support structures – estacades, embankment, underpasses, platforms.

The design (DTD) will cover the immediate surrounding area of the new station building and railway to enable full integration of the new structures into the existing urban environment. The immediate surrounding area is limited to the scope of the design contest and is restricted to:

- access streets and pedestrian paths to the station building (including underpass for pedestrians),
- traffic schematics,
- parking areas necessary and directly linked to the usage of the terminal,
- terminal square for passenger access to the terminal building from existing surrounding areas and facilities.

The design will provide for a connection between the urban areas north and south of the 1520 and 1435 mm gauge railway. Besides the superstructure the design will provide solutions for the substructures (incl. utilities, such as water and sewage pipes, electrical cables etc).

The sub-activity includes the studies to determine the functionality and dimensions of the station, the design contest for the passenger terminal building area, detailed spatial planning of the terminal and surrounding area, and preparation of detailed technical design based on design contest results.

The result of this sub-activity will be used in the implementation of the construction works of Ulemiste passenger terminal (Phase I is part of this Action, Activity 16).

Sub-activity 5: Detailed technical design of Pärnu passenger terminal building and related civil structures

Pärnu passenger terminal is the second international passenger terminal in Estonia. The terminal will be situated in the location of the current Pärnu 1520 mm gauge train stop. The terminal will be designed and built together with facilities necessary for train operations (in accordance with Operational Plan recommendations) and for fitting the terminal into the surrounding area as determined in the detailed spatial plan. The design (DTD) of the passenger terminal will be based on the results of the design contest from 2014 and detailed spatial plan adopted by Pärnu city government in December 2017 (prepared as part of Action No 2012-EE-27001-S). The design area is determined in the adopted detailed spatial plan, taking into account the need to cover the immediate surrounding area of the new terminal building and railway to enable full integration of the new structures into the existing urban environment.

The detailed technical design contains all required parts under national legislation and will cover the following (in scheduled order):

- design (DTD) of the terminal building and immediate surrounding,
- design (DTD) of necessary support structures – estacades, overpasses, etc. The design (DTD) will cover the immediate surrounding area of the new station building and railway to enable full integration of the new structures into the existing urban environment as defined in the detailed spatial plan. Scope for the design of immediate surrounding area is limited in the same way as for Ülemiste terminal described under sub-activity 4.

Besides the DTD, the activity includes studies to determine the functionality and dimensions of the station.

The result of this sub-activity will be used in the implementation of Pärnu passenger terminal construction works (Phase I is part of this Action, Activity 17).

Sub-activity 6: Detailed technical design of Muuga TEN-T Port freight terminal and related studies.

Muuga multimodal freight terminal is the starting point of RB on Estonian territory for goods transport, providing for a connection for maritime goods transport (containers) from/to Finland, transit goods from/to Russia on the 1520 mm gauge, and being a connection point between road/rail transport modes.

The terminal will be situated in Muuga port, currently equipped with 1520 mm gauge railway yard. The terminal will be designed and built together with facilities necessary for train operations in accordance with Operational Plan recommendations and for fitting the terminal into the port area (link to the terminals) with as less obstruction to the existing goods movements as possible. The area is determined in the detailed spatial plan initiation order, taking into account the need to cover the immediate surrounding area of the new terminal building and railway to enable full integration of the new structures into the existing urban environment.

According to current plans the Muuga multimodal terminal solution will cover the following elements: station yard, [REDACTED] tracks of 1435mm gauge, connection tracks to the terminals (public infrastructure), road viaduct, relocation of 1520 mm tracks (new 1520 tracks needed for establishing the previous operational situation), utilities needed to allow operations, depot for the freight fleet, other small scale facilities necessary for the operation of the freight terminal and yard.

The sub-activity covers the following elements:

- Study on alternative integrated solutions for Muuga multimodal terminal location, technological needs and functionalities as well as a Cost Benefit Analysis (CBA). A principal technical solution will be developed considering the necessary alterations of the existing infrastructure based on functional and economic evaluations. A common solution with all necessary stakeholders will be reached.
- Preliminary design of the recommended solution from the study, in the frame of the detailed spatial planning process. The spatial planning process will include environmental studies, if deemed necessary for issuing a building permit.
- Detailed technical design, based on the adopted spatial plan and preliminary design solution.

The design will have to provide also signalling and electrification (if necessary) solutions for the relocated 1520 mm railways to establish full operational situation. Besides the

superstructure the design will provide solutions for the substructures (including utilities, such as water and sewage pipes, electrical cables etc).

#### Sub-activity 7: Detailed technical design of Ülemiste rolling stock maintenance depot

The aim of this sub-activity is to design the rolling stock heavy maintenance facility and to prepare the RB rolling stock maintenance facility for construction.

According to the detailed spatial plan (Activity 10) the location of the depot is near Tallinn-Ülemiste passenger terminal, and consists of depot tracks [REDACTED], depot buildings (rolling stock depot, warehouses, administrative building with the possibility of accommodating infrastructure manager's personnel), utilities (electricity, water, sewage, communications), facilities (access roads, parking), and other small-scale facilities needed for operating the depot. The design shall be in accordance with Operational Plan recommendations.

The activity includes following elements:

- Preliminary design
- Master design
- Detailed technical design

The result of the sub - activity is a detailed technical design with building permits issued.

#### Sub-activity 8: Adjustments of adopted RB spatial plans necessary to complete the designs

Although in general the consolidated preliminary technical design prepared by RB Rail follows the adopted county plans determining the route of RB in Estonia, some areas (such as the section from Soodevahe to Muuga, in Harju county) require additional spatial planning procedures to be implemented. For issuing of building permits any design will have to be in accordance with the relevant spatial plans. For carrying out spatial planning procedures several technical solutions will have to be designed for comparison purposes and for a final solution.

The sub-activity contains the following elements:

- Special spatial plans and/or detailed spatial plans together with SEA (if necessary, based on the decision of relevant authorities)
- Master design of the changed sections or facilities
- Detailed technical designs (DTD) of the changed sections or facilities

Results of the sub-activity are the adopted special plans and DTD with building permits issued.

The overall result of this Activity will be the completed Detailed Technical Design in Estonia.

It is foreseen that part of the tasks will be carried out by in-house personnel [REDACTED]

(Responsible beneficiary: Ministry of Economic Affairs and Communications of the Republic of Estonia)

### **Activity 13: Detailed technical design of the railway line including two multi-modal passenger terminals in Latvia (LV)**

The aim of this activity is the development of the Detailed Technical Design of Rail Baltica railway line, including two multi-modal passenger terminals (at Riga Central station and Riga International Airport station) in Latvia.

Design documentation shall be prepared according to Building Information Modelling (BIM) requirements (BIM strategy developed under Action No. 2016-EU-TMC-0116-M).

The design process will include site investigations (including geotechnical surveys), value engineering (including multicriteria analysis as decision making tool), application for all building permits necessary to start design), master design and detailed technical design.

The quantities and elements of the design sections and its objects are indicative and based on the EIA, Preliminary Design and considering Consolidated Preliminary Design solutions, which may vary during designing.

Chainage of the design and construction work sections is provided for information purposes as overall Rail Baltica chainage is based on Operational Plan developed under Activity 2. This chainage will be updated during Master Design, Detailed Technical Design and Construction until project is implemented, and as built chainage is available. The Coordinator maintains chainage correspondence table to ensure traceability during all project phases.

Detailed technical design scope will contain all the required parts under national legislation and will cover design of railway track, passenger platforms, access and terminals buildings, alignment and structures, necessary road structures, other civil structures and buildings.

Detailed technical design will also include, where necessary (1) relocation and/or reconstruction of the existing 1520mm railway infrastructure (tracks, structures, stations and buildings, signalling, electrification and other sub-systems), (2) relocation or crossing of main state roads and viaducts, municipality roads and viaducts, access roads to land plots, (3) design of segregated grade pedestrian and cyclist path crossings, (4) relocation or crossing utilities infrastructure (gas and power transmission and distribution, telecommunication) as well as (5) relocation or crossing municipality utilities (water and sewage networks, centralized heating networks), (6) demolition of civil structures and buildings to accommodate railway and other necessary works and designs, (7) construction of noise barriers, relocation of species, recreation of bog areas and other environmental impact mitigation measures, (8) other works that will be known after completion of all necessary investigations and surveys and once all requirements from Authorities and Affected Parties are received, including, but not limited to amelioration designs, landscaping designs, designs to retain structural stability of nearby buildings and structures, plans for relocation of fencing, relocation of housing and other necessary impact compensatory measures.

If necessary, EIA procedures might be performed on the railway line sections with substantial change of preliminary technical solution.

Signaling and energy system design will be developed at conceptual level necessary for railway infrastructure and civil works design only. For sections where existing 1520 mm infrastructure needs to be redesigned and ultimately reconstructed in order to place the 1435mm infrastructure, the design of 1520 mm signalling and related sub-systems will be designed at conceptual level (except for Riga central station, where this will be performed to the level sufficient for ensuring works under Activity 18). The full signaling design will be completed in further Rail Baltica Global project development stages and it is not included in

this Action.

Other activities necessary to complete the detailed technical design are: (1) necessary assessments and verifications arising from requirements of EU and national law as well as from necessity to ensure design compliance with Design Guidelines and addressing the findings of Operational Plan, (part of this Action, Activity 25), as well as (2) land acquisition (partly covered by this Action, Activity 22), necessary to complete the detailed technical design approval process in Latvia.

The Activity concerns the detailed technical design of Rail Baltica in Latvia, with the exception of the detailed technical design for railway line section Vangaži to Upeslejas triangle [REDACTED], which is part of Action 2016-EU-TMC-0116-M.

This activity foresees seven sub-activities:

Sub-activity 1: Detailed technical design of the railway line section Estonian/Latvian border to Vangazi [REDACTED]

The total length of this section is approximately 94 kilometers and includes design of railway bridges [REDACTED], railway and road viaducts [REDACTED], eco-ducts [REDACTED], stations or passing loops [REDACTED]. This section also includes a major bridge over river Gauja.

Sub-activity 2: Detailed technical design of the railway line section Upeslejas triangle - Salaspils – Misa ([REDACTED] and [REDACTED]) including the connections to the Central section (to sub-activity 3):

(1) Upeslejas railway triangle (railway line from Estonia towards Riga [REDACTED] and from Riga towards Lithuania [REDACTED]);

(2) Misa railway triangle (railway line from Riga towards Lithuania [REDACTED], from Riga towards Estonia [REDACTED] and railway line section from Misa triangle towards Lithuania [REDACTED]).

The total length of this section is approximately 52 kilometres and includes design of bridges including a major bridge over river Daugava, road and railway viaducts [REDACTED], eco-ducts [REDACTED], stations or passing loops [REDACTED].

Sub-activity 3: Detailed technical design of the railway line Central section Upeslejas – Misa (through Riga) [REDACTED] (except two multi-modal passenger terminals subject of sub-activity 5 and 6 and related railway line)

This section is split into three sub-sections – Upeslejas to Lacplesa street [REDACTED]; Jelgavas street to Imanta station [REDACTED]; Riga International Airport Rail Baltica passenger terminal to Misa [REDACTED].

Total length of this section is approximately 56 kilometers and includes design of bridges [REDACTED], road tunnel [REDACTED] and railway tunnel [REDACTED], road viaducts [REDACTED], railway viaducts [REDACTED], eco-ducts [REDACTED], station/passing loops [REDACTED].

Sub-activity 4: Detailed technical design of the railway line section Misa – Latvian/Lithuanian border [REDACTED]

The total length of this section is approximately 45 kilometers and includes design of bridges

■, road viaducts ■ and railway viaducts ■, eco-ducts ■, station/passing loops ■.

Sub-activity 5: Detailed technical design of the railway line section including Riga International Airport station terminal ■

The total length of this section is approximately 4,5 kilometers and includes design of viaducts ■, estacades ■, underpasses ■, passenger platforms ■, terminal building and related civil structures (evacuation paths, access corridor to new airport terminal, parking facilities, etc.), road access infrastructure including roads ■, pedestrian ■ and cyclist access ■, railway freight yard ■ (reception and shunting tracks, access track to freight terminal). Furthermore, this sub-activity includes studies to determine technical solutions including, but not limited to operations, safety and security assessment.

The result of this sub-activity will be used to implement Riga Airport terminal construction works (Phase I is part of this Action, Activity 19).

Sub-activity 6: Detailed technical design of the railway line section including Riga Central station terminal ■

The total length of this section is approximately 2,6 kilometers and includes viaducts ■, estacades ■, bridges ■, underpasses ■, passenger platforms ■ (for both 1435mm and 1520mm gauge); detailed technical design of the passenger terminal and related civil structures (evacuation paths, access corridor to existing station building, retaining walls, parking facilities, etc.), access infrastructure ■ including (roads and pedestrian, cyclist access). Furthermore, this sub-activity includes studies to determine technical solutions including, but not limited to operations, safety and security assessment.

The result of this sub-activity will be used to procure and implement Riga Central station construction works (Phase I is part of this Action, Activity 18).

Sub-activity 7: Riga node operation optimization study based on Operational Plan study findings (prepared under this Action, Activity 2)

It includes preparation of operation and coordination plan for both 1435 mm and 1520 mm gauge rail services on Rail Baltica and existing Latvian Railways infrastructure for short, medium and long term, to ensure sustainable Global Project infrastructure capacity and effective correlation between both railway gauge infrastructures.

The aim of the sub-activity is to address the operational constraints for Rail Baltica operations identified in the Rail Baltica Operational Plan and identify possible synergies with development and modernization projects of the existing railway network, thus maximizing value for public financing investments, including through avoidance of overlaps resulting in physical restrictions to efficient infrastructure operation and further development.

The study, prepared in parallel with the design, shall clearly define short, medium and long-term actions to be addressed during design phase of any Rail Baltica design in the entire Riga node. Furthermore the study will create a roadmap for passenger and freight service operations and requirements. Therefore the operation optimization study will contribute to the detailed technical design in Riga railway node.

The overall result of this Activity will be completed detailed technical design.  
(Responsible beneficiary: Ministry of Transport of the Republic of Latvia)

#### **Activity 14: Detailed technical design of the railway line in Lithuania, Phase I (LT)**

The aim of this activity is the development of the detailed technical design of Rail Baltica railway line in Lithuania for section Kaunas (RRT) – LT/LV border.

Design documentation shall be prepared according to Building Information Modelling (BIM) requirements (BIM strategy developed under Action 2016-EU-TMC-0116-M) as well as national regulation, which ensures successful approval of the design documentation and obtainment of construction permits.

Design process will include site investigations (including geotechnical surveys), value engineering (including multicriteria analysis as decision making tool), Master Design and Detailed technical design, obtainment of construction permits.

The quantities and elements of the design sections and its objects are indicative based on the EIA and Preliminary Design and considering Consolidated Preliminary Design solutions, which may vary during design.

Chainage of the design and construction work sections is provided for information purposes as overall Rail Baltica chainage based on Operational Plan developed under Activity 2. This chainage will be updated during Master Design, Detailed Technical Design and Construction until project is implemented, and as built chainage is available. The Coordinator maintains chainage correspondence table to ensure traceability during all project phases.

Detailed technical design scope will contain all the required parts under national legislation and will cover design of railway track, passenger platforms, alignment and structures, necessary road structures, other civil structures. Detailed technical design will also include, where necessary (1) relocation and / or reconstruction of the existing 1520mm railway infrastructure (tracks and structures, signalling, electrification and other infrastructure elements and sub-systems), (2) relocation or crossing of main state roads and viaducts, municipality roads and viaducts, construction of access roads to land plots (3) construction of grade separated pedestrian walkaway and cyclist path crossings, (4) relocation or crossing utilities (gas, electric power, telecommunication) transmission and supply infrastructure as well as (5) relocation or crossing municipality utilities (water and sewage networks, centralized heating networks), (6) demolition of civil structures and buildings to accommodate railway and other necessary works and other designs, (7) construction of noise barriers, relocation of species, recreation of bog areas and other environmental impact mitigation measures, (8) other works that will be known after completion of all necessary investigations and surveys and once all requirements from Authorities and Affected Parties are received, including, but not limited to amelioration designs, landscaping designs, designs to retain structural stability of nearby buildings and structures, plans for relocation of fencing, relocation of housing and other necessary impact compensatory measures.

If necessary, EIA procedures might be performed on the railway line sections with substantial change of preliminary technical solution.

Signalling and energy system design will be developed at conceptual level necessary for railway infrastructure and civil works design only. For sections where existing 1520 mm infrastructure needs to be redesigned in order to place 1435mm infrastructure, full design of 1520mm signalling and energy systems of the sections affected will be completed under this Activity in order to allow for a continuous operation of the 1520mm railway network.

Other necessary tasks to complete the design are:

- (1) assessments and verifications (part of this Action, Activity 25) arising from requirements of EU and national law as well as from necessity to ensure design compliance with Design Guidelines; as well as
- (2) land acquisition (covered by Action 2014-LT-TMC-0109-M), necessary to complete Detailed technical design approval process in Lithuania.

This activity foresees two sub-activities:

Sub-activity 1: Detailed technical design of the railway line section Kaunas (RRT) - Ramygala [REDACTED]

The total length of this design section is approximately 78,5 kilometres and is including railway bridges [REDACTED], road and railway viaducts [REDACTED], eco-ducts [REDACTED], stations or passing loops [REDACTED], crossovers [REDACTED], cut and cover tunnels [REDACTED] as well one major [REDACTED] bridge over Neris river.

The result of this sub-activity is the completed detailed technical design for Kaunas (RRT) - Ramygala section.

Sub-activity 2. Detailed technical design of the railway line section Ramygala - Lithuanian/Latvian state border [REDACTED]

The total length of this section is approximately 90,5 kilometres and includes railway bridges [REDACTED], road and railway viaducts [REDACTED], eco-ducts [REDACTED], passing loops [REDACTED], crossovers [REDACTED] and passing loop of Panevėžys station.

The result of this sub-activity is the completed detailed technical design for section Ramygala - Lithuanian/Latvian state border.

The overall result of the Activity will be the completed detailed technical design for Kaunas (RRT) – LT/LV border section of Rail Baltica.

(Responsible beneficiary: Ministry of Transport and Communications of the Republic of Lithuania)

### **Activity 15: Construction of Rail Baltica railway line in Estonia, Phase I (EE)**

Overall objective of this activity is construction of Rail Baltica railway line in Estonia as designed under Activity 12 of this Action.

This activity covers phase I of the railway construction works and comprises the following four sub activities:

Sub-activity 1: Construction of crossings with utilities

Contains construction of crossings of the RB rail main line with national grid of high voltage infrastructure and gas pipelines. Provisional technical solutions for all of the crossings are provided in the accepted preliminary design with concrete descriptions and drawings for every single object. [REDACTED]

[REDACTED] The locations have been determined with the preliminary design of RB in Estonia that was accepted in 2018. Depending on the particular crossings, some of them will be constructed based on preliminary design and some based on master design and detailed technical design (Activity 12).



## Sub-activity 2: Construction of grade separated rail/road crossings

Consists of construction of crossings that can be performed before the railway master design/detailed technical design are finalized. All of the rail/road crossings are road flyovers; provisional technical solutions for all of the crossings are provided in the accepted preliminary design with concrete descriptions and drawings for every single object.

Some of the crossings may be procured as design-build activities, if agreed by all relevant parties. The locations have been determined with the preliminary design of RB in Estonia that was accepted in 2018.

The crossings chosen for construction in the first phase have been determined according to the following technical prerequisites – land ownership (for all of the crossings planned under the sub-activity, land is already either in state or municipal ownership), the horizontal and vertical alignment in the railway planning corridor is fixed (no changes due to the detailed technical design preparations foreseen), no additional EIA is needed.

## Sub-activity 3: Ecoducts

Consists of construction of green bridges (ecoducts). The locations were proposed within the Strategic Environmental Assessment (SEA) and are covered in the preliminary design.

Provisional technical solutions for all of the ecoducts are provided in the accepted preliminary design with concrete descriptions and drawings for every single object.

## Sub-activity 4: Main line sections

Consists of railway embankment works along the main railway line including, where necessary, reconstruction and relocation of access roads and 1520 mm gauge railway.

The embankment works on the main line include soil stripping; soil works; construction of the embankment with partial sub-ballast layer to avoid possible erosion of the embankment until installation of upper track bed; construction of ditches. Works are initially planned on the section between Ülemiste and Soodevahe

due to adjacent railway construction works in the Ülemiste passenger terminal area as a natural extension. With the progress of the detailed technical designs along the Estonian alignment of the railway, the location of the embankment works might need adjustment to reflect updated implementation plans and their contribution to the Global Project.

The upgrade and partial reconstruction of existing 1520mm gauge railway concerns section Lelle - Pärnu for purpose of enabling transport of mineral materials and superstructure materials for 1435 mm gauge Rail Baltica construction. Works planned to be performed are:

. As a result of the works the railway will allow for speeds up to 40 km/h for cargo trains delivering materials for the construction of Rail Baltica in Estonia. Reconstruction and relocation of access roads will be performed where necessary, ensuring road access during construction and after the Rail Baltica railway is in place.

It is foreseen that part of the tasks will be carried out by in-house personnel [REDACTED].

Assessments and supervision necessary for this construction activity are subject of Activities no. 25 and 26.

(Responsible beneficiary: Ministry of Economic Affairs and Communications of the Republic of Estonia)

### **Activity 16: Construction of Tallinn Ülemiste passenger terminal, Phase I (EE)**

The objective of the activity is the construction of the first phase of Tallinn-Ülemiste international passenger terminal with its surrounding area, as designed under Activity 12.

The terminal will be situated in the location of the current Ülemiste 1520 mm gauge train stop. The terminal will be built together with the designed facilities as determined in the adopted detailed spatial plan, taking into account the need to cover the immediate surrounding area of the new terminal building and railway to enable full integration of the new structures into the existing urban environment. The precise construction scope of Ülemiste terminal Phase I is subject to the results of the detailed technical design. Construction works are planned to be started as soon as the detailed technical design is accepted and building permits are issued.

The construction of the terminal and its surroundings is divided in two phases. Under the current Action it is foreseen to implement Phase I through two sub-activities, as follows:

#### **Sub-activity 1: Construction of Tallinn Ülemiste railway infrastructure**

This sub-activity includes relocation of the existing 1520 mm gauge railway together with the necessary reconstruction of the 1520 mm gauge signaling system to allow for continuous train traffic at the station and the construction of three 1435 mm tracks with the necessary facilities.

In total approximately [REDACTED] of station tracks [REDACTED] need to be relocated together with its signaling and electrification. The relocation area is limited by the new terminal location and the minimum necessary distance to the connection points of the 1520 mm railway (a few hundred meters from the terminal area borders).

In total three 1435 mm departure/arrival tracks [REDACTED] with stabling tracks and tracks necessary for connecting with the double track main line will be constructed.

The 1435 mm construction in the current phase will also encompass railway facilities, a pedestrian underpass; preparatory works for signaling (ERTMS) and electrification. The pedestrian underpass must at least have the same width as the terminal square [REDACTED] and sufficient length to reach on the ground level in south of the terminal area [REDACTED]. The terminal square is planned to be built in Phase II, which is not part of this Action.

The final technical solutions are subject to design contest, detailed spatial plan and technical design.

#### **Sub-activity 2: Construction of Tallinn Ülemiste passenger terminal building (particularly**



The approximate dimensions: for the future pedestrian roads - [REDACTED]. Utility dimensions will be acquired from the technical design; the necessity is foreseen in the adopted detailed spatial plan.

The terminal building and related works will be continued and finalized after 2022, outside the scope of this Action.

Expected result of the activity are completed construction works of the Pärnu passenger terminal and surrounding area underground works and necessary underground works for the terminal building (substructures).

It is foreseen that part of the tasks will be carried out by in-house personnel [REDACTED].

Assessments and supervision necessary for this construction's activity are subject of Activity No 25 and 26.

(Responsible beneficiary: Ministry of Economic Affairs and Communications of the Republic of Estonia)

#### **Activity 18: Riga Central Station railway section construction works, Phase I (LV)**

The totality of the construction works of the Riga Central Passenger Terminal and railway section includes: terminal construction/reconstruction, the necessary relocation of 1520mm infrastructure [REDACTED] long railway section with multiple station tracks) to accommodate Rail Baltica, as well as a railway bridge over Daugava river [REDACTED]. The implementation of construction works will be phased.

This Activity covers Phase I of the works described above. The quantities and elements of the construction sections and its objects are indicative, based on the EIA and Preliminary Design and considering Consolidated Preliminary Design solutions, which may vary during the detailed technical design.

Chainage of the design and construction work sections is provided for information purposes as overall Rail Baltica chainage is based on Operational Plan developed under Activity 2. This chainage will be updated during Master Design, Detailed Technical Design and Construction until the project is implemented, and as built chainage is available. The Coordinator maintains chainage correspondence table to ensure traceability during all project phases.

The activity will start after detailed technical design is finalized (prepared under activity 13 of this Action) and building permits for construction are obtained.

Phase I will cover:

- the construction of structures for accommodation of Rail Baltica tracks and relocation of 1520 mm tracks,
- the construction of building structures for passenger paths [REDACTED] and passenger platforms [REDACTED].

More in details, Phase I will include the following works:

- Preparation of construction site installation, construction of necessary site facilities for execution of works in the area;
- Demolition of all existing structures necessary to be dismantled or relocated to accommodate Rail Baltica tracks according to scope described in the building permits to be obtained and in conformity with global phasing of the future works to be performed in the section.
- Demolition of all existing structures necessary to modify position of 1520 tracks, due to changed alignment following above mentioned modification of 1520 mm tracks.
- Reconstruction and relocation of existing utilities which are located in the section and their reconstruction is necessary to permit execution of works.
- [REDACTED]:  
Construction of double track railway estacade and supporting structures to accommodate Rail Baltica and temporarily the 1520 mm tracks [REDACTED]
- [REDACTED]:
  - Construction of building foundation elements, structures, walls and slabs for pathway and corridor [REDACTED],
  - Preparation of area for multimodal transport function, under new estacade supporting tracks [REDACTED],
  - Construction of passenger platforms at level +1 for access to future 1435 mm (length of [REDACTED] [REDACTED] and relocated 1520 mm tracks,
  - Renovation or construction of [REDACTED] street overpasses (as necessary),
  - Construction of substructures - estacades [REDACTED] and embankment [REDACTED] for accommodation of future 1435 mm [REDACTED] and temporary 1520 mm [REDACTED] tracks,
- Construction of the structure for necessary access to platforms [REDACTED] [REDACTED],
  - Construction of passenger platforms cover [REDACTED],
  - Construction of supporting structures for roof and facade [REDACTED] [REDACTED],
  - Installation of catenary poles for temporary 1520 mm tracks and final alignment of Rail Baltica tracks,
  - Installation of necessary networks (including signalling system ducts, traction system space, railway communication system ducts, switch heating system ducts), and railway utilities,
  - Construction of temporary and final signalling networks for affected 1520 mm tracks, following needs of execution of works.

The quantities may be modified following the Riga node operation optimization study (Activity 13, sub-activity 7) findings.

The result of this activity is finished Phase I of construction of Riga Central Passenger Terminal and railway section approved by Engineer and as described above.

(Responsible beneficiary: Ministry of Transport of the Republic of Latvia)

#### **Activity 19: Construction of Rail Baltica Terminal at Riga International Airport and railway section, Phase I (LV)**

The totality of the construction works of Rail Baltica Terminal in Riga International Airport and railway section includes: the terminal construction, railway line construction [REDACTED], North and South estacade construction, embankments, viaduct and public access roads.

The implementation of construction works will be phased, this Activity covers Phase I as



described below.

The quantities and elements of the construction section and its objects are indicative and based on the EIA, Preliminary Design and considering Consolidated Preliminary Design solutions, which may vary during the detailed technical design.

Chainage of the design and construction work sections is provided for information purposes as overall Rail Baltica chainage based on Operational Plan developed under Activity 2. This chainage will be updated during Master Design, Detailed Technical Design and Construction until project is implemented, and as built chainage is available. The Coordinator maintains chainage correspondence table to ensure traceability during all project phases.

The activity will start after the detailed technical design is finalized (prepared under activity 13 under this Action) and building permits for construction are obtained for the relevant section.

The scope of this activity is Phase I construction of structures for accommodation of Rail Baltica tracks; terminal concrete structure (in front of airport terminal); construction of concrete structures [REDACTED]; access from parking [REDACTED] and passenger platforms [REDACTED] and foundations of mainline estacade from terminal towards South (Mārupe municipality) [REDACTED] and will include the following works:

- Preparation of construction site installation, construction of necessary site facilities for execution of works in the area
- Demolition of all existing structures (parking, public roads, buildings) necessary to be dismantled or relocated to accommodate Rail Baltica tracks according to scope described in building permits and in conformity with global phasing of the future works to be performed in this section;
- Construction of foundations, (including piles, pile caps), structures (including piers and supports, bearings) and estacades (including slab structures, beams, parapets) to accommodate Rail Baltica tracks in [REDACTED] of the Railway Terminal (ready for installation of electrification, signaling and laying of tracks);
- Construction of [REDACTED] platforms to accommodate [REDACTED] station tracks [REDACTED];
- Construction of foundation elements, structures, walls and slabs for passenger platform pathways and corridors [REDACTED];
- Construction of first [REDACTED] foundations for mainline estacade from terminal towards South (Marupe municipality) of at least supports [REDACTED] to be built to ensure construction of road in the area ;
- Reconstruction and reallocation of existing utilities (those which are located in the section where the Phase 1 works are performed and under the access road network):
  - installation of external utilities for the Railway Terminal: central heating, electricity, communication, water and sewage connections;
  - relocation of existing utilities interfering with structure of Railway Terminal or roads: central heating, electricity, water and sewage connections; gas, data connections.
- Construction of access road network [REDACTED] [REDACTED] necessary to be relocated to accommodate Rail Baltica Terminal in the existing road network and allow access, to airport/airport and railway terminal area, during and after construction period.

The result of this activity is finished Phase 1 of construction of Rail Baltica Terminal in Riga

International Airport and railway section approved by Engineer and as described above.

(Responsible beneficiary: Ministry of Transport of the Republic of Latvia)

**Activity 20: Construction of the section Kaunas (RRT)-Panevėžys-LT/LV border, Phase I (LT)**

Aim of the activity is to implement the first phase of preparatory and civil works for the Rail Baltica railway line, to achieve readiness for the tracklaying and system deployment on this section.

Overall, the construction works in this Phase I include the earth works (embankment) and civil structures for the first [REDACTED] section northbound from Palemonas [REDACTED], which are covered by respective construction permit. Precise end points will be identified in the detailed technical design stage (Activity 14).

Chainage of the design and construction work sections is provided for information purposes as overall Rail Baltica chainage based on Operational Plan developed under Activity 2. This chainage will be updated during Master Design, Detailed Technical Design and Construction until project is implemented, and as built chainage is available. The Coordinator maintains chainage correspondence table to ensure traceability during all project phases.

The construction of upper track bed elements, track laying, signalling, traffic control and electrification for 1435 mm gauge railway infrastructure are not part of this activity for the related section.

This activity covers following works, which would be within the obtained construction permit(s) under Activity 14:

- Preparatory works including preparation of necessary construction documentation (all necessary documents, which are not part of Activity 13, like work plans, work programme, construction completion documents for related works, etc.), preparation of the construction site, informational stands, etc.;
- Construction of embankment [REDACTED] including drainage system for double track railway line;
- Construction of railway civil structures [REDACTED];
- Reconstruction of 1520 mm gauge railway [REDACTED]

[REDACTED]. Scope of 1520 mm reconstruction will depend on approved design solutions (in Activity 14).

The broad scope of the activity, based on the technical proposals included in the territorial planning (special plan) documentation, is: [REDACTED] of embankment for double track railway line, including drainage system, [REDACTED], reconstruction of 1520 mm railway infrastructure where necessary. Detailed parameters and amounts of railway infrastructure objects are to be specified and elaborated after completion of Master design (technical design according to LT laws) of the corresponding railway section within the scope of Activity 14.

Potential structures [REDACTED] on the boundary with section “PL/LT border – Kaunas”, which would be fully or partially within the scope or territorial boundaries of the “Kaunas – LT/LV border” design, would not be part of this activity and would be

constructed within further construction phases of the “PL/LT border – Kaunas” section.

Necessary assessment and construction supervision for the above works are subject of Activities 25 and 26.

Result of the activity is the completed construction works for 2,9 km of embankment and railway engineering structures (culverts and crossings).

(Responsible beneficiary: Ministry of Transport and Communications of the Republic of Lithuania)

### **Activity 21: Land acquisition in Estonia (EE)**

Objective of the activity is to acquire the land plots necessary for the construction of Rail Baltica railway, facilities and related infrastructure. Altogether around [REDACTED] currently on private or municipal ownership have been identified in the spatial planning process and subsequent preliminary design to be acquired for the purpose.

Approximately [REDACTED] are already in state ownership but need to be determined for usage for railway construction. Acquisition of these plots forms a part of the permission to build on the land - a building permit can only be issued to an entity with the right to build on a certain plot.

Method of the activity is acquisition of the plots based on the Acquisition of Immovables in Public Interest Act passed in June 2018. The prevalent method will be either purchase or exchange of land plots and will be worked out in close cooperation with the land owners, plot by plot.

The activity also covers services such as plot measurement, valuation, legal advice and proceedings related to the RB acquired plots. The acquisition is done hand in hand with the progress of detailed technical design and/or construction to allow for a timely start of issuing building permits and construction. The acquisition of all plots must not necessarily be finalized for the start of construction – priorities for acquisition are the plots where construction will be started in the first phase.

Results of the activity are [REDACTED] plots acquired and approximately [REDACTED] state owned plots determined for usage for Rail Baltica railway.

(Responsible beneficiary: Ministry of Economic Affairs and Communications of the Republic of Estonia)

### **Activity 22: Land acquisition in Latvia, Phase I (LV)**

The aim of the activity is to acquire land and immovable property or establish rights to use the property needed for the construction of Rail Baltica railway, facilities, related infrastructure and access. Over the whole country, altogether around [REDACTED] land plots have been identified in the spatial planning process and subsequent preliminary design to be acquired for the purpose. Some [REDACTED] land plots belong to private persons and legal entities, while [REDACTED] land plots belong to the state and municipalities.

Acquisition will start on the basis of results of the Preliminary design (Action 2012-LV-27001-S) and of the Consolidated Preliminary Technical Design (Action 2016-EU-TMC-



0116-M). The precise amount of land, built on land and immovable property to be expropriated will be identified during the detailed technical design phase. Expropriation will be conducted by the national authorities according to the national legislation. During the expropriation each case will be dealt individually to reach an agreement on fair compensation as stipulated by national legislation.

Within this activity not all land, built on land and immovable property will be acquired in Latvia. Land acquisition will start in the urban sections of Latvia giving priority to those plots where construction will be started under this Action (Activities A18 and A19), i.e. plots in Riga Central Station and Riga Airport Terminal areas.

First approximately ■ plots in Riga Central station and ■ plots in Riga Airport Terminal area will be acquired. When all necessary property for construction of scope described in Activities A18 and A19 will be acquired, land acquisition will continue on priority sections in all Latvia, as identified during the detailed technical design phase. Approximately ■ additional land plots will be acquired.

The result of this activity is approximately ■ plots acquired or establish rights to use the property in Riga Central Station and Riga Airport Station section (except in case of court proceedings) and approximately ■ land plots in pre-identified priority sections during the detailed technical design phase in Latvia.

This activity includes all tasks directly linked with implementation of Activity, administrative (notary, registration, etc.) and outsourced services (land surveying and evaluation, etc.).

(Responsible beneficiary: Ministry of Transport of the Republic of Latvia)

**Activity 23: Global project and action implementation support measures (RB Rail, EE, LV, LT)**

This activity consists of: (1) Action management, (2) project implementation support measures to implement and support the implementation of Activities of this Action, (3) Global Project management activities, (4) necessary digital construction IT tools (Building Information Modelling system (BIM) and Geographic information system (GIS) (including data, model and drawing management system tools) to implement the Action's and Global Project activities.

Sub-activity 1: the Action management sub-activity will enable the successful implementation of the Action ensuring that: i) the milestones are timely met, ii) risks are identified, monitored and mitigated, iii) the necessary reports are prepared and submitted to INEA and other parties. This sub-activity includes all necessary administrative and management tasks that will be carried out by Beneficiaries, Implementing bodies and Coordinator for the implementation of this Action.

Sub-activity 2: Project implementation support measures to implement activities of the Action. This sub-activity covers the implementation of specific tasks overall supporting the activities' implementation, such as the preparation of procurements (e.g. preparation of technical specifications and tender dossiers), contract management, legal support and analyses.

Sub-activity 3: The Global Project management covers the horizontal Global Project governance by setting a harmonised and reasonably unified approach to facilitate Global

Project interest representation and the implementation of this Action in the context of the Global Project.

Sub-activity 4: Comprises the digital construction IT tools of Building Information Modelling system (BIM) and Geographic information system (GIS) (including data, model and drawing management system tools), necessary to implement the Action's and Global Project activities. In Action 2016-EU-TMC-0116-M, the strategy for BIM development has been developed. Thus, further implementation of BIM is directly linked with the implementation of this Action's design and construction activities and with activities of Actions 2015-EU-TM-0347-M and 2016-EU-TMC-0116-M.

By establishing a BIM system (including data, model and drawing management system), a common project deliverable platform will be established to ensure unified exchange of technical design and construction project data/information and increased transparency between all involved stakeholders (project coordinator, beneficiaries, implementing bodies as well as supply chain and affected parties (i.e road administration etc.)).

Establishment of GIS platform will ensure the project's geospatial data management, used for stakeholder management, data collection. This platform will serve as interface and data bank for technical experts, designers, involved stakeholders as well for future infrastructure manager. Certain layers of GIS information can be easily shared with general public for various reasons (public consultations, PR and communications etc).

Further support and development of the platforms will be subject of further Global Project implementation phases.

The result of this Activity is to set-up the BIM and GIS tools and to ensure successful implementation of Global Project and this Action.

#### **Activity 24: Communication and PR with public (RB Rail, EE, LV)**

The activity covers the promotion of public awareness of the railway and its objectives via different communication means, such as brochures, study visits, public communication, website of the project, public hearings and monitoring of public awareness.

Within the activity, the joint communication/PR plan will be worked out and updated on a rolling basis. The frequency of the updates shall be no less than once a year.

Furthermore, a physical or virtual information office during the construction phase will be installed to inform the public on on-going activities.

To reach the target audience communication efforts will be carried out towards the local residents and local governments in all three Baltic States. In the next stages of the Global Project the scope of communication will expand to Polish and Finnish population in general.

Another specific target group addressed is entrepreneurs and key figures in the logistics sector, as the new railroad connection will benefit them most directly and the ultimate success of RB project is determined by volume of passengers and cargo.

Also, the EU co-funding is mentioned in every interview given by project team members and should be also noted in all published articles. All press releases include information on CEF Transport co-financing.

The main information channel is the project's webpage. The webpage is used as a communication channel to actively and continuously inform about on-going progress of the project and communicate with public shareholders. Also, the website contains publicly

available documents regarding the project.

### **Activity 25: Technical Assessment of the detailed technical design (RB Rail, EE, LV, LT)**

Aim of this activity is to assure design and construction works compliance with Global Project Design Guidelines, EU Technical Specifications for Interoperability, and respective national laws of Estonia, Latvia and Lithuania.

Furthermore, the activity will contribute to mitigation of risks such as: non-compliance, cost increase and delays of construction works.

Assessments will cover the design activities (Activities 12 – 14) and construction works (Activities 15-20) of this Action.

The activity consists of the following sub-activities:

**Sub-Activity 1: Design review and assessment required by national construction law of Estonia, Latvia and Lithuania**

It includes design conformity review and verification against respective national construction law. Additionally, on top of the scope of requirements by national construction laws, the design will be reviewed and assessed to be fully conform with Rail Baltica Design Guidelines and implementation of the track layout defined by the Operational Plan (prepared under this Action, Activity 2), which may be amended after assessing the possible obstacles due to local environment, and addressing possible solutions.

Design review and assessment services will last from early design stage and include Master Design and Detailed Technical Design stages.

**Sub-Activity 2: Notified Body (NoBo) conformity assessment**

It includes assessment of conformity of railway subsystems in accordance with Directives 2008/57/EC and 797/2016. The assessment criteria will cover technical specifications for interoperability INF TSI, PRM TSI, SRT TSI, as well as cover CCS TSI and ENE TSI to the extent necessary to complete the design under responsibility of the appropriate design bodies. The assessment services will last from early design stage and include Master Design and Detailed Technical Design stages as well cover assessment during construction stage (where necessary). The result will be Intermediate State of Verification certificates, Technical File accompanying the ISV and Assessment Report. The scope will cover all design and construction works under this Action. Designated Body conformity assessment may be required only for the railway infrastructure where national rules apply (1520mm infrastructure).

**Sub-Activity 3: Assessment Body (AsBo) assessment**

It includes assessment of railway safety risks of the Global Project in accordance with the CSM-RA regulations (Commission Implementing Regulation 402/2013).

AsBo provides a legal obligation and mandatory framework for the evaluation and assessment of risk associated with significant engineering, operational and organisational changes to the EU mainline railway. The result will be assessment reports for sections or objects in concern, necessary to complete this Action.

#### Sub-Activity 4: Independent Safety Assessor assessment

It includes railway system safety requirements (named also RAMS requirements) necessary in compliance with standard EN 50126. ISA provides independent opinion and determines system compliance with specified safety requirements. The result will be ISA report. ISA assessment will be applied when necessary.

#### Sub-Activity 5 (LV): Resident Engineer services for the design at Riga Central Station

It includes the Resident Engineer services under the rules of International Federation of Consulting Engineers (FIDIC), acting for the Owner, by undertaking Riga Central Station design (Activity 18) supervision.

The Resident Engineer will assess compliance of performed design with requirements set by the Global Project Design Guidelines, Operational Plan and Riga node operation optimization study (based on Operational Plan study findings), the design and build contract, national and EU law.

Completion of technical assessments by law and submission of conformity assessment reports are a prerequisite for completion of the Detailed technical designs.

The result of the activity is the completion of all required technical assessments and verifications for relevant activities under this Action.

#### **Activity 26: Supervision services and assessments of construction works (RB Rail, EE, LV, LT)**

The aim of this activity is to assure the compliance of construction works with EU and national laws in Estonia, Latvia and Lithuania, the detailed technical design and Global Project Design Guidelines.

This activity includes the following sub-activities:

##### Sub-Activity 1: Supervision of construction works by Resident Engineer

It includes Resident Engineer services under rules of International Federation of Consulting Engineers (FIDIC) acting for the Owner by undertaking construction works supervision. Resident Engineer will assess compliance of performed construction works with requirements set by Detailed technical design, Global project Design Guidelines, relevant national and EU law. It also includes Owner's and technical supervision as obligation set by the national law for ensuring the performance of construction works according to the design, Building codes and quality requirements. The activity will be carried out by independent bodies with competence required by the Building Code.

Construction work supervision by competent bodies is a prerequisite for completion of construction works.

##### Sub Activity 2: Design author supervision of detailed technical design implementation during construction

It includes the supervision by design author of detailed technical design implementation and verification of its compliance. The aim of this activity is to assure the compliance of construction works with EU and national laws in Estonia, Latvia and Lithuania, the detailed technical design and Global Project Design Guidelines.

Construction supervision services will be contracted for the following construction activities under this Action: Activity 15, Activity 16 , Activity 17, Activity 18, Activity 19 , Activity 20.

The result of the activity is the completed required construction work supervision services for the scope of all construction works under this Action.

#### ARTICLE I.5 – MILESTONES AND MEANS OF VERIFICATION

Milestone number	Milestone description	Indicative completion date	Means of verification
1	Contract for the new CBA is signed		
2	Submission of the new CBA final report to RB Rail		
3	Contract signed for the preparation of the Operational Plan		
4	Submission of the Operational Plan		
5	Contract signed for the preparation of a business plan		
6	Submission of the business plan to RB Rail		
7	Contract signed for the preparation of the study on contracting scheme		
8	Submission of the study on contracting scheme		
9	Contract signed for technical standards definition (Rail Baltica Design Guidelines)		
10	Submission of technical standards definition report (Rail Baltica Design Guidelines)		
11	Design Guidelines reviewed and, if necessary, updated by involving Technical Reference Group		
12	Design Guidelines reviewed and, if necessary, updated by involving Technical Reference Group		
13	Design Guidelines reviewed and, if necessary,		

	updated by involving Technical Reference Group		
14	Annual Commercialization Plan report for 2019 and aims for 2020 completed		
15	Final Commercialization Plan report for 2018-2020 and aims for Phase II (2020+)		
16	Contract signed for the first study of ensuring the supply of raw materials and mineral resources		
17	Submission of the final study on ensuring raw materials and mineral resources		
18	Contract signed for first environmental mitigation study		
19	Submission of last environmental mitigation study		
20	Signed contract for the first non-construction environmental measure		
21	Final non-construction mitigation measure completed		
22	Contract signed for the preparation of environmental management plan		
23	Environmental management plan submitted to Rail Baltic Estonia OÜ		
24	Archaeological measurement framework contracts signed		
25	Archaeological measurements completed		
26	Archaeological excavations framework contracts signed		
27	Archaeological excavations completed		
28	Contract signed for the study of the infrastructure management facilities (spatial and technological needs)		
29	Submission of the study of the infrastructure management facilities (spatial and technological needs)		
30	Contract signed for study on the land acquisition plan		
31	Design for the land acquisition plan submitted		
32	Activity 12, sub-activity 1: Contract signed for the preparation of the Detailed Technical Design of the railway, section Tallinn to Rapla		
33	Activity 12, sub-activity 1: first Master Design completed for the railway line, section Tallinn to Rapla		
34	Activity 12, sub-activity 1: last Detailed		

	Technical Design completed for the railway line, section Tallinn to Rapla				
35	Activity 12, sub-activity2: Contract signed for the preparation of the Detailed Technical Design of the railway, section Rapla to Pärnu				
36	Activity 12, sub-activity 2: first Master Design completed for the railway line, section Rapla to Pärnu				
37	Activity 12, sub-activity 2: last Detailed Technical Design completed for the railway line, section Rapla to Pärnu				
38	Activity 12, sub-activity 3: Contract signed for the preparation of the Detailed Technical Design of the railway, section Pärnu to Estonia/Latvia border				
39	Activity 12, sub-activity 3: first Master Design completed for the railway line, section Pärnu to Estonia/Latvia border				
40	Activity 12, sub-activity 3: last Detailed Technical Design completed for the railway line, section Pärnu to Estonia/Latvia border				
41	Activity 12, sub-activity 4:Design contest of the Tallinn Ülemiste passenger terminal started				
42	Activity 12, sub-activity 4: Detailed spatial plan for Tallinn Ülemiste passenger terminal area submitted for adoption to the municipality				
43	Activity 12, sub-activity 4: Contract signed for Ülemiste passenger terminal area railway design				
44	Activity 12, sub-activity 4: Contract signed for Ülemiste passenger terminal detailed technical design				
45	Activity 12, sub-activity 4: Ülemiste passenger terminal detailed technical design accepted				
46	Activity 12, sub-activity 5: Detailed spatial plan for the Pärnu passenger terminal area adopted				
47	Activity 12, sub-activity 5: Contract signed for Pärnu passenger terminal Detailed Technical Design				
48	Activity 12, sub-activity 5: Pärnu passenger terminal Detailed Technical Design completed				

49	Activity 12, sub-activity 6: Contract signed for the preparation of the CBA, study for technical and spatial needs		
50	Activity 12, sub-activity 6: Muuga CBA, study for technical and spatial needs completed		
51	Activity 12, sub-activity 6: Contract signed for Muuga terminal preliminary design and detailed spatial plan		
52	Activity 12, sub-activity 6: Muuga terminal Detailed Technical Design completed		
53	Activity 12, sub-activity 7: Detailed spatial plan for Ülemiste rolling stock maintenance depot adopted		
54	Activity 12, sub-activity 7: Contract signed for Ülemiste rolling stock maintenance depot Detailed Technical Design		
55	Activity 12, sub-activity 7: Ülemiste rolling stock depot Detailed Technical Design completed		
56	Activity 13, sub-activity 1: Contract signed for the preparation of the Detailed Technical Design of the railway, section Estonian/Latvian border to Vangazi		
57	Activity 13, sub-activity 1: Master Design completed for the railway line, section Estonian/Latvian border to Vangazi		
58	Activity 13, sub-activity 1: Detailed Technical Design completed for the railway line, section Estonian/Latvian border to Vangazi		
59	Activity 13, sub-activity 2: Contract signed for the preparation of the Detailed Technical Design of the railway, section Upeslejas triangle - Misa (through Salaspils)		
60	Activity 13, sub-activity 2: Master Design completed for the railway line, section Upeslejas triangle - Misa (through Salaspils)		
61	Activity 13, sub-activity 2: Detailed Technical Design completed for the railway line, section Upeslejas triangle - Misa (through Salaspils)		
62	Activity 13, sub-activity 3: Contract signed for the preparation of the Detailed Technical Design of the railway, section Upeslejas - Misa – through Riga (except Riga central station and Riga Airport)		



63	Activity 13, sub-activity 3: Master Design completed for the railway line, section Upeslejas - Misa – through Riga (except Riga central station and Riga Airport)			
64	Activity 13, sub-activity 3: Detailed Technical Design completed for the railway line, section Upeslejas - Misa – through Riga (except Riga central station and Riga Airport)			
65	Activity 13, sub-activity 4: Contract signed for the preparation of the Detailed Technical Design of the railway, section Misa – Latvian/Lithuanian border			
66	Activity 13, sub-activity 4: Master Design completed for the railway line, section Misa – Latvian/Lithuanian border			
67	Activity 13, sub-activity 4: Detailed Technical Design completed for the railway line, section Misa – Latvian/Lithuanian border			
68	Activity 13, sub-activity 5: Contract signed for the preparation of the Detailed Technical Design of the railway line and Rail Baltica Terminal in Riga International Airport			
69	Activity 13, sub-activity 5: Submission of the last Master Design for section railway line and Rail Baltica Terminal in Riga International Airport			
70	Activity 13, sub-activity 5: Last building permit obtained for section railway line and Rail Baltica Terminal in Riga International Airport			
71	Activity 13, sub-activity 5: Submission of the last Detailed Technical Design of section railway line and Rail Baltica Terminal in Riga International Airport			
72	Activity 13, sub-activity 6: Contract signed for the preparation of the Detailed Technical Design of railway line and Riga Central Terminal			
73	Activity 13, sub-activity 6: Submission of the last Master Design for section railway line and Riga Central Terminal			
74	Activity 13, sub-activity 6: Last building permit obtained for section railway line and Riga Central Terminal			
75	Activity 13, sub-activity 6: Submission of the last Detailed Technical Design of section railway line and Riga Central Terminal			
76	Activity 13, sub-activity 7: Tender documentation of Riga node operation optimization study prepared			
77	Activity 13, sub-activity 7: Contract signed for the preparation of Riga node operation optimization study			
78	Activity 13, sub-activity 7: Submission of the			

	Riga node operation optimization study to RB Rail				
79	Activity 14, sub-activity 1: Contract for the Detailed Technical Design of the railway line, section Kaunas - Ramygala signed				
80	Activity 14, sub-activity 1: First Master Design completed for the railway line section Kaunas - Ramygala approved				
81	Activity 14, sub-activity 1: Detailed Technical Designs covering the railway line section Kaunas - Ramygala completed				
82	Activity 14, sub-activity 2: Contract for the Detailed Technical Design of the railway line section Ramygala - Lithuanian/Latvian state border signed				
83	Activity 14, sub-activity 2: Master Design covering the railway line section Ramygala - Lithuanian/Latvian state border approved				
84	Activity 14, sub-activity 2: Detailed Technical Designs covering the railway line section Ramygala - Lithuanian/Latvian state border completed				
85	Activity 15, sub-activity 1: First contract for construction of crossings with utilities signed				
86	Activity 15, sub-activity 2: First contract for construction of rail/road crossings signed				
87	Activity 15, sub-activity 3: First contract for construction of ecoducts signed				
88	Construction of ecoducts in the current phase completed				
89	Activity 15, sub-activity 4: First contract for construction of main line priority sections signed				
90	Activity 15, sub-activity 4: Construction of main line priority sections in the current phase completed				
91	Tender for track works published				
92	Construction contract for track works signed				
93	Track works finalized				
94	Tender for construction of Tallinn Ülemiste passenger terminal building (particularly waiting platforms and access to them) and utility works				
95	Construction contract for construction of Tallinn Ülemiste passenger terminal building (particularly waiting platforms and access to them) and utility works				
96	Tallinn Ülemiste Phase 1 works completed				

97	Tender for construction of Pärnu passenger station Phase I		
98	Construction contract for construction of Pärnu passenger station Phase I		
99	Pärnu passenger station Phase 1 works completed		
100	Tender published for construction works		
101	Contract signed for Riga central station construction works		
102	Phase 1 of the works completed		
103	Tender published for construction works		
104	Contract signed for Riga Airport Terminal construction works		
105	Phase 1 of the works completed		
106	Contract signed for construction works of railway line on section Kaunas - Panevėžys - LT/LV border (Phase I)		
107	Construction works on section Kaunas - Panevėžys - LT/LV border (Phase I) completed		
108	First land plot acquired		
109	50% of land plots acquired		
110	Land acquisition completed, all approx. 700 land plots acquired		
111	First land plot acquired		
112	Land acquisition Phase 1 completed		
113	Contract signed for BIM (Data, model and drawing management) system solution implementation		
114	BIM (Data, model and drawing management) system solution with basic functionality deployed and implemented		
115	All designers developing the DTD projects are delivering the design deliverables using the		

	data, model and drawing management system		
116	Strategy for GIS, BIM and other CDE system integration is defined		
117	GIS platform is populated with Rail Baltica Global Project technical information and works as interface platform for accessing the detailed information about it		
118	BIM and GIS systems are ready to be used for Rail Baltica Global Project construction activities		
119	Signed contracts for the communication activities (EE)		
120	Communication and PR activities completed (EE)		
121	Signed contracts for the communication activities (LV)		
122	Communication and PR activities completed (LV)		
123	Signed contracts for the communication activities (RB Rail)		
124	Communication and PR plan prepared (RB Rail)		
125	Communication and PR activities completed (RB Rail)		
126	First contract signed for Design review and assessment		
127	Last contract signed for Design review and assessment		
128	Design review and assessment completed		
129	First contract signed for NoBo assessment		
130	Last contract signed for NoBo assessment		
131	NoBo assessment completed		
132	First contract signed for AsBo and / or ISA assessment		
133	Last contract signed for AsBo and/or ISA assessment		
134	AsBo and/or ISA assessment completed		
135	Start of Design Author Supervision in Estonia		
136	Design Author Supervision completed in Estonia		

137	Construction works supervision by the Resident Engineer started in Estonia		
138	Construction works supervision by the Resident Engineer completed in Estonia		
139	Start of Design Author Supervision in Latvia		
140	Design Author Supervision completed in Latvia		
141	Construction works supervision by the Resident Engineer started in Latvia		
142	Construction works supervision by the Resident Engineer completed in Latvia		
143	Start of Design Author Supervision in Lithuania		
144	Design Author Supervision completed in Lithuania		
145	Construction works supervision by the Resident Engineer started in Lithuania		
146	Construction works supervision by the Resident Engineer completed in Lithuania		
147	Contract signed for detailed spatial plan of the infrastructure maintenance facilities in Estonia		
148	Detailed spatial plan of the infrastructure maintenance facilities in Estonia approved		
149	Activity 12, sub-activity 1: last Master Design completed for the railway line, section Tallinn to Rapla		
150	Activity 12, sub-activity 1: first Detailed Technical Design completed for the railway line, section Tallinn to Rapla		
151	Activity 12, sub-activity 2: last Master Design completed for the railway line, section Rapla to Pärnu		
152	Activity 12, sub-activity 2: first Detailed Technical Design completed for the railway line, section Rapla to Pärnu		
153	Activity 12, sub-activity 3: last Master Design completed for the railway line, section Pärnu to Estonia/Latvia border		
154	Activity 12, sub-activity 3: first Detailed Technical Design completed for the railway line, section Pärnu to Estonia/Latvia border		
155	Activity 12, sub-activity 4: Ülemiste passenger terminal Master Design completed		

156	Activity 12, sub-activity 5: Pärnu passenger terminal Master Design completed				
157	Activity 12, sub-activity 6: Muuga terminal Master Design completed				
158	Activity 12, sub-activity 7: Ülemiste rolling stock depot Master Design completed				
159	Activity 15, sub-activity 1,2,3: Construction of rail/road crossings, crossings with utilities, ecoducts completed				
160	Phase 1 foundation works completed - Riga Central Station				
161	Phase I foundation works completed - Riga Airport				
162	75% of land plots acquired				
163	Not less than 60% of Phase 1 land plots acquired				

"



(7) Annex III shall read as follows:

**"ANNEX III  
 ESTIMATED BUDGET OF THE ACTION**

**Table 1: Planned sources of financing of the eligible costs of the action**

Financing sources	Amount of financial contribution to the action eligible costs (EUR)	Amount of financial contribution to the action eligible costs (EUR)	Amount of financial contribution to the action eligible costs (EUR)	Amount of financial contribution to the action eligible costs (EUR)
	RB Rail	Min EAC - EE	Min Tran - LV	MoTC - LT
<b>1. CEF-Transport financing</b>	19,405,170	164,622,125	236,579,721	21,623,599
<b>2. Beneficiary's own resources</b>	0	0	0	0
<b>of which:</b>				
<b>(a) EIB loan</b>	0	0	0	0
<b>3. State budget(s)</b>	3,424,442	35,967,112	50,828,005	4,269,920
<b>4. Regional/ local budget(s)</b>	0	0	0	0
<b>5. Income generated by the action</b>	0	0	0	0
<b>6. Other sources</b>	0	0	0	0
<b>TOTAL</b>	22,829,612	200,589,237	287,407,726	25,893,519

**Table 2: Indicative breakdown per activity and per beneficiary of estimated eligible costs of the action (EUR)**



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	1485	1486	1487	1488	1489	1490	1491	1492	1493	1494	1495	1496	1497	1498	149
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----

[illegible]

[illegible]



**Table 3: Indicative breakdown per beneficiary of the maximum CEF contribution (EUR)**

	Estimated contribution	Pro-rata share of the maximum CEF contribution (%)
<b>RB Rail</b>	19,405,170	4.39%
<b>Min EAC - EE</b>	164,622,125	37.23%
<b>Min Tran - LV</b>	236,579,721	53.50%
<b>MoTC - LT</b>	21,623,599	4.89%
<b>Total</b>	442,230,615	100.00%

"

## **Article 2**

All the other provisions of the grant agreement shall remain unchanged.

## **Article 3**

The present amendment shall form an integral part of the grant agreement and it shall enter into force on the date on which it is signed by the last party. It shall take effect on 01/01/2019.

[REDACTED]

[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]