

**AGREEMENT ON
OPERATION PLAN CONCEPT FOR RAIL BALTICA RAILWAY**

between

RB RAIL AS

and

ETC Transport Consultants GmbH

Dated 22 February 2018

TABLE OF CONTENTS

SECTION I. DEFINITIONS AND INTERPRETATION	3
SECTION II. GENERAL TERMS AND CONDITIONS	4
SECTION III. RESPONSIBILITIES OF PRINCIPAL.....	5
SECTION IV. RESPONSIBILITIES OF CONTRACTOR	5
SECTION V. REPRESENTATIONS AND WARRANTIES	8
SECTION VI. FEE AND PAYMENT.....	9
SECTION VII. COMMENCEMENT OF STUDY, REMEDYING OF DEFECTS AND ACCEPTANCE.....	10
SECTION VIII. INTELLECTUAL PROPERTY RIGHTS.....	11
SECTION IX. TERMINATION; SUSPENSION	12
SECTION X. LIABILITY	14
SECTION XI. FORCE MAJEURE	15
SECTION XII. CONFIDENTIALITY.....	15
SECTION XIII. RIGHT TO AUDIT	17
SECTION XIV. ON-THE-SPOT VISITS	17
SECTION XV. GOVERNING LAW AND RESOLUTION OF DISPUTES	17
SECTION XVI. MISCELLANEOUS PROVISIONS	18
<i>ANNEX A: DEFINITIONS AND COMMON TERMS.....</i>	<i>19</i>
<i>ANNEX B: TECHNICAL SPECIFICATIONS.....</i>	<i>23</i>
<i>ANNEX C: SCHEDULE OF STUDY.....</i>	<i>23</i>
<i>ANNEX D: FEE AND PAYMENT SCHEDULE</i>	<i>47</i>
<i>ANNEX E: LIST OF APPROVED SUB-CONTRACTORS.....</i>	<i>48</i>
<i>ANNEX F: FORM OF PROVISIONAL COMPLETION CERTIFICATE</i>	<i>49</i>
<i>ANNEX G: FORM OF PROVISIONAL ACCEPTANCE CERTIFICATE</i>	<i>50</i>
<i>ANNEX H: FORM OF FINAL ACCEPTANCE CERTIFICATE</i>	<i>51</i>
<i>ANNEX I: DECLARATION OF CONTRACTOR</i>	<i>52</i>

AGREEMENT ON OPERATION PLAN CONCEPT FOR RAIL BALTICA RAILWAY

Riga 22 February 2018

Agreement registration number

8/2018-4
A1.1.2.

CEF¹ Contract No INEA/CEF/TRAN/M2014/1045990

This Agreement on Operation Plan Concept for Rail Baltica Railway (hereinafter, the "Agreement"), together with all Annexes thereto, is entered into in Riga, on 21 February of the year 2018 (hereinafter, the "Effective Date") by and between:

RB Rail AS, a joint stock company registered in the Latvian Commercial Register registration No 40103845025, having its registered address at K. Valdemāra iela 8-7, Riga, LV 1010, Latvia (hereinafter, the "Principal"), represented by its Chairperson of the Management Board Ms Baiba Anda Rubesa and Management Board Member Kaspars Rokens acting on the basis of the Power of Attorney No 9/2017-17 (dated 11 December 2017), on the one side,

and

ETC Transport Consultants GmbH, a company organized and existing under German law, with registration number HRB 8866, having its registered address at Martin-Hoffmann-Str. 18, Berlin, Germany (hereinafter, the "Contractor"), represented by Managing Director Gernot Steinbrink and Senior Vice President of International Projects Hinrich Bruemmer acting on the basis of authorization.

WHEREAS:

- (A) This Agreement is entered into within the framework of the Global Project which includes all activities undertaken by the respective beneficiaries and implementing bodies of the Republic of Estonia, the Republic of Latvia and the Republic of Lithuania in order to build, render operational and commercialize the Rail Baltica railway – a new fast conventional double track electrified railway line according TSI INF P2-F1 criteria and European standard gauge (1435mm) on the route from Tallinn through Pärnu-Riga-Panevezys-Kaunas to Lithuanian-Polish border, with the connection of Kaunas – Vilnius, and related railway infrastructure in accordance with the agreed route, technical parameters and time schedule;
- (B) The Principal has organised procurement procedure "Preparation of the operational plan of the railway" (identification No RBR 2017/19) (hereinafter, the "Procurement Procedure") whereby the Contractor's tender proposal (hereinafter, the "Contractor's Proposal") was selected as the winning bid;
- (C) This Agreement is co-financed from the Connecting Europe Facility (CEF), Action No. 2015-EU-TM-0347-M.

SECTION I DEFINITIONS AND INTERPRETATION

1.1. *Definitions.* In this Agreement, unless the context requires otherwise, all defined terms shall have the meanings ascribed to such terms in accordance with Annex A (*Definitions and Common Terms*).

1.2. *Interpretation.*

- (a) The headings contained in this Agreement shall not be used in its interpretation.
- (b) References to the singular shall include references in the plural and vice versa, words denoting a gender shall include any other gender where the context requires, and words denoting natural persons shall include any other persons.
- (c) References to a treaty, directive, regulation, law or legislative provision shall be construed, at any particular time, as including a reference to any modification, extension or re-enactment of the respective treaty,

¹ Grant Agreement under the Connecting Europe Facility (CEF) -Transport Sector Agreement No INEA/CEF/TRAN/M2014/1045990

directive, regulation, law or legislative provision at any time then in force and to all subordinate legislation enacted from time to time.

- (d) In the event there arises a conflict between provisions of the Agreement, the last provision to have been written chronologically shall take precedence.
- (e) Any reference in this Agreement to a person acting under the direction of another person shall not include any action that is taken in contravention of any Applicable Law or Standards, unless the relevant person can demonstrate that an explicit instruction or direction was given to take the relevant action.
- (f) Unless expressly stated to the contrary, any reference in this Agreement to the right of consent, approval or agreement shall be construed such that the relevant consent, approval or agreement shall not be unreasonably delayed or withheld. The Parties agree and acknowledge as follows:
 - (i) neither Party shall not be required to seek or apply for any consent, approval or agreement by any Person which would place the respective Party in breach of the Applicable Law or any Good Industry Practice; and
 - (ii) nothing in this Agreement shall require the Principal to give or procure the giving of any consent or approval which would be contrary to the protection, safety and efficient operation of the Railway and the Project.
- (g) A reference to "writing" shall include an e-mail transmission and any means of reproducing words in a tangible and permanently visible form.
- (h) The words "include" and "including" are to be construed without limitation.
- (i) Unless indicated otherwise, all references to "days" shall mean calendar days.
- (j) The words in this Agreement shall bear their natural meaning.

1.3. *Order of Precedence.* In the event of any discrepancy or inconsistency between the documents forming part of this Agreement, the following order of precedence shall apply:

- (a) this Agreement document;
- (b) Explanations (clarifications) of the procurement documentation;
- (c) Technical specifications (Scope of Service);
- (d) Clarifications of the Tender of the Contractor;
- (e) Tender of the Contractor;
- (f) Procurement documents with the annexes;
- (g) all other Annexes of the Agreement.

SECTION II GENERAL TERMS AND CONDITIONS

- 2.1. *Engagement to Carry Out Study.* The Principal hereby engages the Contractor to provide and perform the Study for the purposes of the Project, as further described and according to the specifications contained Annex B (*Technical Specification*) to this Agreement, and the Contractor hereby accepts such engagement. The Study shall result in the provision to the Principal of the Deliverables identified in accordance with Annex C (*Schedule of Study*) to this Agreement.
- 2.2. *Co-Operation of the Parties.* The Parties shall cooperate with one another to fulfil their respective obligations under this Agreement. Both Parties shall endeavour to maintain good working relationships among all key personnel engaged toward provision of the Study.
- 2.3. *Licensing Requirements.* By signing this Agreement, the declaration is made by the Contractor that the Contractor is professionally qualified, registered, and licensed to practice in the Federal Republic of Germany.
- 2.4. *General Obligations of Contractor.* The Contractor shall be responsible for the professional quality, technical accuracy, and coordination of all concepts, programming, reports, designs, drawings, specifications, data, and other services furnished under this Agreement. The Contractor shall have an obligation, without additional compensation of any kind, to correct or revise any errors, deficiencies, or omissions in concepts, programming, reports, designs, drawings, specifications, estimates, and other services rendered hereunder and forming part of the Study.

- 2.5. *Acceptance Not a Waiver.* The Principal's review, approval, acceptance, or payment for the Works forming part of the Study shall not be interpreted or construed to operate as a waiver of any right or cause for action arising out of the Contractor's performance of any Works under this Agreement. The Contractor shall remain liable to the Principal as allowed under this Agreement and under Applicable Law for any and all costs and/or Damages caused by the Contractor's negligent performance of any of the Works furnished under this Agreement.

SECTION III RESPONSIBILITIES OF PRINCIPAL

- 3.1. *Supply of Information.* Unless otherwise provided under this Agreement, the Principal shall, in a timely manner, provide to the Contractor any information regarding requirements and parameters of the Project, as may reasonably be requested by the Contractor for the purposes of the Study. The Principal shall furnish to the Contractor a preliminary Project program setting forth the Principal's objectives, schedule, constraints and criteria, including necessities and relationships, special equipment, systems and site requirements.
- 3.2. *Review of Documentation.* The Principal shall examine Documentation as may be submitted by the Contractor for review by the Principal toward partial completion of the Study and, upon request of the Contractor, shall render decisions and opinions pertaining thereto.
- 3.3. *Decisions.* On all matters properly referred to it in writing by the Contractor the Principal shall give its decision in writing so as not to delay the Study and within a reasonable time.
- 3.4. *Accounting and Auditing Services.* The Principal shall furnish accounting and auditing services as may be necessary for the Study as the Principal may require to ascertain how and/or for what purposes the Contractor has used the funds paid under the terms of this Agreement.
- 3.5. *Action Upon Becoming Aware of Defects.* In the event the Principal observes or otherwise becomes aware of any error, fault, omission, or defect in the Study or non-conformance of any action forming part of the Study with the Documentation, the Principal shall give prompt notice thereof to the Contractor.

SECTION IV. RESPONSIBILITIES OF CONTRACTOR

- 4.1. *Standard of Performance.* The Contractor's services shall be performed as expeditiously as is consistent with professional skill and care, orderly progress of the Study, and in accordance with the Schedule of Study set forth in accordance with Annex C (*Schedule of Study*).
- 4.2. *Accuracy Standard.* Precision of the Deliverables shall be based on the Positional Accuracy Concept. The Contractor shall recommend positional accuracy limits and error of closure limits for the areas, terrains and properties being studied or surveyed as part of the Study.
- 4.3. *Obligation to Act in Accordance with Principal's Comments.* In performing the Study, the Contractor shall have due regard to any comments made by the Principal in connection with any review of the Documentation, and shall provide reasons to the Principal where it does not take into account any such comments.
- 4.4. *Duty of Care and Exercise of Authority.* The Contractor shall:
- (a) in performing its obligations under this Agreement, exercise reasonable professional skill, diligence and care as may be expected of a properly qualified and competent person carrying out services of a similar size, nature, type and complexity;
 - (b) ensure that its personnel are properly qualified and competent in accordance with the relevant Standards;
 - (c) ensure that all maps, drawings, plans, specifications, estimates, surveys and other documents required to be prepared or submitted by the Contractor under this Agreement conform to Good Industry Practice generally acceptable at the time of submission of such maps, drawings, plans, specifications, estimates, studies and documents;
 - (d) at all times during the term of the Study, ascertain and comply with all Applicable Laws and Good Industry Practice of the Republic of Latvia;
 - (e) comply, where applicable, with any reasonable requirements of the Principal not otherwise provided for in this Agreement; and
 - (f) ensure that all designs are performed, and that the design process is documented, in accordance with Good Industry Practice, and using standard industry quality control methods;

- (g) it has all requisite ability to ensure the highest quality of the Study;
- (h) it will assign competent and duly qualified personnel to carry out the Works set out in this Agreement according to the highest professional standard and Good Industry Practice.

4.5. *Maintenance of Records.* During the term of the Study and until 1 April 2027 for any reason whatsoever, the Contractor shall keep and maintain clear, adequate and accurate records and Documentation evidencing, to the reasonable satisfaction of the Principal, that the Study has been and is being carried out in accordance with the Standards.

4.6. *Access to Documentation.* At all times during the term of the Study, the Principal shall have access to all Documentation. This access shall be continuing and survive the termination of this Agreement for either cause or convenience. The Documentation shall be kept in a generally recognized format for a period until 1 April 2017. All records forming part of the Documentation shall be available to the Principal auditor, or expert appointed by the Principal during the period of time specified in accordance with this Clause 4.6.

4.7. *Right to Sub-Contract.* In carrying out the Study, the Contractor may only rely on the services of those Approved Sub-Contractors listed in Annex E (*List of Approved Sub-Contractors*), as such list may, from time to time, be modified or supplemented in agreement with the Principal and in accordance with the terms and subject to the criteria contained in the applicable public procurement laws of the Republic of Latvia. Annex E shall specify the name, contact details and legal representative(s) of each Approved Sub-Contractor as of the Effective Date. The Contractor shall have an obligation to notify the Principal in writing of any changes to Sub-Contractor data specified in Annex E occurring during the term of this Agreement and of the required information for any new sub-contractors which it may subsequently engage toward provision of the Study.

Pursuant to the Public Procurement Law of the Republic of Latvia applicable at the date of entry into effect of this Agreement, the Service Provider shall obtain prior written consent of the Principal for the replacement of a Sub-Contractor:

- (a) whose capacities the Service Provider has relied on during the selection or evaluation stages of the Procurement Procedure; or
- (b) who carries out at least 10% (ten per cent) of the total value (Contract Price) of the Services.

Review and evaluation of the replacement Sub-contractors shall be carried out, and the consent or refusal to give consent shall be rendered by the Principal in accordance with the applicable Law of the Republic of Latvia in the area of public procurement.

The Service Provider shall replace the Sub-contractor which, during the effectiveness of this Agreement, meets any of the compulsory grounds for exclusion of tenderers (or sub-contractors) that were verified during the Procurement Procedure.

4.8. *Responsibility for Performance by Sub-Contractors.* The Contractor shall retain the complete responsibility for the proper performance of all of its obligations under this Agreement, and any act, failure to act, breach or negligence on the part of any of its Approved Sub-Contractors shall, for the purposes of this Agreement, be deemed to be the act, failure to act, breach or negligence of the Contractor.

4.9. *No Conflicting Activity.* Except with the Principal's knowledge and express written permission, the Contractor shall not engage in any activity, or accept any employment, other agreement, interest, or contribution that would reasonably appear to compromise the Contractor's professional judgment and performance with respect to the Study and/or the Project. In performing the Study, the Contractor shall take all necessary measures to prevent any situation where the impartial and objective implementation of the Study is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest.

4.10. *Attendance of Meetings.* To the extent necessary to ensure smooth and efficient provision of the Study, the Contractor shall, at the Principal's request, hold and/or attend meetings with any Persons.

4.11. *Compliance with Laws.* The Contractor shall review the Applicable Laws applicable to the Contractor's services. In carrying out any activities forming part of the Study, the Contractor shall, at all times, ensure compliance with requirements imposed by supra-national and/or governmental authorities having jurisdiction over the Project.

4.12. *Information Furnished by Principal.* The Contractor shall be entitled to rely on the accuracy and completeness of services and information furnished by the Principal. The Contractor shall provide prompt written notice to the Principal if the Contractor becomes aware of any errors, omissions, or inconsistencies in such services or information.

4.13. *Certain Negative Covenants.* In performing the Study, the Contractor undertakes not to procure goods or services of any kind from any Person meeting any of the following criteria:

- (a) the Person who is a member of the Management Board or Supervisory Board of an Approved Sub-Contractor or procurator of an Approved Sub-Contractor, or is authorized to represent or act on behalf of an Approved Sub-Contractor with respect to any activity related to any subsidiary company of such Approved Sub-Contractor, and such Person has been accused of commitment of any of the following criminal offences pursuant to an order issued by a public prosecutor or was found to be guilty of commitment of any of the following criminal offences in accordance with a court judgment that has entered into legal force, is non-disputable and non-appealable:
 - (i) accepting a bribe, giving of a bribe, misappropriation of a bribe, intermediation toward giving or taking of a bribe, acceptance of a prohibited benefit or commercial bribing;
 - (ii) fraud, misappropriation of funds or money laundering;
 - (iii) tax evasion or evasion of payments equivalent to tax;
 - (iv) terrorism, financing of terrorism, instigation of acts of terrorism, terrorist threats or recruitment and training of a person with the aim of committing acts of terrorism;
- (b) the Person has, by decision of a competent authority or judgment of a court which has entered into legal force and is non-disputable and non-appealable, been found guilty of violation of labour law in any of the following manners:
 - (i) employment of one or more citizens or nationals of countries who are not citizens or nationals of a Member State of the European Union and are residing in the territory of a Member State of the European Union unlawfully;
 - (ii) employment of one or more persons without having entered into written employment agreement with such persons, or without having submitted an employee declaration with respect to such persons within a period of time stipulated in accordance with applicable laws and regulations applicable to persons that enter into salaried employment;
- (c) the Person who, by decision of a competent authority or in accordance with judgment of a competent court which has entered into legal force, is non-disputable and non-appealable, has been held guilty of violation of applicable rules of competition law manifested as a vertical agreement aimed at restricting the ability of one or more purchasers to determine the resale price, or a horizontal cartel agreement, with the exception of instances where the relevant authority, upon having established the fact of violation of applicable rules of competition law, has discharged the candidate or participant in a tender offer from imposition of a fine or has reduced the amount of fine as a part of co-operation leniency programme;
- (d) the Person who has insolvency proceedings initiated against it (except in the circumstances where a bailout or a similar set of measures are applied within the insolvency proceedings and are aimed at preventing the bankruptcy and restoring the debtor back to solvency, in which case the Contractor shall evaluate the possibility of participation by such Person in performing the Study), economic activity of the Person has been suspended or discontinued, bankruptcy proceedings have been initiated against the Person or the Person is subject to a liquidation;
- (e) the Person has unpaid tax indebtedness in the country where the procurement is organised or in the country where the Person is registered or permanently residing as a tax payer, including the indebtedness with respect to State social insurance contributions, in the total amount exceeding EUR 150 in each individual country; in such case, the Contractor can, within its sole discretion, prompt the Approved Sub-Contractor to pay or discharge all outstanding tax indebtedness within ten (10) Working Days and, upon such payment or discharge, allow the Person to continue performance of the Study; and
- (f) any of the above-mentioned criteria shall apply to all members of a group of persons if the Person is a group of persons.

4.15. *Visibility Requirements.* At all times during performance of the Study, the Contractor undertakes to comply with each of the following requirements:

- (a) any report, brochure, document or information related to the Study conducted by the Contractor hereunder or any other Person, or which the Contractor makes publicly available shall include each of the following:
 - (i) a funding statement which indicates that the Study is financed from CEF funds substantially in the following form: "Rail Baltic/Rail Baltica is co-financed by the European Union's Connecting Europe Facility";

- (ii) with respect to printed materials, a disclaimer releasing the European Union from liability with respect to any contents of any distributed materials substantially in the form as follows: "The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein". The disclaimer in all official languages of the European Union can be viewed on the website <https://ec.europa.eu/inea/connecting-europe-facility/cef-energy/beneficiaries-info-point/publicity-guidelines-logos>; and
 - (iii) the flag of the Council of Europe and the European Union.
- (b) the requirements set forth in Clauses 4.15(a)(i) and 4.15(a)(iii) of this Agreement can be complied with by means of utilizing the following logo:



Co-financed by the European Union
 Connecting Europe Facility

- in the event the Contractor decides to utilize the above logo, the Contractor shall ensure that the individual elements forming part of the logo are not separated (the logo shall be utilized as a single unit) and sufficient free space is ensured around the logo; and
- (c) in order to comply with the latest applicable visibility requirements established by the European Union, the Contractor shall regularly monitor changes to visibility requirements; as of the Effective Date, the visibility requirements are available for review on the webpage <https://ec.europa.eu/inea/connecting-europe-facility/cef-energy/beneficiaries-info-point/publicity-guidelines-logos>.

SECTION V. REPRESENTATIONS AND WARRANTIES

5.1. *Certain Representations and Warranties by Parties.* Each Party represents and warrants to the other Party, as of the Effective Date, as follows:

- (a) it has entered into this Agreement with the aim of attaining all of the objectives and performing in all material respects all of the obligations and commitments herein set forth;
- (b) it has entered into this Agreement without having any intention or goal whatsoever to violate the Applicable Law, its own Statutes, other constitutional documents or agreements of any kind to which it is a party;
- (c) it is not bankrupt and is not the subject of insolvency or winding-up proceedings, where its assets are being administered by a liquidator or by the court, it is not in an arrangement with creditors, where its business activities are suspended, or it is in any analogous situation arising from a similar procedure under the laws of Germany; and
- (d) it has entered into this Agreement of its own volition and in good faith.

5.2. *Certain Representations and Warranties by Contractor.* The Contractor represents and warrants to the Principal, as of the Effective Date, as follows:

- (a) it has all requisite qualification, skills and competence to perform the Study on the terms and conditions of this Agreement which are no less favourable than the terms and conditions of service identified by the Contractor in any document submitted by the Contractor to the Principal as part of the Procurement Procedure and on the terms of the Contractor's Proposal;
- (b) it holds all requisite licenses, permits, approvals and consents necessary to enable performance by the Contractor of the Study according to the specifications contained in Annex B (*Technical Specification*);
- (e) it is not deemed to be a person associated with the Principal for the purposes of Applicable Law;
- (f) it is compliant with all of the requirements of the Contractor's Declaration contained in Annex J (*Declaration of Contractor*) and will continue to be compliant with all such requirements during the term of this Agreement.

SECTION VI. FEE AND PAYMENT

- 6.1. *Fee.* In consideration of provision of the Study, the Principal undertakes to pay the Contractor a consideration in the total amount set forth in accordance with Annex D (*Fee and Payment Schedule*) (hereinafter, the “*Fee*”) which shall be split into separate instalments and be payable by the Principal to the Contractor according to the Schedule set forth in Annex D (*Fee and Payment Schedule*). It is acknowledged and agreed by the Parties that the Fee shall include all Costs and expenses incurred by the Contractor and Approved Sub-Contractors toward performing the Study. The Fee specified in accordance with this Clause 6.1 excludes value added tax that will be charged at the rate applicable in accordance with Applicable Law at the time of invoicing.
- 6.2. *Invoicing.* According to Annex D (Fee and Payment Schedule) and following each Completion Date and/or Final Acceptance Date, the Contractor shall deliver to the Principal an invoice specifying the amount of Fee payable and the period of time with respect to which the Fee is payable. In the event the Principal objects to payment of any amount claimed by the Contractor in the invoice, notice to this effect shall be given by the Principal to the Contractor not later than five (5) Working Days before the due date for payment under this Clause 6.2. The notice of objection shall state the amount to be withheld, the grounds for withholding the payment and the basis on which that amount is calculated. Unless such notice of objection is made by the Principal, the amount to be paid is that stated in the invoice which shall become due and payable in accordance with this Clause 6.2. For the avoidance of any doubt, the Principal shall not be required to pay any amount under this Agreement with respect to any part of the Study that has not been accepted by the Principal in accordance with Clauses 7.5, 7.6 or 7.7 of this Agreement.
- 6.3. *Payment.* Subject to the provisions of Clause 6.2, payment by the Principal to the Contractor shall be without set-off, retention, counterclaim, abatement or other deduction of any kind and shall be due thirty (30) days after the date of issue of the invoice. For the avoidance of any doubt, the Principal shall not be required to pay any amount with respect to any invoice in the absence of a Completion Acceptance Certificate duly signed by the Principal or, with respect to the final payment of the Fee to be effected under this Agreement, the Final Acceptance Certificate duly signed by both Parties.
- 6.4. *Costs and Commissions.* Each Party shall bear its own costs, fees, commissions and expenses incurred in connection with the transfer of any funds under this Agreement to the other Party.
- 6.5. *Compliance with Tax Obligations in Germany.* It is acknowledged and agreed by the Parties that the Fee shall include all taxes and duties payable by the Contractor in the consequence of provision of the Study. The Contractor shall, at the sole cost and expense of the Contractor, comply with the obligation to pay all taxes and duties relevant to provision of the Study in Germany and in accordance with Applicable Law of Germany. In addition, the Contractor shall assume all risks associated with the payment or obligation to pay such taxes and duties, if any. The Contractor assumes all risks associated with the possible increase in the amount of the Fee arising as a result of the obligation of having to pay any such taxes or duties.
- 6.6. *Invoice.* The Contractor’s invoices shall contain the following Contractor’s details and details about the Contract:

Contractor	ETC Transport Consultants GmbH
Registration No	HRB 8866
VAT payer’s No	DE 165533279
Address	Martin-Hoffmann-Str. 18, Berlin, Germany
Name of Bank	Bayerische Landesbank
Bank Code	BIC BYLADEMMXXX
Bank Account No	DE 80 7005 0000 0004 2156 55
Subject:	For provided services according to the Agreement on Operation Plan Concept for Rail Baltica Railway No _____ (CEF ² Contract No INEA/CEF/TRAN/M2014/1045990 Acitivity No A1.1.2.).

The Contractor shall send the invoice to the Principal electronically to the following e-mail address: invoices@railbaltica.org. The Pricipal shall review the invoice to verify whether it contains all necessary requisites.

² Grant Agreement under the Connecting Europe Facility (CEF) -Transport Sector Agreement No INEA/CEF/TRAN/M2014/1045990

SECTION VII. COMMENCEMENT OF STUDY, REMEDYING OF DEFECTS AND ACCEPTANCE

- 7.1. *Study Commencement.* The Contractor shall not commence provision of the Study until Study Start Date, as identified in accordance with Annex C (*Schedule of Study*) and shall ensure that the Deliverables are furnished to the Principal on or before each relevant Study Milestone. The Contractor shall perform the Study with due diligence having due regard to any applicable Study Milestones and any other key dates for performance of the Study set out in the Agreement and the applicable Annexes, as may be amended from time to time with the consent of the Principal or in accordance with this Agreement.
- 7.2. *Impediments and Delays.* If the Study, or any part thereof, is impeded or delayed by the Principal or any third party engaged by the Principal so as to increase the duration of the Study:
- (a) the Contractor shall inform the Principal of the circumstances and probable effects of such impediment or delay upon the agreed Schedule of Study specified in accordance with Annex C (*Schedule of Study*); and
 - (b) the duration of the Study shall be increased, and any Study Milestones affected by the impediment or delay shall be extended accordingly.
- 7.3. *Defects and Defects Date.* Until the Defects Date specified in accordance with Annex C (*Schedule of Study*) the Principal shall notify the Contractor of any Defects of any kind as soon as Defects are identified by the Principal and the Contractor shall have an obligation to notify the Principal of any Defects of any kind as soon as Defects are identified by the Contractor. Upon discovery of any Defects, or upon receipt by the Contractor of a notification of Defects from the Principal, the Contractor shall have seven (7) calendar days to remedy the Defects, irrespective of the nature of such Defects (hereinafter, the "Cure Period"). In the event of inability or failure by the Contractor to remedy the Defects within the Cure Period, the Principal shall be entitled, in the sole and exclusive discretion of the Principal, to do any of the following:
- (a) allow the Contractor an additional time period for remedying the Defects, such time period to be determined in the sole discretion of the Principal;
 - (b) remedy the Defects, irrespective of the extent or nature of the Defects, at own cost of the Principal (including by means of relying on the services of a third Person) and demand reimbursement by the Contractor of Costs incurred by the Principal as a result of having to pay other Persons toward carrying out any work or action;
 - (c) terminate the Agreement according to Clause 8.1; or
 - (d) remedy the Defects, irrespective of the extent or nature of the Defects, in accordance with Clause 7.3(b) and terminate the Agreement pursuant to Clause 8.1.

For the avoidance of any doubt, the application of the Cure Period under this Clause 7.3 shall be without prejudice to and shall not relieve the Contractor from the obligation to pay any contractual penalty in accordance with the provisions of Clause 10.2 or to pay Damages in accordance with the provisions of Clause 10.3 of this Agreement.

- 7.4. *Completion of Study and Completion Certificate.* Meeting of a Study Milestone or supply of a Deliverable occurs whenever the Contractor has completed all of the Works which the Contractor has undertaken to perform according to the Technical Specification and Schedule of Study by the relevant Study Milestone. On meeting a Study Milestone and/or producing a Deliverable (including all Documentation forming part of the Deliverable) constituting all or an identifiable part of the Study, the Contractor shall issue to the Principal a Provisional Completion Certificate substantially in the form of Annex F (*Form of Provisional Completion Certificate*) (hereinafter, the "Provisional Completion Certificate"). The Provisional Completion Certificate shall include the Deliverable and adequate supporting documentation relevant to the Study Milestone attained and/or Deliverable completed.
- 7.5. *Objection Notice and Provisional Acceptance Certificate.* In the event the Principal objects to the issuance of a Provisional Completion Certificate, it shall give notice to the Contractor setting out in reasonable detail any Defect or reason for the objection (hereinafter, the "Objection Notice") within reasonable time following receipt of the Provisional Completion Certificate. In the event no reasons for objection to the Provisional Completion Certificate exist, the Principal shall issue, within reasonable time following receipt of the Provisional Completion Certificate, a Certificate of Provisional Acceptance in the form of Annex G (*Form of Provisional Acceptance Certificate*) (hereinafter, the "Provisional Acceptance Certificate"). Subject to Clause 2.5 of this Agreement, the date of the Provisional Acceptance Certificate shall constitute "Completion Date" with respect to the relevant Study Milestone and/or Deliverable. The Principal shall not unreasonably withhold or delay issuance of a Provisional Acceptance

Certificate. The Provisional Acceptance Certificate may have annexed to it a list of any outstanding Defects or deficiencies to be corrected by the Contractor.

7.6. *Completion of Study Following Receipt of Objection Notice.* In the event of receipt by the Contractor of an Objection Notice in accordance with Clause 7.5, the Contractor shall:

- (a) take due account of all Defects, irrespective of their extent or nature, and other matters raised in the Objection Notice;
- (b) as soon as reasonably practicable but no later as mentioned in the Objection Notice, correct such Defects and deficiencies, irrespective of their extent or nature, and complete the Works indicated in the Objection Notice so as to comply in all material respects with the requirements of this Agreement; and
- (c) issue to the Principal a second Provisional Completion Certificate substantially in the form of Annex F (*Form of Provisional Completion Certificate*).

The second Provisional Completion Certificate issued in accordance with Clause 7.6(c) shall include the Deliverable and adequate supporting documentation relevant to the Study Milestone attained and/or Deliverable completed. In the event no reasons for objection to the second Provisional Completion Certificate exist, the Principal shall, within reasonable time following receipt of the second Provisional Completion Certificate, issue a Certificate of Provisional Acceptance in the form of Annex G (*Form of Provisional Acceptance Certificate*) and, subject to the provisions of Clauses 2.5 and 9.1(b) of this Agreement, the date of the Provisional Acceptance Certificate shall constitute "Completion Date" with respect to the relevant Study Milestone and/or Deliverable. For the avoidance of any doubt, the giving by the Principal of any Objection Notice under Clause 7.5 or second Objection Notice under this Clause 7.6 shall be without prejudice to and shall not relieve the Contractor from the obligation to pay any contractual penalty in accordance with the provisions of Clause 10.2 or to pay Damages in accordance with the provisions Clause 10.3 of this Agreement.

7.7. *Final Acceptance.* Final acceptance of the Study shall occur upon remedying of all Defects notified by the Principal to the Contractor in accordance with Clause 7.3, irrespective of the extent or nature of such Defects. Final acceptance shall be evidenced by means of the Principal issuing and both Parties attaching their signatures to the Final Acceptance Certificate substantially in the form of Annex H (*Form of Final Acceptance Certificate*) (hereinafter, the "Final Acceptance Certificate"). The date of the Final Acceptance Certificate shall constitute the "Final Acceptance Date" with respect to the Study. The Principal shall not unreasonably withhold or delay issuance of a Final Acceptance Certificate.

SECTION VIII. INTELLECTUAL PROPERTY RIGHTS

8.1. *Proprietary Rights.* All Documentation and software data forming part of the Deliverables developed under this Agreement is and shall become the property of the Principal regardless of whether the Study or Deliverable is produced or finally accepted. It is acknowledged and agreed by the Parties that the Principal shall be permitted to reproduce the drawings, schemes and distribute the prints in connection with the use or disposition of the Documentation without any approval of the Contractor and without incurring obligation to pay any royalties or additional compensation whatsoever to the Contractor.

8.2. *Intellectual Property in Documentation.* The Contractor represents and warrants that it owns all Intellectual Property in all Documentation deliverable by or on behalf of the Contractor under this Agreement and that, to the extent any Intellectual Property in any Documentation is not owned by the Contractor, it has obtained all requisite consents from owner(s) of all Intellectual Property in the Documentation to fulfil all of the obligations undertaken by the Contractor under this Agreement and has fully discharged all obligations with respect to payment of any royalties or fees.

8.3. *Transfer of Ownership to Principal.* The Principal shall acquire legal title to and ownership in the Intellectual Property in all Documentation and software data deliverable to the Principal under this Agreement as of the moment of delivery by the Contractor to the Principal of the Provisional Completion Certificate, together with the Deliverable and Documentation forming part of the Deliverable, in accordance with Clause 7.4 of this Agreement; provided, however, that the Principal has paid the Fee or other consideration payable under the terms of this Agreement with respect to the relevant part of the Study or Deliverable. For the avoidance of any doubt, such title and ownership shall confer upon the Principal, without limitation, each of the following:

- (a) the right to reproduce the Documentation, or any part thereof, and distribute copies of the Documentation or any part thereof;
- (b) the right to modify, amend and supplement the Documentation, or any part thereof;
- (c) the right to licence the Documentation, or any part thereof, for use by others; and

- (d) the right to transfer ownership in the Documentation, or any part thereof, to others.
- 8.4. *No Additional Royalty.* It is acknowledged and agreed by the Parties that consideration for the transfer of ownership in the Intellectual Property shall be forming part of the Fee and no additional royalty, fee or other consideration of any kind shall be payable by the Principal to the Contractor or to any third party in consideration of the transfer of ownership in the Intellectual Property in any Documentation.
- 8.5. *No Infringement.* The Contractor represents and warrants to the Principal that no Documentation deliverable to the Principal under the terms of this Agreement will infringe any existing Intellectual Property of any third party. In the event any of the representations or warranties contained in this Section VIII prove to be untrue or inaccurate, the Contractor undertakes, at its own cost and expense, to defend and settle any claim raised by any third party alleging infringement of Intellectual Property in the Documentation. The foregoing undertaking by the Contractor shall apply subject to the following conditions:
- (a) the Principal shall notify the Contractor, without undue delay, of any third party claim alleging infringement of any Intellectual Property in any Documentation;
 - (b) the Principal refrains from admitting liability under any third party claim or acting on the account of such claim without prior approval by the Contractor; and
 - (c) the exclusive control over any legal proceeding or settlement related any third party claim shall be exercised by the Contractor; provided, however, that the Principal shall render the Contractor all reasonable assistance toward such proceeding or settlement, at the cost and expense of the Contractor.
- 8.6. *Infringement Proceedings.* In the event the Principal is a party to legal proceedings involving allegations of infringement of any Intellectual Property in the Documentation of any third party, the Contractor shall keep the Principal fully informed of all aspects relevant to the legal proceedings and the Principal shall have the right, at its own cost, to be represented in the legal proceedings by separate counsel. In the event the Contractor fails to act against claims alleging infringement of any Intellectual Property in the Documentation of any third party within reasonable time but, in any event, within twenty (20) days of having been notified of such claims, the Principal shall have the right to assume legal defence against claims alleging infringement of Intellectual Property and shall be entitled to reimbursement by the Contractor of reasonable costs and expenses incurred toward such defence.
- 8.7. *Continued Use.* In the event a court of competent jurisdiction resolves in a binding judgment that the Documentation, or any part thereof, infringe Intellectual Property of any third party, the Contractor shall, at its own cost and expense, procure for the Principal the right of continued use of the Documentation, or part thereof infringing Intellectual Property of a third party.
- 8.8. *License in Intellectual Property of Contractor.* The Contractor hereby grants the Principal an irrevocable and non-exclusive license to use, reproduce, modify and/or enhance any Intellectual Property of the Contractor, provided and to the extent Intellectual Property of the Contractor is used by the Principal for the purposes of the Railway and/or the Project. It is agreed and acknowledged by the Parties that the license fee for the grant of license in accordance with this Clause 8.8 forms part of the Fee and such license shall continue to be valid irrespective of expiration of this Agreement following completion of the Study or termination of this Agreement for any reason.
- 8.9. *Obligation to Procure Intellectual Property Rights.* Where the Contractor is not the legal owner of any relevant Intellectual Property of the Contractor, the Contractor shall use reasonable endeavours to procure for the Principal the rights specified in accordance with Clause 8.8.
- 8.10. *Obligation to Indemnify with Respect to Uses Other Than for the Purpose.* The Principal shall defend and indemnify the Contractor from and against any and all Damages arising from the use by the Principal of any Intellectual Property of the Contractor other than for the purposes of the Railway and/or the Project.
- 8.11. *Indemnification by the Contractor.* The Contractor shall defend and indemnify the Principal from and against any and all Damages arising from the use by the Principal of any Intellectual Property of the Contractor, to the extent use by the Principal is within the scope of the license granted to the Principal in accordance with Clause 8.8.

SECTION IX. TERMINATION; SUSPENSION

- 9.1. *Termination for Material Breach or Bankruptcy.* Subject to the provisions of Clause 9.2, either Party shall be entitled to terminate this Agreement upon giving a written notice of termination to the other Party in the event of material breach by the other Party of any of its obligations under this Agreement. The written notice of termination shall contain an itemized description of the breach. For the purposes of this Clause 9.1 an event of material breach shall include any of the following:

- (a) commitment by a Party of any persistent or material breach of this Agreement (which shall include failure to pay an amount of at least EUR 5,000 due to the other Party or perform any part of the Study valued at least EUR 5,000);
- (b) failure by the Contractor to duly address any of the matters raised in the second Objection Notice given by the Principal in accordance with Clause 7.5;
- (c) failure by any Deliverable to conform to any of the material requirements to such Deliverable contained in Annex C (*Schedule of Study*), provided that such failure is not capable of being remedied during the Cure Period;
- (d) failure by the Principal to make any payment to the Contractor in accordance with this Agreement within at least fourteen (14) days from the date of payment falling due;
- (e) any of the representations or warranties given by either Party under Clause 5.1 or any of the representations or warranties given by the Contractor under Clause 5.2 proving to be untrue; or
- (f) breach by the Contractor of the undertaking contained in Clause 8.9.

9.2. *Corrective Period.* In the event of breach by either Party of its obligations under this Agreement, the non-breaching Party shall allow the breaching Party fourteen (14) days for corrective action or submission of a corrective action plan (hereinafter, the "Corrective Period"). The Corrective Period shall be counted from the date of receipt by the breaching Party of a written notice of breach. Should no satisfactory corrective action be taken or acceptable corrective action plan provided by the breaching Party, the non-breaching Party shall have the right to terminate the Agreement. It is acknowledged and agreed by the Parties that the provisions of this Clause 9.2 shall not apply with respect to any of the events enumerated in accordance with Clause 9.4. In addition and for the avoidance of any doubt, the application of the Corrective Period under this Clause 9.2 shall be without prejudice to and shall not relieve either Party from the obligation to pay any contractual penalty in accordance with the provisions of Clause 10.2 or to pay Damages incurred by the other Party in accordance with the provisions of Clause 10.3.

9.3. *Right to Terminate Immediately.* Notwithstanding anything to the contrary contained in this Agreement, a Party may terminate this Agreement immediately upon giving the other Party a written notice of termination explaining, in reasonable detail, the reason for termination upon occurrence of any of the following:

- (a) breach by the other Party of Clause 16.3;
- (b) an event of Force Majeure has been continuing during more than sixty (60) days;
- (c) the other Party had passed a resolution for winding-up (other than in order to amalgamate or reconstruct);
- (d) breach by the Contractor any of the confidentiality undertakings contained in Section XII;
- (e) the other Party is unable to pay its debts and has presented a petition for voluntary bankruptcy;
- (f) the other Party had a bankruptcy order issued against it;
- (g) the other Party has a provisional receiver or administrative receiver appointed over the whole or a substantial part of its undertaking or assets;
- (h) liquidation, insolvency or legal protection proceedings have been initiated with respect to the other Party or the other Party is declared insolvent;
- (i) the making by the other Party of a proposal for a voluntary arrangement with creditors; or
- (j) the occurrence of any event analogous to the events enumerated under Clauses 9.3 (g) – (i) under the law of any jurisdiction to which the other Party's assets and undertaking are subject.

9.4. *Right to Advance to Completion.* In the event the Contractor fails to fulfil any of its obligations, or fails to cure any breach in accordance with Clause 9.2, and the Agreement is terminated by the Principal, the Principal may advance the Study to completion by employing the services of other professional service supplier(s) or by other means available to the Principal. The Contractor shall be liable to the Principal for any and all additional costs incurred due to failure by the Contractor to perform. The rights and remedies available to the Principal set forth in accordance with this Clause 9.4 shall be in addition to any and all other rights and remedies available under Applicable Law.

9.5. *Consequences of Termination.* Upon expiration or termination of this Agreement, the obligations of the Parties set forth in this Agreement shall cease, except with respect to the following:

- (a) any obligations arising as a result of any antecedent breach of this Agreement or any accrued rights; and
- (b) the provisions stipulated in accordance with Clauses 4.6, 4.7, 7.3, 8.2, 8.3, 8.4, 8.5, 8.11, 10.2, 10.3 and Sections XII, XIII and XV which shall survive the termination or expiry of this Agreement and continue in

full force and effect along with any other Clauses of or Annexes hereof which are necessary to give effect to the clauses specifically identified in this Clause 9.5(b).

- 9.6. *Partial Acceptance.* Notwithstanding anything in this Agreement to the contrary including, without limitation, the provisions of Clauses 8.5, 8.6 and 8.7 and in the event of termination of this Agreement, the Principal shall have the right, in the sole discretion of the Principal, to partially accept any Works, part of Works or part of the Study delivered to the Principal under this Agreement (hereinafter, the "Right of Partial Acceptance"). The Principal shall notify the Contractor of its intention to exercise the Right of Partial Acceptance in the termination notice given in accordance with Clause 9.1 or Clause 9.3 of this Agreement, specifying, in reasonable detail, the Works, part of Works or part of the Study which the Principal would like to partially accept. In the event of receipt of such notice, the Contractor shall reasonably cooperate with the Principal in order to ascertain transfer to the Principal of ownership in the result(s) of such Works, part of Works or part of the Study and determination of the amount of consideration payable by the Principal.
- 9.7. *Principal's Obligation to Pay.* Subject to the provisions of Clause 9.6 and except in the event of termination by the Principal occurring as a result of violation by the Contractor of Clause 16.3, in the event this Agreement is terminated for any reason prior to completion of the Study, the Principal shall have an obligation to pay the Contractor the following:
- (a) the Costs incurred by the Contractor up to the date of termination; and
 - (b) except where termination is due to negligence of the Contractor, breach by the Contractor, insolvency of the Contractor or a Force Majeure Event under Section XII:
 - (i) an amount equal to the costs reasonably and properly incurred by the Contractor as a result of or in connection with such termination; and
 - (ii) such additional amount as is required to put the Contractor in the same after tax position (taking into account the amount of any relief, allowance, deduction, set-off or credit relating to tax available to the Contractor in respect of the payment received) as it would have been in if the payment had not been a taxable receipt in the hands of the Contractor.
- 9.8. *No Obligation to Pay Costs Incurred Prior to Acceptance.* Notwithstanding anything set forth in this Agreement to the contrary including, without limitation, under Clause 9.7, the Principal shall have no obligation to pay any of the Costs incurred by the Contractor with respect to any Works or the Study (or part of any Works or the Study) not deemed as having been accepted by the Principal in accordance with Clauses 8.5, 8.6 or 8.7.
- 9.9. *No Prejudice to Other Rights.* The right to terminate this Agreement shall be without prejudice to any other right of either Party which has accrued prior to or as a result of such termination or to any remedy available to either Party under the terms of this Agreement or in accordance with Applicable Law.

SECTION X. LIABILITY

- 10.1. *Liability of the Parties.* The Contractor shall be liable to compensate Damages incurred by the Principal arising out of or in connection with this Agreement and pay contractual penalty set forth in accordance with Clause 10.2 if a breach of any of the obligations of the Contractor under this Agreement is established against the Contractor. The Principal shall be liable to pay the contractual penalty set forth in accordance with Clause 10.2 if a breach of payment obligations of the Principal under this Agreement is established against the Principal.
- 10.2. *Contractual Penalty.* In the event of failure by the Contractor to meet any Study Milestone and/or supply any Deliverable, the Contractor shall be liable to pay to the Principal a penalty of zero point zero one percent (0.01%) of the amount of the total Fee payable under this Agreement with respect to the relevant Study period for each day of delay with meeting any of the Study Milestones and/or supplying any of the Deliverables set forth in accordance with Annex C (*Schedule of Study*); provided, however, that the total amount of penalty payable by the Contractor under this Clause 10.2 for the relevant Works, as specified according to Annex C (*Schedule of Study*) shall not exceed ten percent (10%) of the total amount of the Fee payable in consideration of such Works. In the event of failure by the Principal to pay any amount in accordance with Clause 6.3, the Principal shall be liable to pay the Contractor a penalty of zero point zero one percent (0.01%) of the amount of the amount invoiced for each day of delay with meeting the payment obligation; provided, however, that the total amount of penalty payable by the Principal under this Clause 10.2 shall not exceed ten percent (10%) of the total amount remaining unpaid under the relevant invoice.
- 10.3. *Compensation for Damages.* Notwithstanding of and without prejudice to any contractual penalty payable in accordance with Clause 10.2 and subject to the provisions of Clause 10.5, in the event it is established that either Party is liable to the other Party with respect to any breach of its respective obligations under this Agreement, the

liable Party shall compensate the other Party for any Damages incurred as a result of such breach, subject to the following terms:

- (a) the amount of compensation shall be limited to the amount of reasonably foreseeable Damages suffered as a result of the breach(es), but not otherwise; and
- (b) if either Party is considered to be liable jointly with third parties to the other, the proportion of compensation payable by the liable Party shall be limited to that proportion of liability which is attributable to the breach by the liable Party.

10.4. *Attribution of Damages.* Any Damages suffered by either Party shall, for the purposes of Clause 10.3, be reduced to the extent that the Damages are caused by or contributed to by the other Party's own negligence or breach of its obligations under this Agreement.

10.5. *Limitation of Liability.* Notwithstanding anything to the contrary set forth in this Agreement, in no circumstances shall the Contractor or Principal be liable to one another for any loss of production, loss of profit, loss of revenue, loss of contract, liability incurred under other agreements (with the exception of costs paid by the Principal to contractors appointed by the Principal in relation to the Study or the Project) or any indirect or consequential loss arising out of or in connection with this Agreement. The Contractor's total liability for the Works carried out under this Agreement shall in no circumstances exceed 1 000 000 EUR (one million *euros*).

SECTION XI. FORCE MAJEURE

11.1. *Effects of Force Majeure.* Subject to the requirements set forth in accordance with Clauses 11.2 and 11.3, each Party shall be relieved from liability for nonperformance of its obligations under this Agreement (other than any obligation to pay) to the extent that the Party is not able to perform such obligations due to a Force Majeure Event.

11.2. *Action on Becoming Aware of Force Majeure.* Each Party shall at all times, following the occurrence of a Force Majeure Event:

- (a) take reasonable steps to prevent and mitigate the consequences of such an event upon the performance of its obligations under this Agreement, resume performance of its obligations affected by the Force Majeure Event as soon as practicable and use reasonable endeavours in accordance with Good Industry Practice to remedy its failure to perform; and
- (b) not be relieved from liability under this Agreement to the extent that it is not able to perform, or has not in fact performed, its obligations under this Agreement due to any failure to comply with its obligations under Clause 11.2(a).

11.3. *Notification Requirements.* Upon the occurrence of a Force Majeure Event, the affected Party shall notify the other Party as soon as reasonably practicable and in any event within ten (10) Working Days of it becoming aware of the relevant Force Majeure Event. Such notification shall give sufficient details to identify the particular event claimed to be a Force Majeure Event and shall contain detailed information relating to the failure to perform (or delay in performing), including the date of occurrence of the Force Majeure Event, the effect of the Force Majeure Event on the ability of the affected Party to perform, the action being taken in accordance with Clause 11.2(a) and an estimate of the period of time required to overcome the Force Majeure Event. The affected Party shall provide the other Party with any further information it receives or becomes aware of which relates to the Force Majeure Event and provide an update on the estimate of the period of time required to overcome its effects.

11.4. *Notification of Resumed Performance.* The affected Party shall notify the other Party as soon as practicable once the performance of its affected obligations can be resumed (performance to continue on the terms existing immediately prior to the occurrence of the Force Majeure Event).

11.5. *Mitigation of Effects of Force Majeure.* As soon as practicable after the notification specified pursuant to Clause 11.3, the Parties shall use reasonable endeavours to agree appropriate terms or modifications to the Study to mitigate the effects of the Force Majeure Event and to facilitate the continued performance of this Agreement.

SECTION XII. CONFIDENTIALITY

12.1 *Confidential Information.* "Confidential Information" means, in relation to the Principal, all information of a confidential nature relating to the Principal and its Affiliates which is supplied by the Principal (whether before or after the date of this Agreement) to the Contractor, either in writing, orally or in any other form and includes all analyses, compilations, notes, studies, memoranda and other documents which contain or otherwise reflect or are derived from such information, but excludes information which:

- (a) the Principal confirms in writing is not required to be treated as confidential; or
 - (b) the Contractor can show that the Confidential Information was in its possession or known to it (by being in its use or being recorded in its files or computers or other recording media) prior to receipt from the Principal and was not previously acquired by the Contractor from the Principal under an obligation of confidence; or
 - (c) was developed by or for the Contractor at any time independently of this Agreement.
- 12.2 *Undertakings with Respect to Confidential Information.* Subject to Clauses 12.1 and 12.3, the Contractor shall:
- (a) at all times keep confidential all Confidential Information received by it and shall not disclose such Confidential Information to any other Person; and
 - (b) procure that its Affiliates and its and their respective officers, employees and agents shall keep confidential and not disclose to any Person any Confidential Information except with the prior written consent of the Party to which such Confidential Information relates.
- 12.3 *Permitted Disclosure.* Notwithstanding anything to the contrary set forth in accordance with Clauses 12.1 and 12.2, the Contractor shall, without the prior written consent of the Principal, be entitled to disclose Confidential Information:
- (a) that is reasonably required by the Contractor in the performance of its obligations pursuant to this Agreement, including the disclosure of any Confidential Information to any employee, contractor, agent, officer, sub-contractor (of any tier) or adviser to the extent necessary to enable the Contractor to perform its obligations under this Agreement;
 - (b) to enable a determination to be made pursuant to Section XV;
 - (c) to its lenders or their professional advisers, any rating agencies, or its insurance advisers but only to the extent reasonably necessary to enable a decision to be taken on the proposal;
 - (d) to the extent required by Applicable Law or pursuant to an order of any court of competent jurisdiction, any parliamentary obligation or the rules of any stock exchange or governmental or regulatory authority having the force of law; or
 - (e) to the extent Confidential Information has become available to the public other than as a result of any breach of an obligation of confidence; provided that any such disclosure is made in good faith.
- 12.4 *Obligation of Confidentiality Pertinent to Recipients of Confidential Information.* Whenever disclosure is permitted to be made pursuant to Clauses 12.3(a) or (c), the Contractor shall require that the recipient of Confidential Information be subject to the same obligation of confidentiality as that contained in this Agreement.
- 12.5 *Certain Obligations on Termination of Agreement.* If this Agreement is terminated for whatsoever reason, the Contractor shall:
- (a) return to the Principal all of the Confidential Information then within the possession or control of the Contractor; or
 - (b) destroy such Confidential Information using a secure and confidential method of destruction.
- 12.6 *No Press Release by Contractor.* Save as required by Applicable Law, the Contractor shall not issue any press release in relation to the matters contemplated under this Agreement without the prior written consent of the Principal (such consent not to be unreasonably withheld or delayed) as to both the content and the timing of the issue of the press release.
- 12.7 *Right to Publish.* For the avoidance of any doubt, the Principal shall have the right to publish any of the documents, information or data provided by the Contractor to the Principal during provision of the Study.
- 12.8 *Remedies.* The Parties acknowledge and agree that a breach of the provisions of this Section XIII may cause the owner of Confidential Information to suffer irreparable Damages that could not be adequately remedied by an action at law. Accordingly, the Contractor agrees that the owner of Confidential Information that is disclosed in breach of Clauses 12.2, 12.4 or 12.6 may be entitled to specific performance of those provisions to enjoin a breach or attempted breach thereof and to any other remedy, including, inter alia, damages and injunctive relief, awarded by a court of competent jurisdiction.

SECTION XIII. RIGHT TO AUDIT

- 13.1. *Right to Audit.* Notwithstanding anything to the contrary set forth in this Agreement including, the Principal itself, a reputable outside independent body or expert engaged and authorized by the Principal shall be entitled to inspect and/or audit the Contractor to ensure compliance with the terms of this Agreement, including inspecting and/or auditing:
- (a) the performance of any aspect of the Study; and/or
 - (b) any documentation, including all payrolls, accounts of the Contractor and/or other records used in or related to the performance of the Study.
- 13.2. *Obligation to Assist.* The Contractor shall provide all reasonable assistance to the Principal or the independent body authorized by the Principal in carrying out any inspection or audit pursuant to this Section XIII. The Principal shall be responsible for its own costs, or the costs incurred by the outside independent body designated by the Principal, incurred toward carrying out such inspection or audit, unless, in the case of any such audit, that audit reveals that the Contractor is not compliant with the terms of this Agreement, in which case the Contractor shall reimburse the Principal for all of its additional reasonable costs incurred, provided such non-compliance is material.
- 13.3. *Survival of Termination.* The rights and obligations of the Principal set forth in accordance with this Section XIII shall survive expiration or termination of this Agreement for any reason and shall continue to apply during ten (10) years following expiration or termination of this Agreement for any reason whatsoever.

SECTION XIV. ON-THE-SPOT VISITS

- 14.1. *Right to perform On-the-Spot visits.* By submitting a written notice five (5) Working Days in advance, but at the same time reserving the right of an unannounced on-the-spot visit without an advance notice, the Principal may carry out on-the-spot visits to the sites and premises where the activities implemented within the Agreement are or were carried out.
- 14.2. *Personnel involved.* On-the-spot visits may be carried out either directly by authorised staff or representatives of the Principal or by any other outside body or third party authorised to do so on behalf of the Principal. Information provided and collected in the framework of on-the-spot visits shall be treated on confidential basis. The Principal shall ensure that any authorised outside body or third party shall be bound by the same confidentiality obligations.
- 14.3. *Access to the information.* Contractor shall provide to the performer of the on-the-spot visit or any other authorised outside body or third party access to all the information and documents, including information and documents in electronic format, which is requested by the authorised staff of the performer of the on-the-spot visit or any other authorised outside body or third party for the performance of an on-the-spot visit and which relates to the implementation of the Agreement, as well as shall allow the authorised staff of the performer of the on-the-spot visit or any other authorised outside body or third party the copying of the information and documents, with due respect to the confidentiality obligation.
- 14.4. *OLAF checks and inspections.* By virtue of Council Regulation (Euratom, EC) No 2185/961 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities and Regulation (EU) No 883/20132 of the European Parliament and the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF), OLAF may also carry out on-the-spot checks and inspections in accordance with the procedures laid down by European Union law for the protection of the financial interests of the European Union against fraud and other irregularities. Where appropriate, OLAF findings may lead to criminal prosecution under national law.

SECTION XV. GOVERNING LAW AND RESOLUTION OF DISPUTES

- 15.1. *Governing Law.* This Agreement shall be governed by and construed in accordance with law of the Republic of Latvia.
- 15.2. *Resolution by Amicable Means.* The Parties shall first attempt to settle any dispute, controversy or claim arising out of or relating to this Agreement through good faith debate, discussion, and negotiating prior to submitting them to mediation, arbitration, or other legal proceeding.
- 15.3. *Venue for Resolution of Disputes.* Should the Parties fail to agree by means of amicable negotiations within the time period of two (2) months from the date of serving of the respective written complaint to the other Party, the

Parties shall submit all their disputes arising out of or in connection with this Agreement to the exclusive jurisdiction of the courts of the Republic of Latvia. The Parties hereby represent and warrant that the English language is understandable for both Parties in accordance with Article 8(1)(a) of the Regulation (EC) No 1393/2007 of the European Parliament and of the Council of 13 November 2007 on the service in the Member States of judicial and extrajudicial documents in civil or commercial matters (service of documents), and repealing Council Regulation (EC) No 1348/2000.

SECTION XVI. MISCELLANEOUS PROVISIONS

- 16.1. *Capacity.* Each Party warrants to the other Party that it has full power to enter into and perform this Agreement, and the person signing this Agreement on its behalf has been duly authorized and empowered to enter into such agreement. Each Party further acknowledges that it has read this Agreement, understands it and agrees to be bound by it.
- 16.2. *Conflict of Interest, Corruption and Fraud.* Notwithstanding any penalties that may be enforced against the Contractor under Applicable Law, or the laws of other jurisdiction(s), the Contractor shall be deemed to have committed a breach under this Agreement and the Principal shall be entitled to terminate this Agreement immediately and without any regard to the provisions of Clause 9.2, if it is shown that the Contractor is guilty of:
- (a) offering, giving, receiving or soliciting anything of value with a view to influencing the behaviour or action of anyone, whether a public official or otherwise, directly or indirectly in the selection process or in the conduct of the Agreement; or
 - (b) misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the Principal, including the use of collusive practices intended to stifle or reduce the benefits of free and open competition.
- 16.3. *Notices.* Notices under the Agreement shall be in writing and will take effect from receipt by the Party to which the notice is addressed at the address of the Party set forth in the Preamble to this Agreement. Delivery can be by hand or facsimile message against a written confirmation of receipt or by registered letter.
- 16.4. *Relationship of the Parties.* The relationship between the Contractor to the Principal under this Agreement is that of independent contractors. The Contractor (or the Contractor's sub-contractors) is not an employee of the Principal, is not carrying out the regular business of the Principal and is not subject to the same employment regulations as are applicable to employees of the Principal. Each of the Parties shall be solely and entirely responsible for their own acts and the acts of their employees. No benefits, special considerations, or employer/employee-type provisions are provided by the Principal to the Contractor, the Contractor's employees, or the Contractor's consultants, or the employees of such consultants.
- 16.5. *Severability.* If any provision of this Agreement shall be held to be illegal, invalid, void or unenforceable under Applicable Laws, the legality, validity and enforceability of the remainder of this Agreement shall not be affected, and the legality, validity and enforceability of the whole of this Agreement shall not be affected.
- 16.6. *Successors and Assigns.* The Principal and the Contractor each bind themselves, their successors, legal representatives, and assigns to the other party to this Agreement and to the partners, successors, legal representatives and assigns of such other party in respect to all covenants of this Agreement. Neither Party shall assign or transfer its respective interest in the Agreement without written consent of the other Party.
- 16.7. *Amendments and Variations.* No amendment to or variation of this Agreement shall be effective unless made in writing and signed by duly authorized representatives of both Parties. The Agreement can be amended in compliance with the provisions of Article 61 of the Public Procurement Law of the Republic of Latvia including but not limited to the provisions of point 5 of Section 2 of Article 61.
- 16.8. *Entire Agreement.* This Agreement, and the Annexes hereto, constitutes the entire agreement between the Parties relating to the subject matter hereof and supersedes and extinguishes all and any prior drafts, undertakings, representations, warranties and arrangements of any nature, whether in writing or oral, relating to such subject matter.
- 16.9. *Execution.* This Agreement may be executed in two counterparts to be held by each Party which counterparts, taken together, shall constitute one and the same instrument.

Signed by:

For and on behalf of the Principal:

ANNEX A: DEFINITIONS AND COMMON TERMS

The following capitalized terms shall be ascribed the following meaning for the purposes of the Agreement:

- (a) "Agreement", this Agreement, together with all Annexes thereto.
- (b) "Applicable Law" or "Law", any legislative act, regulation, decree, order, ordinance, statute, treaty, directive, judgment, or other legislative measure. For the avoidance of any doubt, the term "Applicable Law" shall include any legislative act or directive relevant to public procurement.
- (c) "Approved Sub-Contractor", any person or organization listed pursuant to Annex E (*List of Approved Sub-Contractors*), which is in a contractual relationship with the Contractor to provide a part of the Study.
- (d) "Confidential Information", as defined in accordance with Clause 12.1 of the Agreement.
- (e) "Contractor", the company **ETC Transport Consultants GmbH**, as further specified in the Preamble of this Agreement, which is employed by the Principal as an independent professional contractor to perform the Study, and legal successors to the Principal and permitted assignees of the Principal.
- (f) "Costs", direct costs reasonably incurred in relation to the Project. Specifically, the Cost shall include any of the following:
 - (i) costs of all materials and supplies forming part of the Study, including transportation and storage expenses (discounts for cash or prompt payments will not reduce these costs);
 - (ii) salaries for personnel in the direct employ of the Contractor in the performance of the Study or relating to the Study;
 - (iii) salaries of the Contractor's employees for the time that they spend in connection with the Study;
 - (iv) payments to sub-contractors for work relating to the Study;
 - (v) costs of all employee benefits and taxes for items such as social security and other benefits for the labor and employees;
 - (vi) costs, including transportation and maintenance, of equipment and hand tools not owned by workmen employed by the Contractor which are employed or consumed toward the Study;
 - (vii) payments for rental charges for machinery, equipment, facilities and tools used in connection with the Study, and payments for installations, repairs, replacements, dismantling, removal, lubrication, transportation and delivery of those rental items;
 - (viii) other transportation costs incurred in connection with the Study;
 - (ix) that portion attributable to this Agreement of premiums for insurance that is required by this Agreement or by law to be obtained or maintained by the Contractor;
 - (x) sales, use, gross receipts or other taxes related to the Study, imposed by any governmental authority, to the extent that the Contractor is responsible for such taxes;
 - (xi) costs of long-distance telephone calls, telephone service at the site and postage relating to the Study;
 - (xii) costs of any data processing services used in connection with the performance of the work required under this Agreement; and
 - (xiii) losses and expenses, not compensated by insurance, sustained by the Contractor in connection with the work under this Agreement, provided they resulted from causes other than the fault or neglect of the Contractor.
- (g) "Corrective Period", as defined in accordance with Clause 9.2
- (h) "Cure Period", as defined in accordance with Clause 7.3.
- (i) "Damages", any cost, claim, damage, demand, loss, expense or liability incurred by the relevant Party or Person.
- (j) "Defect", is a part of the Study which is not in accordance with the Schedule of Study specified in accordance with Annex B (*Technical Specification*), the Applicable Law or Good Industry Practice.

- (k) "Defects Date", a date specified in accordance with Annex C (Schedule of Stufy) by which date the Principal and the Constructor is obliged to notify each Deficiency in the Study.
- (l) "Deliverable", any information, notes, material, drawings (including drawings in 3D model), records, documents and/or other items which the Contractor is required to deliver to the Principal as part of the Study, as further specified pursuant to Annex C (*Schedule of Study*).
- (m) "Documentation", all records, correspondence, and files of the Contractor, its employees, engineers, and consultants pertaining to the Project.
- (n) "Effective Date", as first above specified in the Preamble to this Agreement.
- (o) "EUR" and "euro", the official currency of the eurozone, officially known as the euro area.
- (p) "Fee", as defined in accordance with Clause 6.1 and Annex D (Fee and Payment Schedule).
- (q) "Final Acceptance Certificate", as described in accordance with Clause 7.7.
- (r) "Final Acceptance Date", as defined in accordance with Clause 7.7.
- (s) "Force Majeure Event", any of the following events:
 - (i) an act of the public enemy or war (declared or undeclared), threat of war, revolution, riot, insurrection, civil commotion, demonstration or sabotage;
 - (ii) an act of vandalism or accidental damage or destruction of machinery, equipment, track or other infrastructure;
 - (iii) a natural disaster or phenomena, including extreme weather or environmental conditions (such as lightning, earthquake, hurricane, storm, fire, flood, drought or accumulation of snow or ice);
 - (iv) nuclear, chemical or biological contamination;
 - (v) pressure waves caused by devices travelling at supersonic speeds;
 - (vi) discovery of fossils, antiquities or unexploded bombs; and/or
 - (vii) strike, lockout or other industrial action other than involving the Contractor or the Principal.
- (t) "Good Industry Practice", in relation to the performance of any activity to which this standard is applied, the exercise of that degree of skill, diligence, prudence and foresight as would reasonably be expected to be exercised by a properly qualified and competent person engaged in carrying out works or services of a similar size, nature, scope, type and complexity, complying with Applicable Law, applicable Standards and published codes of practice.
- (u) "Intellectual Property", all intellectual property rights in any part of the world in respect of any documentation or information provided by the Contractor to the Principal, including any patent, patent application, trade mark, trade mark application, registered design, registered design application, utility model, trade name, discovery, invention, process, formula, specification, copyright (including all neighbouring rights, rights in computer software and database and topography rights), know how or unregistered design right.
- (v) "Intellectual Property of Contractor", all Intellectual Property owned or licensed to the Contractor with a right to sub-license.
- (w) "Objection Notice", as defined in accordance with Clause 7.5.
- (x) "Party" and "Parties", the Principal and the Contractor and include their respective successors in title, permitted assigns and permitted transferees.
- (y) "Person" shall include any person, company, body corporate, government, state or agency of a state or any association or partnership (whether or not having separate legal personality) or two or more of the foregoing.
- (z) "Principal", the company RB Rail AS, as further specified in the Preamble of this Agreement, which employs the services of the Contractor, and legal successors to the Contractor and permitted assignees of the Contractor.
- (aa) "Project", development of a 1435 mm standard gauge railway line in the Rail Baltic/Rail Baltica (RB) corridor through Estonia, Latvia and Lithuania aimed at eliminating the technical bottleneck due to the gauge differences (1,520 mm vs. the EU standard of 1,435 mm).

- (bb) "Provisional Completion Certificate", as defined in accordance with Clause 7.4.
- (cc) "Provisional Completion Certificate", as defined in accordance with Clause 7.4.
- (dd) "Railway", new fast conventional double track electrified railway line with the maximum design speed of 240 km/h and European standard gauge (1435 mm) on the Route.
- (ee) "Right of Partial Acceptance", as defined in accordance with Clause 9.6.
- (ff) "Standards", CEF Standards and Grant Agreement Standards;
- (gg) "Study", preparation of the overall Operational Plan Concept for Rail Baltica railway corridor, on short, medium and longer term (According to Annex B to this agreement).
- (hh) "Study Milestone", the date for delivery of one or more Deliverables, as set out in the Technical Specification and Schedule of Study;
- (ii) "Study Start Date", as specified in accordance with Annex C (*Schedule of Study*).
- (jj) "Working Day", any day (other than Saturday or Sunday) on which banks in the Republic of Latvia are open for conduct of business.
- (kk) "Works", all incidental works, steps and actions performed by the Contractor for the attainment of the objectives of the Study and/or the Project.

TECHNICAL SPECIFICATION

FOR PROCUREMENT

OPERATION PLAN CONCEPT FOR RAIL BALTICA RAILWAY



Co-financed by the European Union
Connecting Europe Facility

Content

1. Introduction and references	25
1.1. Introduction	25
1.2. Abbreviations and terms	27
1.3. Documents, studies and informations to be taken into account	28
2. Content of the assignment.....	30
2.1. Overall framework.....	30
2.2. Traffic studies (WP1).....	32
2.3. Rolling stock studies (WP2)	33
2.4. Infrastructure studies (WP3)	34
2.5. Operation plan – iteration 1 (WP4)	35
2.6. Rolling stock maintenance (WP 5)	37
2.7. Infrastructure maintenance (WP 6).....	38
2.8. Recommendations and optimisation (WP 7).....	39
2.9. Operation plan – iteration 2 (WP 8)	40
2.10. Control command systems (WP 9).....	41
3. Contract's project management	42
3.1. Management structure and cooperation	42
3.2. Visibility requirements	42
3.3. Project schedule.....	43
3.4. Project execution site	43
3.5. Reports and deliverables	44
3.6. Submission and approval of reports and deliverables	44

1. INTRODUCTION AND REFERENCES

1.1. Introduction

The Baltic countries Estonia, Latvia and Lithuania have historically been linked to the east-west railway transport axis using the 1520mm gauge railway system. Because of the existing historical and technical constraints, the existing rail system is incompatible with mainland European standards, thus there is a consensus that Estonia, Latvia and Lithuania need to be fully integrated into the wider European rail transport system. Currently there is no efficient 1435 mm railway connection along the Warsaw-Kaunas-Riga-Tallinn axis, i.e. there are missing links or significant bottlenecks. Thus, there are no direct passenger or freight services along the railway axis as the existing infrastructure does not allow for competitive services compared to alternative modes of transport. Thus, the clear majority of the North-South freight is being transported by road transport and the overall accessibility in the region is low.

The ambitions of the Rail Baltica Global project (Global Project) are:

- to become a powerful catalyst for sustainable economic growth in the Baltic States;
- to set a new standard of passenger and freight mobility;
- to ensure a new economic corridor will emerge;
- sustainable employment and educational opportunities;
- an environmentally sustainable infrastructure;
- new opportunities for multimodal freight logistics development;
- new intermodal transport solutions for passengers;
- safety and performance improvements;
- a new value platform for digitalization and innovation;
- completion of Baltic integration in the European Union transport ecosystem.

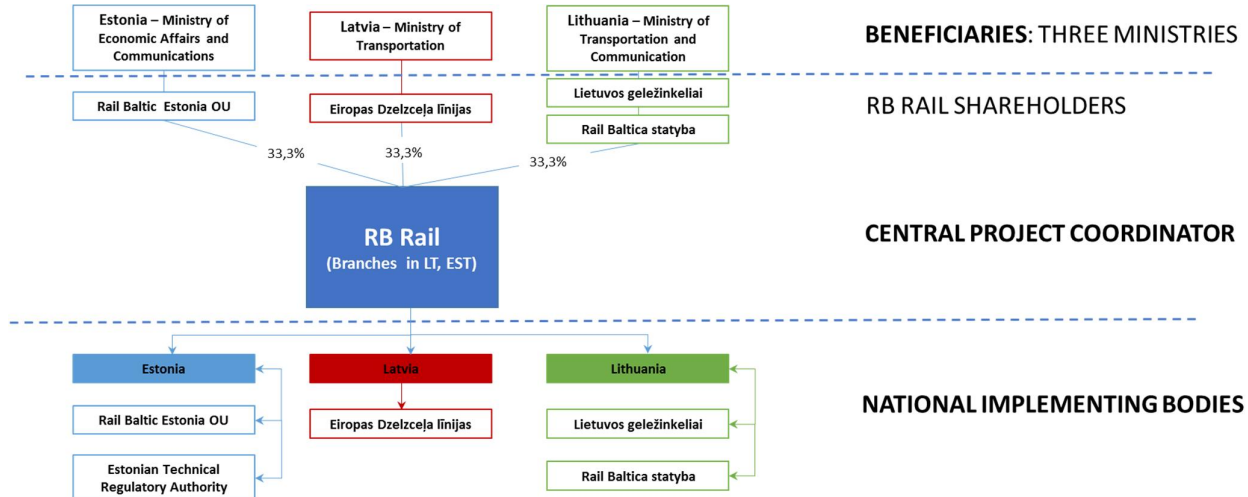
Rail Baltica is already designed to become a part of the EU TEN-T North Sea – Baltic Core Network Corridor, which links Europe's largest ports of Rotterdam, Hamburg and Antwerp – through the Netherlands, Belgium, Germany and Poland – with the three Baltic States, further connecting to Finland via the Gulf of Finland short sea shipping connections with a future fixed link possibility between Tallinn and Helsinki. Further northbound extension of this corridor shall pave the way for future connectivity also with the emerging Arctic corridor, especially in light of the lucrative prospects of the alternative Northern Circle maritime route development between Europe and Asia. Furthermore, the North Sea – Baltic Corridor crosses with the Baltic-Adriatic Corridor in Warsaw, paving the way for new supply chain development between the Baltic and Adriatic seas, connecting the Baltics with the hitherto inadequately accessible Southern European markets. In a similar fashion, Rail Baltica shall strengthen the synergies between North-South and West-East freight flows, creating new transshipment and logistics development opportunities along the Europe and Asia overland trade routes. The new Rail Baltica infrastructure would, therefore, not only put the Baltics firmly on the European rail logistics map, but also create massive opportunities for value creation along this infrastructure with such secondary economic benefits as commercial property development, revitalization of dilapidated urban areas, private spin-off investment, new business formation, technology transfer and innovation, tourism development and other catalytic effects. Rail Baltica aims to promote these effects from the early stages of the Global Project, learning from the key global success stories and benchmarks in this regard.

The contracting authority RB Rail AS (RBR) was established by the Republics of Estonia, Latvia and Lithuania, via state-owned holding companies, to coordinate the development and construction of the fast-conventional standard gauge railway line on the North Sea – Baltic TEN-T Core Network Corridor (Rail Baltica II) linking three Baltic states with Poland and the rest of the EU. The main technical parameters shall correspond to traffic code P2-F1 as per INF TSI (Commission Regulation 1299/2014/EU) and shall have the following main technical parameters:

- double track, design speed on the main track 240 km/h, design speed on side tracks minimum 100 km/h;
- axle load 22.5 t;
- distance between track centres at least 4.20 m on the main tracks;
- distance between two sided passing loops approximately 50 km and crossovers approximately 25 km but staged according to a train traffic forecast;
- all pedestrian, road and 1520mm rail crossings only as above or below grade crossings (segregated grade crossings), fencing and noise barriers where needed;
- ERTMS Level 2 with possible update to the newest version;
- communications system GSM-R with a view to accommodate the new generation railway communications standard;
- electrification 2x25 kV AC;

- length of freight trains 740m, but for spatial planning and track geometry design a length of 1050m shall be used;
- length of passenger trains 200m, but for spatial planning and track geometry design a length of 400m shall be used;
- height of passenger platforms 550mm;
- maintenance road, where necessary, shall be on one side of the tracks with gravel 3.5m wide

The shareholders structure of RBR is presented in Figure 1.



RBR together with governments of Estonia, Latvia and Lithuania (represented by the ministries in charge of transport policy) have applied for the CEF co-financing in 2015, 2016 and 2017 (three applications in total). The first two applications were successful and INEA grants are available to support the Global Project expenses with up to 85% of co-financing in amount of 633 mln EUR. A further application is currently under evaluation.

Rail Baltica is a joint project of three EU Member States – Estonia, Latvia and Lithuania – and concerns the building of a fast conventional double track 1435 mm gauge electrified railway line on the route from Tallinn through Pärnu (EE), Riga (LV), Panevėžys (LT), Kaunas (LT) to the Lithuania/Poland state border (including connection Kaunas - Vilnius). In the longer term, the railway line could potentially be extended to include a fixed link between Helsinki and Tallinn, as well as integrate the railway link to Warsaw and beyond.

The expected core outcome of the Global Rail Baltica Project is a European gauge (1435mm) double-track railway line of almost 900 km in length meant for both passenger and freight transport and the required additional infrastructure (to ensure full operability of the railway). It will be interoperable with the TEN-T Network in the rest of Europe and competitive in terms of quality with other modes of transport in the region. The indicative timeline and phasing of the project implementation can be found here: <http://www.railbaltica.org/about-rail-baltica/project-timeline/>.

Further informations are available in <http://www.railbaltica.org/>

1.2. Abbreviations and terms

Rail Baltica Project - a future railway line preventing missing links in the European railway network and improving the existing network infrastructure on the route Warsaw – Kaunas – Riga – Tallinn – Helsinki, and ensuring full railway interoperability and better railway usage indicators in passenger and cargo traffic. The project ensures Baltic State integration into the EU railway area. The project is the part of the TEN-T core network North Sea-Baltic corridor. The total investment cost of the project is being estimated at 5.8 billion euro;

Railway – new fast conventional double track electrified railway line with the design speed of 240 km/h and European standard gauge (1435 mm) on the route from Tallinn through Pärnu (EE), Riga (LV), Panevėžys (LT), Kaunas (LT) to Warsaw (PL);

Study corridor – the railway lines, stations, service and maintenance facilities and all other associated objects, on the routes:

- Warsaw – Białystok – Ełk – Suwałki – PL/LT border – Kaunas node – Panevėžys - Riga node – Pärnu – Tallinn node – FinEst Link – Helsinki node;
- Kaunas node – Vilnius node.

Contractor - service provider awarded with rights on Operation plan concept for Rail Baltica railway;

Contracting authority - "RB Rail" AS - a joint venture of Estonia, Latvia and Lithuania for the development of Rail Baltica project and construction of the Railway;

Service, study - service of elaboration of Rail Baltica Operational Plan concept;

Node: complex railway configuration, which include stations, tracks, junctions, bridges, tunnels, service and maintenance facilities to serve cargo and passenger flows in a geographical location, typically a city.

Line section: section of the Railway between 2 nodes, generally equipped with dual track, with stations, sidings and necessary maintenance facilities.

Operational Plan Concept – set of documents including a detailed plan for the trains operation of Rail Baltica railway, description and benchmarking of typical rolling stock to be operated, a draft of infrastructure and rolling stock maintenance plan, recommendations to ensure interoperability of Rail Baltica railway, recommendations for technical parameters to be taken into account for design and construction of the Railway, recommendations for technical parameters to be taken into account for design and construction of infrastructure and rolling stock maintenance facilities, and recommendations for the Control Command systems of the Railway;

Design guidelines – set of predefined and standardized technically and economically justified engineering and design solutions for Rail Baltica to be applied at design, construction and operation phases of the Railway. Design guidelines will be mandatory for all stakeholders involved in design and construction of the Railway. Design Guidelines are ongoing studies not part of the Service;

Operating rules – draft regulatory basis of Rail Baltica Railway operations. Operating rules are not part of the Service, and will be based on OPE TSI;

CEF – Connecting Europe Facility;

National studies - detailed engineering and feasibility studies on implementation of Rail Baltica project in each of the three Baltic states, covering EIA, preliminary design, feasibility studies, spatial planning and similar activities;

WP - Work package;

EU - European Union;

TSI – Technical Specifications for Interoperability;

Technical work group, TWG – group of experts from stakeholders and involved parties nominated by the Contracting authority;

1.3. Documents, studies and informations to be taken into account

1.3.1. The Contractor shall consider the following non-exhaustive list of documents, studies, study projects and spatial development planning documents:

Ref.	Title of document, date of issuance, Web link
1	Technical standards and specifications Manual of Rail Baltic/Rail Baltica Railway
2	Feasibility study "Standard gauge separate railway line within the "Rail Baltica" corridor through Estonia, Latvia and Lithuania" (so called AECOM Study, 2011)
3	Design Guidelines (ongoing)
4	Rail Baltica Global Project Cost-Benefit Analysis, 2017 http://railbaltica.org/cost-benefit-analysis/
5	Elaboration of traffic management and operations control plan for Rail Baltica", Railistics 2016 (Railistics study)
6	Rail Baltica studies for Estonia: General information website: http://railbaltic.info/et/
7	Rail Baltica studies for Latvia: Environmental Impact Assessment: http://railbaltica.info/wp-content/uploads/2014/11/IVN-Zinojums.pdf
8	Rail Baltica studies for Lithuania: Kaunas – Vilnius feasibility study, 2015 https://sumin.lrv.lt/uploads/sumin/documents/files/Veikla/Veiklos_sritys/Gelezinkeliu_transportas/%E2%80%9ERail%20Baltica%E2%80%9C_projektas/AECOM_Vilnius_(1).pdf
9	Feasibility Study for FinEst link (ongoing)
10	Study on Rail Baltic/Rail Baltica section "Polish / Lithuanian state border - Kaunas - RRT Palemonas" upgrade (ongoing)
11	Analysis on RB Muuga MMT technological and spatial needs (ongoing)
12	Integration of Rail Baltica railway line within the Riga central multimodal public transportation hub – Elaboration of technical solution, 2015
13	Rail Baltica Intermodal Logistics Centre in Latvia - Development of Operational and Technical Solutions, 2016
14	Construction of the Kaunas intermodal terminal in a public logistics centre, 2014
15	Commercialisation plan studies (ongoing)
16	List of planned regional station in Estonia
17	List of planned regional station in Latvia
18	List of planned regional station in Lithuania

- Documents for which Internet link is not mentioned will be provided at inception of the study.
- The Contractor shall consider all other significant information and documents with either direct or indirect relation to the study project, or providing background information;
- The Contractor shall consider all relevant national as well as EU standards and Technical Specifications for Interoperability.

1.3.2. List of passengers and freight train services planned to be operated on the Railway:

Ref.	Type of service
PAX1	Mainline daytime express passenger long distance (international) service at maximum line speed
PAX2	Mainline night time long distance (international) express passenger service
PAX3	Regional passenger service in every country and, if applicable cross-border regional passenger service
PAX4	Airport shuttle services on the routes Riga Central station - Riga International Airport (RIX) and Helsinki Central station - Vantaa International Airport (HEL)
PAX5	FinEst Link shuttle service on the route Tallinn Ullemiste - Helsinki central station - Vantaa International Airport (HEL)
FRT1	Freight service for containers (intermodal)
FRT2	Freight service for trucks or lorry transport (piggybacking)
FRT3	Freight service for dry bulk materials
FRT4	Freight service for liquid bulk materials
FRT5	Freight service for dangerous goods (chemicals etc.)
FRT6	Freight service for transport of new passenger cars and trucks transport (automotive rail logistics)
FRT7	Freight service for transport of passenger cars of passengers travelling by day or night express service
FRT8	Freight service for temperature-controlled goods
FRT9	Freight service for express mails, post, parcels
FRT10	Freight service for dangerous goods (chemicals etc.)
FRT11	Project Cargo exceptional oversize service

2. CONTENT OF THE ASSIGNMENT

2.1. Overall framework

- 2.1.1. The objective of this assignment is to prepare the overall Operational Plan Concept for Rail Baltica railway corridor, on short, medium and longer term. The Operational Plan Concept is the proposed organization for the transport offer, which will be realized on the Rail Baltica railway. It shall incorporate all physical, technical, human and organisational factors and resources, to set up the most efficient production organisation. Major targets are reduced operation costs for the infrastructure lifetime and optimised transport plans for final customers, to ultimately transfer the maximum of market share to the rail and to Rail Baltica in particular.
- 2.1.2. Rail Baltica railway Operational Plan Concept shall consider all the traffic flows which shall employ the Rail Baltica railway. It is therefore important to have a wide scale domain for the study of Operation Plan Concept, keeping in mind the mandatory transshipments due to break of gauge, physical obstacle, or use or other transportation than rail. On another hand, the needed operation studies cannot be done on a too wider territory outside of Rail Baltica railway.
- 2.1.3. The **Study Corridor** is defined as the railway lines, stations, service and maintenance facilities and all other associated objects, on the routes:
- Warsaw node – Białystok – Ełk – Suwałki – (PL/LT border) – Kaunas node – Panevėžys – (LT/LV border) - Riga node – (LV/EE border) - Pärnu – Tallinn node – FinEst Link – Helsinki node;
 - Kaunas node – Vilnius node.
- 2.1.4. A node is defined as a complex railway configuration, which include stations, tracks, junctions, bridges, tunnels, service and maintenance facilities to serve cargo and passenger flows in a geographical location, typically a city. Inside the Study Corridor, the considered nodes are:
- Warsaw node: only the main traffic generating points relevant for Rail Baltica corridor will be studied, e.g. the main passenger and freight stations, services and maintenance facilities which are strictly needed for Rail Baltica corridor operation. Since only a macroscopic view is necessary, a very simplified node configuration shall be considered;
 - Kaunas node: it includes Kaunas station and Palemonas station, the section Jiesia – Kaunas station – Palemonas station, Kaunas bypass (Jiesia – Palemonas), junction with Vilnius line, any 1435 mm gauge regional station, freight terminal and service and maintenance facility;
 - Vilnius node: it includes Vilnius central station, any 1435 mm gauge regional station, freight terminal and service and maintenance facility;
 - Riga node: from Dimžukalns junction (South) to Upeslejas junction (North), including Riga airport (RIX) and Riga central station, Riga by-pass line, and any 1435 mm gauge regional station, freight terminal and service and maintenance facility;
 - Tallinn node: Ülemiste station, line to Muuga port terminal, junction line to future FinEst Link, and any 1435 mm gauge regional station, freight terminal and service and maintenance facility;
 - Helsinki node: Central station, Pasila station, line to Vantaa airport (HEL), junction line to FinEst Link, any 1435 mm gauge regional station, freight terminal and service and maintenance facility.



Study Corridor for Operational Plan Concept

2.1.5. The performance of the study for Operational Plan Concept requests extensive railway engineering technical analysis, transversal approach from future customers' needs to realisation of transport offer, and quantitative economic assessment of key elements of railway operation. The study shall be carried out in work packages according to nine general stages:

- **Traffic studies (WP1)** (covers review and consolidation of the traffic studies, for all types of railway transport services to be performed by Rail Baltica railway);
- **Rolling stock studies (WP2)** (covers possible / needed typical rolling stock to operate trains on the Rail Baltica railway);
- **Infrastructure studies (WP3)** (covers analysis and assessment of the planned railway infrastructure);
- **Operation plan – Iteration 1 (WP4)** (covers the analysis of operation conditions, the software simulation and the operation plan of the Railway);
- **Rolling stock maintenance (WP5)** (covers the analysis of rolling stock maintenance needs, location and consistence of rolling stock maintenance facilities, required equipment, as well as assessment of rolling stock maintenance costs);
- **Infrastructure maintenance (WP6)** (covers the analysis of infrastructure maintenance needs, location and consistence of infrastructures maintenance facilities, required equipment, as well as assessment of maintenance costs);
- **Recommendation and optimisation (WP7)** (covers the Contractor proposals for improvement and optimisation of the planned railway infrastructure, railway infrastructure maintenance and railway service facilities);
- **Operation plan – Iteration 2 (WP8)** (covers the update of WP4 following conclusions of WP7);
- **Signalling and Control Command System studies (WP9)** (covers the definition of main features of the ERTMS and Centralised Traffic Control systems to operate the Rail Baltica railway, in accordance with operation plan defined in WP8).

2.1.6. The timeframe defined as pertinent for the Study is declined around 4 specific years, hereafter called *Time Periods (TP)*:

- TP1: 2026, Rail Baltica railway planned start of operations between Warsaw and Tallinn and on Kaunas – Vilnius section;
- TP2: 2036;
- TP3: 2046;
- TP4: 2056, taking as assumption that FinEst Link and infrastructure in Finland started their operation in 2050.

TP4 is the time period for which Rail Baltica infrastructure parameters shall be designed, taking into account the traffic at that time.

- 2.1.7. The Contractor shall perform necessary researches and studies, and report conclusions and deliverables **for the four time periods TP1 to TP4.**
- 2.1.8. At each stage, according to section 3.5 of this technical specification, the Contractor shall submit reports to the Contracting Authority along with a presentation of the progress made within each stage, based on which the latter may take relevant decisions on the further fulfilment of the Service.

2.2. Traffic studies (WP1)

- 2.2.1. The Contractor shall carry out detailed analysis of the existing traffic studies, consolidate and supplement them in order to propose an overview of the passengers and freight studies for each time period.
- 2.2.2. **WP 1.1 – Screening of existing passengers traffic studies** - the Contractor shall conduct traffic study analysis on the study corridor, for the type of passenger services [PAX1], [PAX2], [PAX3], [PAX4], and [PAX5].
- 2.2.3. The existing traffic studies will be mainly taken from in the reference studies [4], [8] and [9]. These studies and all other available information will be delivered to the Contractor as part of input data;
- 2.2.4. The Contractor shall review all information and prepare a report on consistency and deficiencies of existing passenger traffic studies, and propose of list of updates to the studies, to be included in WP 1.3;
- 2.2.5. **WP 1.2 Screening of existing freight traffic studies** - the Contractor shall conduct traffic study analysis on the study corridor, for the following type of freight services [FRT1], [FRT2], [FRT3], [FRT4], [FRT5], [FRT6], [FRT7], [FRT8], [FRT9] and [FRT10];
- 2.2.6. The existing traffic studies will be notably taken from in the reference studies [4], [9], [11], [13] and [15]. These studies will be delivered to the Contractor as part of input data;
- 2.2.7. The Contractor shall review all information and prepare a report on consistency and deficiencies of existing freight traffic studies, and propose of list of studies to complement them;
- 2.2.8. **WP 1.3 – Consolidation and completion of passengers traffic studies** – based on the report of WP 1.1, the Contractor shall prepare an overview of traffic studies for every type of passenger services, for the 4 TP considered.
- 2.2.9. The Contractor shall perform update, consolidation and harmonisation of the passengers traffic studies, in order to ensure technical and methodological consistency between the studies.
- 2.2.10. The Contractor shall consider the socio-economic data, as well as return of experience from similar projects in Europe, to assess the induced and captured traffic flows.
- 2.2.11. The Contractor shall perform traffic studies for Regional passenger service, to estimate the number of passengers using these stations. All relevant Origin – Destination shall be considered, inside every country as well as for cross-border services. The number of passenger at every hour of the service shall be estimated.
- 2.2.12. The number of Regional stations is indicatively estimated as follows:
- In Estonia: 11;
 - In Latvia: 12;
 - In Lithuania: 13
 - In Poland, the Contractor shall consider the existing regional stations and services.

List and location of regional stations will be provided at the inception of the Study.

- 2.2.13. As a result, a report including summary of methodology and assumptions used and giving overview of traffic flows for every type of passenger services and for the 4 TP considered shall be prepared by the Contractor.
- 2.2.14. **WP 1.4 – Consolidation and completion of freight traffic studies** – based on the report of WP 1.2, the Contractor shall prepare an overview of traffic studies for every type of freight services, for the 4 TP considered.
- 2.2.15. The Contractor shall perform update, consolidation and harmonisation of the freight traffic studies, in order to ensure technical and methodological consistency between the studies. However, no additional traffic forecasting study shall be performed as part of the Services.
- 2.2.16. The Contractor shall take into account the socio-economic data, as well as return of experience from similar projects in Europe, to assess the induced and captured traffic flows.
- 2.2.17. The Contractor shall perform a breakdown of traffic flows per type of freight services, on a sufficient basis to be used for the preparation of the operation plan of Railway freight services. This task shall be coordinated with the Technical Work Group set by the Contracting authority.
- 2.2.18. As a result, a report including summary of methodology and assumptions used and giving overview of traffic flows for every type of freight services and for the 4 TP considered shall be prepared by the Contractor.

2.3. Rolling stock studies (WP2)

- 2.3.1. **WP 2.1 – Definition of passenger typical rolling stock** – the contractor shall elaborate a list of the rolling stock which will be needed to perform the passenger services, defines their technical characteristics and perform a benchmarking of suppliers and off shelf rolling stock.
- 2.3.2. On the basis of the defined types of passenger services (Refer to WP 1.1), the Contractor shall define the typical characteristics for locomotives, carriages, EMU and DMU needed. This shall include (but not limited to) type of rolling stock, weight, passenger capacity, axle load, bogie configuration, climatic and environmental requirements, power, maximum tractive effort, typical tractive effort / train resistance curve, adhesion limit values, acceleration values, electrification types, signalling system types, braking systems parameters, environmental parameters.
- 2.3.3. The Contractor shall study the infrastructure parameters along the study corridor which may impact the definition of passenger rolling stock characteristics. This shall include (but not limited to) issues related to rolling stock gauge, platform dimensions, electrification, signalling, axle load, restrictions in tunnels or in specific areas. This task shall be coordinated with the Technical Work Group set by the Contracting authority.
- 2.3.4. The Contractor shall consider rolling stock for both electric and thermic traction mode.
- 2.3.5. The Contractor shall list and consider the passengers rolling stock currently in use or future plans for rolling stock procurement in Poland and Lithuania (1435 mm gauge network).
- 2.3.6. The Contractor shall perform a benchmark of the available passenger rolling stock off the shelf by different manufacturers, corresponding to the defined technical characteristics. A comparison table shall be delivered, including all technical characteristics.
- 2.3.7. **WP 2.2 – Definition of passenger typical fleets** – the Contractor shall elaborate a set of the rolling stock fleet which will be needed to perform the passenger services, according the traffic flows planned for each time period. Corresponding rough CAPEX for fleets shall be defined.
- 2.3.8. On the basis of the defined types of typical rolling stock for passenger services (Refer to WP 2.1) and the passengers traffic flows at every TP (Refer to WP 1.3), the Contractor shall define the fleet needed for each service. The proposed fleets shall take into account RB Rail requirements and Contractor recommendations regarding comfort levels for different services, including (but not limited to) available space per passenger, necessary on-board facilities, specific equipment for PRM, children, restauration, accommodation, normal and exceptional luggage and other issues.
- 2.3.9. The typical train composition for every fleet at every TP shall be detailed by the Contractor. This shall include the type of train used (locomotive + carriages, EMU, DMU) and typical compositions. For each composition, an approximate of the train resistance shall be given, using the Davis formula $R(V) = A + BV + CV^2$.

- 2.3.10. The Contractor shall deliver a rough cost estimate (CAPEX) of the fleets, considering the quantities needed for every TP.
- 2.3.11. **WP 2.3 – Definition of freight typical rolling stock** – the contractor shall elaborate a list of the rolling stock which will be needed to perform the freight services, defines their technical characteristics and perform a benchmarking of suppliers and off shelf rolling stock.
- 2.3.12. On the basis of the defined types of freight services (Refer to WP 1.2), the Contractor shall define the typical characteristics for locomotives and wagons needed. This shall include (but not limited to) type of rolling stock, weight, goods type and capacity, axle load, bogie configuration, climatic and environmental requirements, power, maximum tractive effort, typical tractive effort / train resistance curve, adhesion limit values, acceleration values, electrification types, signalling system types, braking systems parameters, environmental parameters.
- 2.3.13. The Contractor shall study the infrastructure parameters along the study corridor which may impact the definition of freight rolling stock characteristics. This shall include (but not limited to) issues related to rolling stock gauge, electrification, signalling, axle load, restrictions in tunnels or in specific areas. This task shall be coordinated with the Technical Work Group set by the Contracting authority.
- 2.3.14. The Contractor shall consider rolling stock for both electric and thermic traction mode.
- 2.3.15. The Contractor shall list and consider the freight rolling stock currently in use or future plans for rolling stock procurement in Poland and Lithuania (1435 mm gauge network).
- 2.3.16. The Contractor shall perform a benchmark of the available freight rolling stock off the shelf by different manufacturers, corresponding to the defined technical characteristics. A comparison table shall be delivered, including all technical characteristics.
- 2.3.17. The Contractor shall precise if some benchmarked locomotives could be fitted for both freight and passenger services.
- 2.3.18. **WP 2.4 – Definition of freight typical fleets** – the contractor shall elaborate a set of the rolling stock fleet which will be needed to perform the freight services, according the traffic flows planned for every TP. Corresponding rough CAPEX for fleets shall be defined.
- 2.3.19. On the basis of the defined types of typical rolling stock for freight services (Refer to WP 2.3) and the freight traffic flows at each time period (Refer to WP 1.4), the Contractor shall define the fleet needed for each service. The proposed fleets shall take into account RB Rail requirements and Contractor recommendations regarding specific requirements for different services.
- 2.3.20. Axle load considered shall be 25 tons.
- 2.3.21. The typical train composition for every fleet at every TP shall be detailed by the Contractor. This shall the type of train used (locomotive + wagons) and typical compositions. For each composition, an approximate of the train resistance shall be given, using the Davis formula $R(V) = A + BV + CV^2$.
- 2.3.22. In the case of heavy train composition, the Contractor shall propose different locomotive configurations: simple unit, multiple unit, push-pull... and detail pros and cons for each of them, using technical and economic aspects.
- 2.3.23. The Contractor shall deliver a rough cost estimate (CAPEX) of the fleets, taking into account the quantities needed for every TP.

2.4. Infrastructure studies (WP3)

- 2.4.1. **WP 3.1 – Analysis of infrastructure parameters** – The Contractor shall collect, analyse and complement the available infrastructure data, in order to gather all needed information to prepare the operation plans.
- 2.4.2. Existing infrastructure studies will be made available to the Contractor. These studies are at various stages, part of them include detailed parameters (gradient, profiles, stations and junction location and configurations, signals location...) and others are with limited level of details. The Contractor shall define the type and level of detail of input data needed to perform the operation plans. The Contractor shall review the existing studies, extract the necessary data, and propose assumptions to complement them to be able to perform the study.
- 2.4.3. In Estonia, the alignment for the entire country are on approval process. Preliminary design includes line profiles at 1/10000 scale.

- 2.4.4. In Latvia, the alignment for the entire country was approved. Preliminary design includes line profiles at 1/1000 scale.
- 2.4.5. In Lithuania, Special Plan for the Kaunas (Palemonas) – Lithuanian – Latvian state border was approved and includes line profiles at 1/5000 scale. The ongoing study “Study on Rail Baltica section “Polish / Lithuanian state border – Kaunas – RRT Palemonas” upgrade” shall define necessary modification to be implemented on that line and in Kaunas node to be compliant with the whole Rail Baltica project parameters. Kaunas – Vilnius is at feasibility study stage.
- 2.4.6. In Poland, the situation differs depending on the line sections:
- Warsaw – Białystok section will be upgraded to allow passengers trains at 160 km/h and freight trains at 120km/h;
 - Białystok – Elk section will be upgraded to allow passengers trains at 160 km/h and freight trains at 100km/h;
 - Elk – Trakiszki section will be upgraded to allow passengers trains at 120/140 km/h and freight trains at 100km/h;
- RB Rail is connected with Polish authorities and available information will be delivered to the Contractor as input data.
- 2.4.7. In Finland and regarding FinEst Link, a feasibility study is currently ongoing, which include tunnel construction technical feasibility, stations locations in Finnish side, safety aspects, detailed train operation and capacity study. RB Rail is connected with FinEst Link and available information will be delivered to the Contractor as input data.
- 2.4.8. Signalling system to be implemented in ERTMS level 2, with possible update to level 3. For the sake of the study, the Contractor shall take into account the presently available release (baseline 2,3,0d).

2.5. Operation plan – iteration 1 (WP4)

- 2.5.1. **WP 4.1 – Assessment of the operational situation** – Based on the information collected on previous work packages, the Contractor shall deliver his detailed analysis of the operational situation, for every TP. Particular attention shall be given to the possible bottlenecks, to the connection with Polish railway network and to the railway nodes of Tallinn, Riga and Kaunas. The Contractor may illustrate his analysis with case study of similar situation on other countries.
- 2.5.2. Current and future operation plans in Poland, as far as available, will be delivered to the Contractor as input data. The Contractor shall review these operation plans, extract the necessary data, and propose assumptions to complement them to be able to perform the study.
- 2.5.3. Current and future operation plans on the line sections Kaunas / Palemonas – Jiesia – Kazlu Ruda – Sestokai – LT / PL border, as far as available, will be delivered to the Contractor as input data. The Contractor shall review these operation plans, extract the necessary data, and propose assumptions to complement them to be able to perform the study.
- 2.5.4. The Contractor shall take regular information of the progress of “Study on Rail Baltica section “Polish / Lithuanian state border – Kaunas – RRT Palemonas” upgrade”, and in particular regarding its operation part. RB Rail Lithuanian country manager will be responsible to manage the interface with the contractor responsible of that study.
- 2.5.5. The Contractor shall take regular information of the progress of “ Feasibility Study for Finnish Estonian Transport Link (FinEst Link)”, and in particular regarding its operation part. RB Rail Estonian country manager will be responsible to manage the interface with the contractor responsible of that study.
- 2.5.6. **WP 4.2 – Study area software modelling** – The Contractor shall perform the software modelling of the railway infrastructure of the Study area, and of the operational situations, for every time period.
- 2.5.7. On the basis of the information collected on type of services, rolling stock fleets and infrastructure parameters, the Contractor shall create a software model of the Rail Baltica railway operation situation, for every time period.
- 2.5.8. Software model created on a format compatible with RailSys, which is the software in use inside RB Rail.
- 2.5.9. A copy of the software model and its update shall be transferred to RB Rail on request. It shall be on RailML format.

- 2.5.10. The software model shall allow to visualise, (but not limited to), for the operation plans of every TP, as defined in the WP 4.3:
- Infrastructure schematic layout, including all needed element (track sections, track gauge type, points, stations, platforms, level crossings, bridges, tunnels, infrastructure and rolling stock maintenance facilities, signalling devices and other related items);
 - Typical busiest day 24-hour space / time diagram, including all train services;
 - Maximum speed allowed by infrastructure;
 - Effective speed of every particular train;
 - Station track occupation;
 - All train movements, including shunting and between passengers' stations and depots;
 - Energy consumption for train traction.
- 2.5.11. The Contractor shall create the model for the entire study area. However, if existing models of some sections would be available under useable format, they would be delivered to the Contractor to speed up the modelling phase.
- 2.5.12. The Contractor shall incorporate in the model the sections with gauntleted 1435 mm and 1520 mm gauges, located in Kaunas node area. Necessary train operation data on 1520 mm will be provided as input data, or assumptions taken in agreement with RB Rail.
- 2.5.13. **WP 4.3 – Operation Plan** – The Contractor shall prepare an exhaustive operational plan for Rail Baltica railway, for the whole study area, and for every TP.
- 2.5.14. The Contractor shall define and propose the necessary trains to transport the passengers and freight flows calculated in the WP 1.3 and 1.4, using the rolling stock fleets defined in WP 2.3 and WP 2.4.
- 2.5.15. Train services, defined by type of traffic, timetables and stops shall be proposed by the Contractor, taking into account all information available. Commercial aspects shall be main criteria for train service definition, notably when defining the train timetable. Transferring the maximum of market share to Rail Baltica remains of of the main objective of the study.
- 2.5.16. Assumptions taken by the Contractor in the definition of train services shall be justified by factual element, as travel times and time to serve stations suitable and attractive to passengers, potential users of services, competition with other transportation modes for cargo...
- 2.5.17. The Contractor will deliver a report presenting the operational situation for every TP, with the following (but not limited to) content:
- Considered track layout and infrastructure elements;
 - Considered typical rolling stock used to perform the services;
 - Maximum speed diagrams for all routes, tracks and junctions;
 - Detailed definition for each passenger and freight services, taking into account rolling stock used, stations or freight facilities served, timetable of every train.
 - Train space time diagrams for the whole study area;
 - Assumptions taken for necessary parameters (reliability margin, dwell times, traffic windows...);
 - Flow diagrams in railway nodes;
 - Conflict and bottleneck areas;
 - Detailed report on operational situations of the nodes of Kaunas, Riga, Tallinn and Helsinki;
 - Used and spare capacity of every line section;
 - Calculation of trains services at different speeds;
 - Power consumption for each train,
 - Total power consumption for all trains for a 24 hours service.

- 2.5.18. **WP 4.4 – Operation resources assessment** – The Contractor shall evaluate in terms of quality and quantity the resources needed for the railway operation. This shall include the human and material resources.
- 2.5.19. The Contractor shall evaluate the number of staff positions needed to operate the railway, inside stations, in Centralised Traffic Control and in other locations. The evaluation shall be based on benchmarking of similar type of railway and type of operation. Necessary work conditions (day shifts, night shifts, on duty) shall be taken into account. A tentative list shall be established for all the locations along Rail Baltica railway, for every TP.
- 2.5.20. Description of the required skills, experience and education for every position needed shall be provided.
- 2.5.21. Description of necessary material resources (buildings, rooms, offices, specific tools...) shall be provided, with respective locations. Based on the evaluations above, the Contractor shall calculate an estimation of the operation costs, for every TP.
- 2.5.22. The signalling and Control Command Systems shall not be included, as it is the subject of WP 9.
- 2.5.23. Energy costs (Electricity or Diesel) shall be excluded of the operation costs.

2.6. Rolling stock maintenance (WP 5)

- 2.6.1. **WP 5.1 – Definition of passenger rolling stock fleet maintenance facilities**– On to the basis of work performed on previous work packages, the Contractor shall evaluate the needs in maintenance facilities (locomotive, EMU and DMU depots, garage and associated equipment) for the passengers rolling stock fleet.
- 2.6.2. The Contractor shall assess the adequacy of the planned or existing facilities along the study corridor, according their respective technical parameters: number and length of tracks, depot buildings, equipment, connection to main railway tracks and geographical situations, etc.
- 2.6.3. The Contractor shall propose the suitable purpose (type of rolling stock to be serviced), locations and technical parameters for passengers rolling stock fleet maintenance facilities for every TP.
- 2.6.4. **WP 5.2 – Cost estimate of passenger rolling stock fleet maintenance** – The Contractor will assess the maintenance cost for passengers rolling stock fleet, for every TP.
- 2.6.5. On the basis of the maintenance facilities defined in WP 5.1, the Contractor will assess the investment cost for passengers rolling stock fleet maintenance facilities, for every location.
- 2.6.6. The Contractor shall evaluate in terms of quality and quantity the human resources needed for the maintenance of passengers rolling stock fleet. The Contractor shall evaluate the number of staff positions needed to maintain the rolling stock, inside depots, garage, workshops and in other locations. The evaluation shall be based on benchmarking of similar type of railway operation and maintenance. Necessary work conditions (day shifts, night shifts, on duty) shall be taken into account. A tentative list shall be established for all the locations along Rail Baltica railway, for every time period.
- 2.6.7. Description of the required skills, experience and education for every position needed shall be provided.
- 2.6.8. On the basis of WP 2.1, 2.2, 4.3 and 5.1, the Contractor shall provide a rough yearly cost assessment of the spare parts needed for passengers rolling stock fleet maintenance.
- 2.6.9. On the basis of the evaluations above, the Contractor shall calculate an estimation of the passengers rolling stock fleet maintenance costs, for every time period.
- 2.6.10. Cost of energy (from electricity, Diesel or other sources) shall be excluded of the maintenance costs.
- 2.6.11. **WP 5.3 – Definition of freight rolling stock maintenance facilities**– On to the basis of work performed on previous work packages, the Contractor shall evaluate the needs in maintenance facilities (locomotive and wagons depots, garage and associated equipment) for the freight rolling stock fleet.
- 2.6.12. The rolling stock dedicated to the maintenance of the infrastructure, as defined in WP 6.1, shall be considered for the definition of the freight rolling stock maintenance facilities.
- 2.6.13. The Contractor shall assess the adequacy of the planned or existing facilities along the study corridor, according their respective technical parameters: number and length of tracks, depot buildings, equipment, connection to main railway tracks and geographical situations, etc.
- 2.6.14. The Contractor shall propose the suitable purpose (type of rolling stock to be serviced), locations and technical parameters for freight rolling stock fleet maintenance facilities for each time period.

- 2.6.15. **WP 5.4 – Cost estimate of freight rolling stock fleet maintenance** – The Contractor will assess the maintenance cost for freight rolling stock fleet, for each time period.
- 2.6.16. On the basis of the maintenance facilities defined in WP 5.3, the Contractor will assess the investment cost for freight rolling stock fleet maintenance facilities, for every location.
- 2.6.17. The Contractor shall evaluate in terms of quality and quantity the human resources needed for the maintenance of freight rolling stock fleet. The Contractor shall evaluate the number of staff positions needed to maintain the rolling stock, inside depots, garage, workshops and in other locations. The evaluation shall be based on benchmarking of similar type of railway operation and maintenance. Necessary work conditions (day shifts, night shifts, on duty) shall be taken into account. A tentative list shall be established for all the locations along Rail Baltica railway, for every TP.
- 2.6.18. Description of the required skills, experience and education for every position needed shall be provided.
- 2.6.19. On the basis of WP 2.3, 2.4, 4.3 and 5.3, the Contractor shall provide a rough yearly cost assessment of the spare parts needed for freight rolling stock fleet maintenance.
- 2.6.20. On the basis of the evaluations above, the Contractor shall calculate an estimation of the freight rolling stock fleet maintenance costs, for every time period.
- 2.6.21. Cost of energy (from electricity, Diesel or other sources) shall be excluded of the maintenance costs.

2.7. Infrastructure maintenance (WP 6)

- 2.7.1. **WP 6.1 – Definition of infrastructure maintenance strategy and organisation** – On to the basis of his experience and on the work performed on WP 3 and 4, the Contractor shall evaluate the needs in maintenance of the infrastructure. A strategy shall be proposed, which shall be transposed in a global organisation of the maintenance of Rail Baltica railway.
- 2.7.2. After presenting a benchmarking of infrastructure organisation for similar type of railway and type of operation, the Contractor shall propose a global maintenance strategy, taking into consideration all infrastructure components (earthworks, bridges and structures, tunnels, stations, track, electrification, control command and signalling...).
- 2.7.3. Particular attention shall be given to the climatic conditions, and their impact on the maintenance operation, notably in term of seasonality and of access to worksites.
- 2.7.4. Infrastructure management strategy is subject to a separate ongoing study. For the sake of the present study, the Contractor will consider the following situation:
 - One single infrastructure manager for the 3 Baltic states;
 - Existing infrastructure manager in Poland;
 - One single infrastructure manager for the FinEst Link and the 1435 mm gauge tracks in Finland.
- 2.7.5. **WP 6.2 – Definition of infrastructure maintenance facilities, equipment and dedicated rolling stock**– On the basis of his experience and on the work performed on WP 6.1, the Contractor shall evaluate the facilities, equipment and rolling stock dedicated to the maintenance of the infrastructure.
- 2.7.6. Infrastructure maintenance facilities include all tracks, buildings and fixed equipment dedicated to the maintenance of the infrastructure, as maintenance bases general or specialised to a component, specific laboratory and plant, administrative buildings, storages of material, access road and path...
- 2.7.7. The Contractor shall assess the adequacy of the planned or existing infrastructure maintenance facilities along the study corridor, according their respective technical parameters (type of facilities, number and length of tracks, buildings, equipment, connection to main railway tracks and geographical situations, etc).
- 2.7.8. Infrastructure maintenance equipment include all tools, machines, industrial equipment dedicated to the maintenance of the infrastructure, and generally located in maintenance facilities. It also includes the material stocks (e.g.: sleeper and rail spare part, ballast stockpiles, cable rolls...)
- 2.7.9. Rolling stock dedicated to the maintenance of the infrastructure include all tracks and catenary maintenance machines (dumper, grinder...), infrastructure parameter measurement trainsets, inspection draisine, locomotives and dedicated wagons...
- 2.7.10. Non-destructive measurement rolling stock as well as railway infrastructure testing systems (both track side and rail machinery) shall be proposed by the Contractor.

- 2.7.11. The Contractor shall list every type of facilities, equipment and rolling stock dedicated to the maintenance of the infrastructure, provide for each of them:
- a brief description of the item and its purpose;
 - location and quantities needed;
 - cost estimate for every item.

A summary table for each of the infrastructure managers defined in WP 6.1 shall be provided, based on geographical entries.

- 2.7.12. **WP 6.3 – Cost estimate of infrastructure maintenance** – The Contractor will assess the maintenance cost for the infrastructure, for each time period.
- 2.7.13. On the basis of the infrastructure maintenance facilities, equipment and rolling stock defined in WP 6.1, the Contractor will assess the investment costs for infrastructure maintenance, for every location.
- 2.7.14. The Contractor shall evaluate in terms of quality and quantity the human resources needed for the maintenance of the infrastructure. The Contractor shall evaluate the number of staff positions needed to maintain the infrastructure, inside maintenance bases, laboratories, buildings and in other locations. The evaluation shall be based on benchmarking of similar type of railway maintenance. Necessary work conditions (day shifts, night shifts, on duty) as well as climatic conditions shall be taken into account. A tentative list shall be established for all the locations along Rail Baltica railway, for every time period.
- 2.7.15. Description of the required skills, experience and education for every position needed shall be provided.
- 2.7.16. On the basis of WP 4, 6.1, and 6.2, the Contractor shall provide a rough yearly cost assessment of the spare parts and materials needed for infrastructure maintenance.
- 2.7.17. On the basis of the evaluations above, the Contractor shall calculate an estimation of the infrastructure maintenance costs, for every time period.
- 2.7.18. Cost of energy (from electricity, Diesel or other sources) shall be excluded of the maintenance costs.

2.8. Recommendations and optimisation (WP 7)

- 2.8.1. **WP 7.1 – Recommendations regarding infrastructure design parameters** – On the basis of previous studies, software simulation results and his experience, the Contractor shall provide statements and recommendations regarding the infrastructure design parameters, with detailed justifications.
- 2.8.2. The objective of the statements and recommendations shall be to improve the operational situation of the Rail Baltica railway, in order to warranty that the designed configuration will fulfils the requirements for train capacity and cost-effective operation, for each time period.
- 2.8.3. Statements and recommendations could be about general infrastructure design parameters, including (but not limited to): gradients, curve radius, speeds on deviated turnouts, typical station configuration, platform dimensions...), signalling (headway...), control and electrification systems features or for specific cases and locations, where it is suggested to modify the design.
- 2.8.4. Statements and recommendations regarding the configuration of the railway nodes of Kaunas, Riga and Tallinn shall be provided, which detailed supporting argumentation, regarding (but not limited to) the following parameters: number of tracks in stations and open line, stations configuration, location of infrastructures and maintenance facilities, single track sections, gantletted track sections, locations with speed restrictions, specific case of bridges and tunnels, junctions configuration, signalling control and electrification systems features.
- 2.8.5. Statements and recommendations shall include the management of operation for all sections, including gantletted track sections and gauge crossings. Measures to improve the operational situation and capacity limitations in these areas shall be proposed. This shall include functional and technical requirements for signalling, traffic control and electrification systems.
- 2.8.6. Particular attention shall be given to the size of infrastructures needed for each time period, according traffic forecasts and corresponding operation plans. Recommendations shall be provided to delay construction of part of infrastructure, which is not needed at some TP. It could be about number of tracks, stations or part of station, intermodal station, electrification system, maintenance bases, rolling stock depot...

- 2.8.7. Station configuration recommendations shall take into consideration the operation in the same station of different type of trains: express passengers trains, night trains, regional trains, long freight trains (1 050 m).
- 2.8.8. Statements and recommendations shall be provided in a summary table based on geographical entries (km point, station...).
- 2.8.9. **WP 7.2 – Recommendation regarding rolling stock** – On the basis of previous studies and his experience, and taking into account the WP 7.1, the Contractor shall provide statements and recommendations regarding the typical rolling stock to be used on Rail Baltica railway, with detailed justifications.
- 2.8.10. These recommendations may concern rolling stock parameters studied in WP 2.3, or any additional parameter.
- 2.8.11. **WP 7.3 – Recommendation regarding infrastructure maintenance facilities** – On the basis of previous studies and his experience, the Contractor shall provide statements and recommendations regarding the infrastructure maintenance facilities, with detailed justifications.
- 2.8.12. Statements and recommendations could be about general design parameters (e.g.: number of track, spacing between maintenance bases...) or for specific cases and locations, where it is suggested to modify the design.
- 2.8.13. Particular attention shall be given to the size of infrastructure maintenance facilities needed for every TP, according traffic forecasts and corresponding operation plans. Recommendations shall be provided to delay construction of part of infrastructure maintenance facilities, which is not needed at some TP.
- 2.8.14. Statements and recommendations shall be provided in a summary table based on geographical entries (km point, maintenance base...).
- 2.8.15. **WP 7.4 – Recommendation regarding rolling stock maintenance facilities** – On the basis of previous studies and his experience, the Contractor shall provide statements and recommendations regarding the rolling stock maintenance facilities, with detailed justifications.
- 2.8.16. Statements and recommendations could be about general design parameters (e.g.: number of track, type of equipment...) or for specific cases and locations, where it is suggested to modify the design.
- 2.8.17. Particular attention shall be given to the size of rolling stock maintenance facilities needed for every TP, according traffic forecasts and corresponding operation plans. Recommendations shall be provided to delay construction of part of rolling stock maintenance facilities, which is not needed at some TP.
- 2.8.18. Statements and recommendations shall be provided in a summary table based on geographical entries (depot location...).
- 2.8.19. **WP 7.5 – Optimisation of the operation organisation** – On the basis of previous studies and recommendations and on his experience, the Contractor shall propose an optimisation of the organisation of operation, as defined in the WP 4, with detailed justifications.
- 2.8.20. **WP 7.6 – Review and revision of recommendations of optimisation measures** – The statements and recommendations of the Contractor will be reviewed, and discussed with all necessary stakeholders, in order to in fine reach a consensus regarding the recommendations to be implemented.
- 2.8.21. The Contracting Authority will review the statements and recommendations, and will provide his opinion, taking into account the involved authorities and stakeholders. This review period will have a maximal duration of 30 days.
- 2.8.22. During this review period, the Contractor will be requested to present during high level meetings his works, statements and recommendations to the relevant authorities and stakeholders. Up to 3 meetings will be organised, which will take place in some of the involved state capitals. Consistent presentations shall be prepared, using the modern communication tools.
- 2.8.23. At the end of the review period, the Contractor will receive from the Contracting Authority. the detail of the recommendations which were approved for implementation, forming the *optimised situation*.
- 2.9. Operation plan – iteration 2 (WP 8)**
- 2.9.1. **WP 8.1 – Optimised study area software modelling** – The Contractor shall perform the software modelling of the optimised situation.

- 2.9.2. Optimised situation shall be based on the situation studied in WP 4, amended by the recommendations proposed by the Contractor in WP 7, and which were approved by the Contracting Authority.
- 2.9.3. The Contractor shall perform update of the operation model of the optimised situation inside the software tool. The updated software model shall be delivered to the Contracting Authority in electronic format together with the Final Report.
- 2.9.4. **WP 8.2 – Optimised Operation Plan** – The Contractor shall prepare the optimised exhaustive operational plan for Rail Baltica railway, for the whole study area, and for every TP.
- 2.9.5. The Contractor will deliver a report presenting the operational situation for every TP, with the following (but not limited to) content:
- Considered optimised track layout and infrastructure elements;
 - Considered typical rolling stock used to perform the services;
 - Maximum speed diagrams for all routes, tracks and junctions;
 - Detailed definition for each passenger and freight service;
 - Calculation of trains services at different speeds;
 - Train space time diagrams for the whole study area;
 - Assumptions taken for necessary parameters (reliability margin, dwell times, traffic windows...);
 - Flow diagrams in railway nodes;
 - Conflict and bottleneck areas;
 - Detailed report on operational situations of the nodes of Kaunas, Riga, Tallinn and Helsinki, after optimisation;
 - Used and spare capacity of every line section;
 - Power consumption for each train;
 - Total power consumption for all trains for a 24 hours service;
 - Remaining train capacity for every line section, at every TP.
- 2.10. Control command systems (WP 9)**
- 2.10.1. **WP 9.1 – Signalling systems** – The Contractor shall propose main features for ERTMS signalling systems, which are adapted and needed to operate the Rail Baltica railway.
- 2.10.2. **WP 9.2 – Traffic Control** – The Contractor shall propose an operational organisation for the Traffic Control Centres, which are necessary to operate the Rail Baltica railway.
- 2.10.3. The operational organisation shall take into account the infrastructure management organisations, as defined in the WP 6.1.

3. CONTRACT'S PROJECT MANAGEMENT

3.1. Management structure and cooperation

- 3.1.1. The principal decisions are made by the Contracting authority. In addition to settling operative and professional issues, the Contracting authority will establish a Technical Work group, which may include stakeholder representatives.
- 3.1.2. The organisational scheme of the study has to take into account that it will be conducted in 5 countries while the main Contracting Authority is in Riga. The Contractor is required to propose a Project Management Structure which is adequate to that scheme to ensure a smooth and efficient conduct of the project.
- 3.1.3. All experts must be free from conflicts of interest in the tasks or responsibilities accorded to them.
- 3.1.4. The Contractor shall propose an optimum structure for the Project Team, based on the Services Requested in the terms of reference, and where possible propose a core team with cross-functional roles.
- 3.1.5. The Contractor shall provide Technical Work Group facilitation.
- 3.1.6. Progress meetings with the Contracting authority are held at least once per month.
- 3.1.7. Regular project management meetings shall be scheduled at least 2-3 times per month.
- 3.1.8. If needed, ad-hoc meetings can be arranged, which may be initiated both by the Contractor, or the Contracting Authority,
- 3.1.9. Upon a request by and in the term set by the Contracting Authority (but no less than within five business days) the Contractor shall prepare informative materials and presentation within this study demonstrating both main conclusions at that time, an overview of the project progress.
- 3.1.10. Upon a request by the Contracting Authority, the Contractor shall take part and, where necessary, prepare informative materials or work reports in meetings, forums, discussions, etc. organised by the Contracting Authority or where the Contracting Authority shall take part. Such events are, for instance, Rail Baltica Task Force meetings, workgroups, meetings in the European Commission, meetings with stakeholders in Latvia, Lithuania, Estonia, Poland, or Finland, conferences, discussions, etc. Maximum number of events is set to 8.
- 3.1.11. Working materials (including a PowerPoint presentations), agenda of the meeting, list of participants shall be submitted no later than one business day prior to the meeting. Decisions taken at the meeting are registered in the minutes of the meeting. The writing of minutes is done by an expert assigned by the Contractor. Minutes of the meeting are sent by email to the meeting participants within two business days after the meeting. Where within two working days after minutes of the meeting have been sent the participants have not submitted any comments, the minutes of meeting are deemed approved. Approved minutes of meeting are signed by the project managers of the Contracting authority and the Contractor during the next meeting.
- 3.1.12. Initiated by the Contracting authority the Contractor's project manager of the study, his deputy or any other competent Contractor's exerts may be invited to take part in the meetings organised by the Contracting authority or meetings, where the Contracting authority shall take part, together with representatives of other authorities.
- 3.1.13. Any official correspondence within the Contract must be done in paper.
- 3.1.14. Language for official communication - English.

3.2. Visibility requirements

The Contractor is obliged to comply with the following visibility requirements:

- 3.2.1. Any reports, tables, figures and infographics, appendices, presentations and other deliverable material must be formatted according to Rail Baltica visual guidelines (<http://railbaltica.org/about-rail-baltica/visual-guidelines/>);
- 3.2.2. Any reports, brochures, other documents or information connected with Services which the Contractor produces and submits to the Principal, the Beneficiary, any other third person or makes publicly available must include the following:
 - a) a funding statement stating that Services is the recipient of the funding from the CEF: "Rail Baltica is co-financed by the European Union's Connecting Europe Facility";

- b) (for printed materials) a disclaimer releasing the European Union from any liability in terms of the content of the dissemination materials: "The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein." This disclaimer in all European Union official languages can be seen at the website: <https://ec.europa.eu/inea/connecting-europe-facility/cef-energy/beneficiaries-info-point/publicity-guidelines-logos>;
- c) the European Union flag.
- 3.2.3. Requirements set in Sections 3.2.1 **Error! Reference source not found.** and 3.2.2 can be fulfilled by using the following logo:



Co-financed by the European Union
Connecting Europe Facility

If the Contractor shall use this logo, the Contractor shall ensure that elements of the logo will not be separated (the logo will be used as one whole unit) and enough free space around the logo shall be ensured;

- 3.2.4. The Contractor is obliged to comply with the latest visibility requirements set by the European Union. For that purpose the Contractor shall follow the changes in the visibility requirements on its own. On the date of conclusion of this Contract the visibility requirements are published on the following website: <https://ec.europa.eu/inea/connecting-europe-facility/cef-energy/beneficiaries-info-point/publicity-guidelines-logos>.

3.3. Project schedule

- 3.3.1. The deadline for the performance of the procurement contract shall be up to 36 weeks from its commencement date.
- 3.3.2. The Contractor shall provide in its work programme enough time for the review of submitted reports and deliverables by representatives of the Contracting Authority and other stakeholders, leaving at least 14 days for the review and preparation of their statement.
- 3.3.3. The Contractor shall plan and schedule activities and tasks so the time available for the Study is utilized effectively.

3.4. Project execution site

- 3.4.1. The primary base for the project will be the office facilities of the Contractor. In order to perform the project tasks visits within the region to make the interviews, site visits, and field research will have to be carried out.
- 3.4.2. The Contractor shall make his own arrangements for office facilities, personal computers and other facilities of appropriate performance and security standard for the production of study results.
- 3.4.3. The Contractor shall ensure that experts involved in Project are adequately supported and equipped. In particular, he shall ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. The Contractor must also transfer funds as necessary to support its activities under the Contract, and ensure that his employees are paid regularly and in a timely manner.
- 3.4.4. Costs for project administration and office operation including telecommunication costs shall be included.
- 3.4.5. If the Contractor is a consortium, the arrangements should allow for the maximum flexibility in project implementation.

3.5. Reports and deliverables

- 3.5.1. Inception Report is required within 4 weeks after commencement of the Contract. Any clarifications of the present Technical Specifications shall be carried out during the inception period of the Project, and shall be agreed with the Contracting authority. Inception report:
- a) shall demonstrate the understanding of assignment by the Contractor; and
 - b) shall demonstrate the further implementation plan of the study, including the schedule of workgroup meetings, and a detailed work programme of other works.
- 3.5.2. Monthly progress reports shall be drafted in digital editable format (*.ppt, *.pptx) and shall be submitted to the Contracting authority one business day prior to presentation of the report in a progress meeting. A progress report shall be short and cover all aspects of the service in terms of its content, incl. information on the work progress and conclusions within working tasks, as well as questions and issues. A progress report may contain short technical report on the course of work by the Contractor. The aim of the progress reports is:
- 1) To receive timely information from the Contractor regarding progress of works and initial conclusions and recommendations;
 - 2) To ensure the Contractor with the possibility of receiving duly comments, opinions, and recommendations on issues related to service performance.
- 3.5.3. There must be a Final Completion Report at the end of the period of execution. The Draft Completion Report must be submitted at least 1 week prior to expiry of the Contract.
- 3.5.4. Note that Progress Report and Completion Report are administrative reports on the course of performance of the service.
- 3.5.5. The content of the deliverables/ reports to be drafted and delivered are summarized in the table below.

Report	Main contents
Inception report	Detailed project execution plan Detailed methodology and workplan Project risk and issue evaluation and management plan
First interim report	Outputs of WP 1, WP 2, WP 3 and WP 4.1. Status of software modelling (WP 4,2), with submission of the model in its current status.
Second interim report	Outputs of WP 4.2, WP 4.3, WP 4.4, WP 5 and WP 6. Submission of the finalised software model.
Preliminary Study Report	Revised contents of WP 1 to WP 6 Output of WP 7.
Final Study report	Revised contents of WP 1 to WP 7 Output of WP 8 and WP 9. Submission of the software model for optimised situation. Conclusion and recommendations.
Final Completion report	Summary of execution of the Contract

(*) CD: commencement date of the contract

3.6. Submission and approval of reports and deliverables

- 3.6.1. Draft Final Report and Final report shall be submitted in English. Inception, Progress and Completion Reports, and Final Report must be written in English. All reports shall be submitted in hard and soft copy. The Contractor must submit the documents (paper and soft versions) in person or by courier to the Contracting authority's representative.

3.6.2. Time schedule of deliverables and approval thereof is presented in the following table. The Contractor may submit updated report and deliverable submission schedule included within the project inception report only in reasonably justified cases.

Deliverables/Reports	No. of copies	Submission schedule	Approval through Contracting Authority
Inception Report	1 hard copies, 1 soft copy	CD* + 4 weeks	2 weeks after reception
Interim Report 1	1 hard copies, 1 soft copy	CD* + 14 weeks	1 month after reception
Interim Report 2	1 hard copies, 1 soft copy	CD* + 19 weeks	2 weeks after reception
Preliminary Study Report	1 hard copies, 1 soft copy	CD* + 28 weeks	1 month after reception
Final Report	4 hard copies, 1 soft copy	CD* + 34 weeks	2 weeks after reception
Final Completion Report	1 hard copies, 1 soft copy	CD* + 35 weeks	1 week after reception

(*) CD: commencement date of the contract

3.6.3. Reports and documents will be officially delivered and accepted when the Contracting authority or its authorized representative will approve the receipt of the document in writing by signing the acceptance-delivery protocol.

ANNEX C: SCHEDULE OF STUDY

Study Start Date:

Commencement date of the agreement

Study Milestones:

According to Section 2 of the Technical Specification

Deliverables:

According to Part 3.5 of the Technical Specification

Defects Date:

as set in Section 7.3 of the Technical Specification

ANNEX D: FEE AND PAYMENT SCHEDULE

Fee a service fee in the amount of 499'340 EUR (Four hundred ninety nine thousand and three hundred forty euro and zero cents);

Schedule of payment of Fee

After delivery of the following Deliverables and signing of the Provisional Acceptance Certificate and/or Final Acceptance Certificate the Principal shall pay following amount of the Fee:

Deliverable	Payment amount
Inception report	0%
First interim report	30%
Second interim report	0%
Preliminary Study Report	30%
Final Study report	0%
Final Completion report	40%

ANNEX E: LIST OF APPROVED SUB-CONTRACTORS

Company name: COWI A/S

Contact details: Parallelvej 2, 2800 Kongens Lyngby, Denmark

Legal representative: Mr. Andreas Petersen

Company name: IFB Institut für Bahntechnik GmbH

Contact details: Carnotstr. 6, 10587 Berlin, Germany

Legal representative: Mr. Andrzej Nuskiewicz

ANNEX F: FORM OF PROVISIONAL COMPLETION CERTIFICATE NO [•][INSERT NUMBER]

Date: [INSERT DATE IN THE FORM OF 1 January 2017]

Location: [INSERT LOCATION]

For:

RB Rail AS

registration number 40103845025 legal address K. Valdemāra iela 8-7, Riga LV-1010, Latvia

(hereinafter, the "Principal")

This provisional completion certificate (hereinafter, "Provisional Completion Certificate") is issued to the Principal by [•][INSERT NAME, REGISTRATION NUMBER INSERT REGISTRATION NUMBER, LEGAL ADDRESS] (hereinafter, the "Contractor"), represented by [INSERT NAME OF REPRESENTATIVE ON THE BASIS OF INSERT BASIS OF REPRESENTATION].

In this Provisional Completion Certificate, unless the context requires otherwise, all defined terms shall have the meaning ascribed to such terms in accordance with the [INSERT AGREEMENT DATE IN THE FORM OF STUDY AGREEMENT NO. INSERT AGREEMENT NUMBER] (hereinafter, the "Agreement") and Annex A (*Definitions and Common Terms*) of the Agreement.

Whereas:

- (A) the Principal and the Contractor have entered into the Agreement;
- (B) Clause 7.4 of the Agreement stipulates that upon meeting a Study Milestone or producing a Deliverable constituting all or an identifiable part of the Technical Specification, the Contractor shall issue to the Principal a Provisional Completion Certificate substantially in the form of Annex F (*Form of Provisional Completion Certificate*) of the Agreement;
- (C) a Study Milestone has been met or a Deliverable has been completed.

The following Study Milestone(s) has/have been met on [INSERT DATE IN THE FORM OF 1 January 2017], as specified in accordance with Annex C (*Schedule of Study*) of the Agreement:

[describe in reasonable detail the Study Milestone attained. Insert n/a, if no Study Milestone has been attained.]

The following Deliverable(s) has/have been completed on [INSERT DATE] and are attached to this Provisional Completion Certificate:

[INSERT NAME OF THE DELIVERABLE. INSERT N/A, IF NO DELIVERABLES HAVE BEEN COMPLETED.]

As stipulated in Clause 7.5 of the Agreement, in the event the Principal objects to the issue of the Provisional Completion Certificate, the Principal shall give a written notice to the Contractor setting out in reasonable detail Defects or reasons for the objection (hereinafter, the "Objection Notice") within seven (7) or fourteen (14) days, or thirty (30) days (as set in to the Technical Specification) following receipt of the Provisional Completion Certificate.

In the event of conflict between the text in this Provisional Completion Certificate and the Agreement, the Agreement shall take precedence.

Signature:

[insert name, surname

insert position

insert company name]

ANNEX G: FORM OF PROVISIONAL ACCEPTANCE CERTIFICATE NO. [•][INSERT NUMBER]

Date: [INSERT DATE IN THE FORM OF 1 January 2017]

Location: [INSERT LOCATION]

For: [•] (hereinafter, the "Contractor")

This provisional acceptance certificate (hereinafter Provisional Acceptance Certificate) is issued to the Contractor by RB Rail AS, registration number 40103845025, legal address K. Valdemāra iela 8-7, Riga, LV-1010 (hereinafter, the "Principal"), represented by [INSERT NAME OF REPRESENTATIVE ON THE BASIS OF INSERT BASIS OF REPRESENTATION].

In this Provisional Acceptance Certificate, unless the context requires otherwise, all defined terms shall have the meaning ascribed to such terms in accordance with the [INSERT AGREEMENT DATE] AGREEMENT ON OPERATION PLAN CONCEPT FOR RAIL BALTICA RAILWAY No [INSERT AGREEMENT NUMBER] (hereinafter, the "Agreement") and Annex A (*Definitions and Common Terms*) of the Agreement.

Whereas:

- (A) the Principal and the Contractor have entered into the Agreement;
- (B) the following Study Milestone(s) has been met and the following Deliverable(s) have been supplied to the Principal:
 - (i) [PLEASE IDENTIFY MILESTONE]
 - (ii) [PLEASE IDENTIFY DELIVERABLE]
- (C) any and all Defects have been averted or no Objection Notices have been issued;
- (D) as stipulated by Clause 7.7 of the Agreement, final acceptance shall be evidenced by means of the Principal issuing and both Parties attaching their signature to the Final Acceptance Certificate substantially in the form of Annex H (*Form of Final Acceptance Certificate*) (hereinafter, the "Final Acceptance Certificate");

The Principal is satisfied with the result of any and all achieved Study Milestones and/or Deliverables completed and submitted and, in accordance with Clause 7.5 of the Agreement, the Principal accepts the part of the Study performed as of the date of this Provisional Acceptance Certificate.

In the event of conflict between the text in this Provisional Acceptance Certificate and the Agreement, the Agreement shall take precedence.

Signatures:

[insert name, surname

insert position]

ANNEX H: FORM OF FINAL ACCEPTANCE CERTIFICATE NO [•][INSERT NUMBER]

Date: [INSERT DATE IN THE FORM OF 1 January 2017]

Location: [INSERT LOCATION]

For: [•] (hereinafter, the "Contractor")

This final acceptance certificate (hereinafter, "Final Acceptance Certificate") is issued to the Contractor by RB Rail AS, registration number 40103845025, legal address K. Valdemāra iela 8-7, Riga, LV-1010 (hereinafter, the "Principal"), represented by [INSERT NAME OF REPRESENTATIVE ON THE BASIS OF INSERT BASIS OF REPRESENTATION].

In this Final Acceptance Certificate, unless the context requires otherwise, all defined terms shall have the meaning ascribed to such terms in accordance with the AGREEMENT ON OPERATION PLAN CONCEPT FOR RAIL BALTICA RAILWAY No [INSERT AGREEMENT NUMBER] dated [INSERT DATE] (hereinafter, the "Agreement") and Annex A (*Definitions and Common Terms*) of the Agreement.

Whereas:

- (A) the Principal and the Contractor have entered into the Agreement;
- (B) one or more Study Milestones have been met and/or Deliverables have been completed;
- (C) any and all Defects have been averted or no Objection Notices have been issued;
- (D) as stipulated by Clause 7.7 of the Agreement, final acceptance shall be evidenced by means of the Principal issuing and both Parties attaching their signature to the Final Acceptance Certificate substantially in the form of Annex H (*Form of Final Acceptance Certificate*) (hereinafter, the "Final Acceptance Certificate");

The Principal is satisfied with the result of the Study and/or all Deliverables completed and submitted and the Principal accepts the Study in its entirety.

In the event of conflict between the text in this Final Acceptance Certificate and the Agreement, the Agreement shall take precedence.

Signatures:

[insert name, surname

insert position]

RB Rail AS

Principal

[insert position]

[insert company name]

Contractor

ANNEX I: DECLARATION OF CONTRACTOR

I, the undersigned duly authorised representative, on behalf of ETC Transport Consultants GmbH undertake:

1. To respect the freely-exercised right of workers, without distinction, to organize, further and defend their interests and to bargain collectively, as well as to protect those workers from any action or other form of discrimination related to the exercise of their right to organize, to carry out trade union activities and to bargain collectively;
2. Not to use forced or compulsory labour in all its forms, including but not limited to not employ people against their own free will, nor to require people to lodge 'deposits' or identity papers upon commencing employment;
3. Not to employ: (a) children below 14 years of age or, if higher than that age, the minimum age of employment permitted by the law of the country or countries where the performance, in whole or in part, of a contract takes place, or the age of the end of compulsory schooling in that country or countries, whichever is higher; and (b) persons under the age of 18 for work that, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of such persons;
4. To ensure equality of opportunity and treatment in respect of employment and occupation without discrimination on grounds of race, colour, sex, religion, political opinion, national extraction or social origin and such other ground as may be recognized under the national law of the country or countries where the performance, in whole or in part, of a contract takes place;
5. To ensure the payment of wages in legal fashion, at regular intervals no longer than one month, in full and directly to the workers concerned; to keep an appropriate record of such payments. Deductions from wages will be conducted only under conditions and to the extent prescribed by the applicable law, regulations or collective Contract, and the workers concerned shall be informed of such deductions at the time of each payment. The wages, hours of work and other conditions of work shall be not less favourable than the best conditions prevailing locally (i.e., as contained in: (i) collective Contracts covering a substantial proportion of employers and workers; (ii) arbitration awards; or (iii) applicable laws or regulations), for work of the same character performed in the trade or industry concerned in the area where work is carried out;
6. To ensure, so far as is reasonably practicable, that: (a) the workplaces, machinery, equipment and processes under their control are safe and without risk to health; (b) the chemical, physical and biological substances and agents under their control are without risk to health when the appropriate measures of protection are taken; and (c) where necessary, adequate protective clothing and protective equipment are provided to prevent, so far as is reasonably practicable, risk of accidents or of adverse effects to health;
7. To support and respect the protection of internationally proclaimed human rights and not to become complicit in human rights abuses;
8. To create and maintain an environment that treats all employees with dignity and respect and will not use any threats of violence, sexual exploitation or abuse, verbal or psychological harassment or abuse. No harsh or inhumane treatment coercion or corporal punishment of any kind is tolerated, nor is there to be the threat of any such treatment;
9. To have an effective environmental policy and to comply with existing legislation and regulations regarding the protection of the environment; wherever possible support a precautionary approach to environmental matters, undertake initiatives to promote greater environmental responsibility and encourage the diffusion of environmentally friendly technologies implementing sound life-cycle practices;
10. To identify and manage chemical and other materials posing a hazard if released to the environment to ensure their safe handling, movement, storage, recycling or reuse and disposal;
11. To monitor, control and treat as required prior to discharge or disposal wastewater and solid waste generated from operations, industrial processes and sanitation facilities;
12. To characterize, monitor, control and treat as required prior to discharge or disposal air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting chemicals and combustion by-products generated from operations;

13. To reduce or eliminate at the source or by practices, such as modifying production, maintenance and facility processes, materials substitution, conservation, recycling and re-using materials, waste of all types, including water and energy;
14. To adhere to the highest standards of moral and ethical conduct, to respect local laws and not engage in any form of corrupt practices, including but not limited to extortion, fraud, or bribery;
15. To disclose (a) any situation that may appear as a conflict of interest, such as but not limited to: where a Contractor or an undertaking related to the Contractor has advised a Beneficiary or Implementing Body or has otherwise been involved in the preparation of the procurement procedure; and (b) if any Beneficiaries' or Implementing Bodies' official, professional under contract with Beneficiary or Implementing Body or sub-contractor may have a direct or indirect interest of any kind in the Contractor's business or any kind of economic ties with the Contractor;
16. Not to offer any benefit such as free goods or services, employment or sales opportunity to a Beneficiary's and Implementing Body's staff member in order to facilitate the Contractors' business with Beneficiaries or Implementing Bodies;
17. Within a period set in the applicable national legislation following separation from service or award of a contract, as the case may be, to refrain from offering employment to any Beneficiaries' and Implementing Bodies' staff in service and former Beneficiaries' and Implementing Bodies' staff members who participated in the procurement process and to whom a legal restriction to receive material benefits from or be employed by a Contractor which participated in a procurement procedure or restrictions with similar effect applies;
18. To promote the adoption of the principles set forth in this Contractor's Declaration by my potential business partners and promote the implementation of the principles set forth in this document towards own Contractors;
19. Not procure goods, works and services from other Contractors:
 - a. Who, or its member of the Management Board or the Supervisory Board or procurator of such Contractor, or a person having the right to represent such Contractor in activities related to a subsidiary, has been found guilty in any of the following criminal offences by a such punishment prescription of prosecutor or a judgement of a court that has entered into effect and is non-disputable and not subject to appeal:
 - i. bribetaking, bribery, bribe misappropriation, intermediation in bribery, taking of prohibited benefit or commercial bribing;
 - ii. fraud, misappropriation or laundering;
 - iii. evading payment of taxes and payments equivalent thereto,
 - iv. terrorism, financing of terrorism, invitation to terrorism, terrorism threats or recruiting and training of a person for performance of terror acts;
 - b. who, by such a decision of a competent authority or a judgment of a court which has entered into effect and has become non-disputable and not subject to appeal, has been found guilty of an infringement of employment rights which means:
 - i. employment of such one or more citizens or nationals of countries, which are not citizens or nationals of the European Union Member States, if they reside in the territory of the European Union Member States illegally;
 - ii. employment of one person without entering into a written employment contract, not submitting an informative declaration regarding employees in respect of such person within a time period laid down in the laws and regulations, which is to be submitted regarding persons who commence work;
 - c. who, by such a decision of a competent authority or a judgment of a court which has entered into effect and has become non-disputable and not subject to appeal, has been found guilty of infringement of competition rights manifested as a vertical Contract aimed at restricting the opportunity of a purchaser to determine the resale price, or horizontal cartel Contract, except for the case when the relevant authority, upon determining infringement of competition rights, has released the candidate or tenderer from a fine or reduced fine within the framework of the co-operation leniency programme;
 - d. whose insolvency proceedings have been announced (except the case where a bailout or similar set of measures is applied within insolvency proceedings oriented towards prevention of possible bankruptcy and restoration of solvency of the debtor, in which case I shall evaluate the possibility of such Contractor to participate in the

tender), economic activity of such Contractor has been suspended or discontinued, proceedings regarding bankruptcy of such Contractor have been initiated or such Contractor will be liquidated;

- e. who has tax debts in the country where the procurement is organised or a country where such Contractor is registered or permanently residing, including debts of State social insurance contributions, in total exceeding an amount which is common threshold in public procurements in the respective country.