COLLABORATIVE RESEARCH AGREEMENT

Concluded as per Section 1746 (2) of Act No. 89/2012 Coll., the Civil Code as amended (hereinafter referred to as the "Civil Code") between:

I. Contracting Parties

University of Pardubice Faculty of Transport Engineering Public higher educational institution stablished by law

Registered office:

Studentská 95, 532 10 Pardubice

Represented by:

Company registered No.:

00216275

VAT ID No.:

CZ00216275

Bank details:

Komerční banka a.s., pobočka Pardubice

Account No.:

19-2522710287/0100

Contact details:

E-mail:

on the one side (hereinafter referred to as the "Contractor")

and

AS OPERAIL

Legal form:

joint stock company

Registered office:

Metalli 3; 10615 Tallinn

Represented by:

Company registered No.:

11575850

VAT ID No.:

EE101273846

Bank details:

Swedbank

Account No.:

EE432200221044367465

Contact details:

Invoices:

E-mail:

on the other side (hereinafter referred to as the "Client")

each also hereinafter referred to as "Party" or collectively as "Parties"

Both Contracting Parties hereby declare that they have legal personality and that upon mutual consideration and agreement they have entered into this Research Agreement (hereinafter referred to as the "Agreement") on the day, month and year stated below:

II. Subject of Contract

- 1. The Contractor undertakes to complete the following works for the Client: Simulations of dynamic behaviour of the locomotive Class C30-M under the condition of 1524 mm track gauge (hereinafter referred to as "Works").
- 2. Specific terms and conditions: The aim of the Works is a realization of assessment of the dynamic behaviour of the six-axle locomotive Class C30-M under the condition of the Finnish railway infrastructure with the track gauge of 1524 mm. This assessment will be performed by means of multi-body simulations (MBS). A more detailed specification of the assessment is defined in Annex B of this Agreement. The Works include especially:

- an update of the current multi-body model of the six-axle locomotive created in the MBS tool "SJKV";
- a preparation of the input data, which are necessary for the MBS of dynamic behaviour
 of the vehicle model under the conditions of the track gauge 1524 mm (especially the
 wheel/rail contact geometry and the track data);
- realization of the simulations and evaluation of their results;
- assessment of the dynamic behaviour of the vehicle model under defined conditions (simulation scenarios – see Annex B).
- 3. Results of Works will be written in the final research report (hereinafter referred to as "Report").
- 4. Specification of requirements on the Report:
 - the Report will be prepared in a documental as well as electronic form;
 - the documental form of the Report has to be elaborated in two (2) original copies, one (1) for Client and one (1) for Contractor;
 - the electronic form of the Report has to be elaborated in a PDF file and saved on one piece of CD or DVD intended for the Client;
 - the documental form of the Report has to be signed by the Head of the Subsidiary of the Faculty of Transport Engineering in and delivered to the Client on the postal address in the head of this Agreement until 30. 06. 2021;
 - the electronic form of the Report has to be delivered to the Client on the e-mail addresses:
 - a delivery on another address is not acceptable and it cannot be considered as a delivery
 according to the conditions of this Agreement. In case of unclearness, the time of
 dispatch is considered as the time of delivery;
 - the delivery and takeover of the Report will be confirmed in the acceptance protocol.
- 5. The Client undertakes to take the Works over and to make the payment stipulated in Article VI.

III. Terms and Conditions of Works

- 1. This Agreement shall enter into force on 15. 04. 2021 (referred to as the "Effective Date") and shall remain in force till 15. 07. 2021, unless terminated earlier in accordance with the provisions of this Article.
- 2. The Contractor shall complete the Works independently, in accordance with the law, and in the completion of the Works he shall be bound by the Client's instructions under the Contract.
- 3. Properly completed Works shall be done within the range described in the scope of Article II paragraph 2.
- 4. If either Party shall fail faithfully to perform any of its obligations under this Agreement the non-defaulting party may give written notice of the default to the defaulting party. Unless such default is corrected within thirty (30) days after such notice, the notifying party may terminate this Agreement upon thirty (30) days prior written notice.
- 5. Termination of the Agreement shall not affect any other rights accrued to either Party up to the date of termination.

IV. Participation by Client

- 1. The Client undertakes to provide the Contractor with required assistance to complete the contracting Works.
- 2. To performs the Works, the contracting parties agreed that the Client shall provide the required equipment, information and premises in the following scope and form:
 - until 30. 04. 2021:
 - specification of actual parameters of the multi-body vehicle model (i.e., dimensional and mass parameters, characteristics of stiffness and damping joints). If the input data is not updated until this date, the input data specified in the Annex A of this Agreement will be used for the simulations;
 - specification of simulation scenarios for the simulations (i.e., nominal track alignment, length of the track sections, track quality, vehicle speed or cant deficiency, wheel/rail contact geometry). If the simulation scenarios are not updated until this date, the input data specified in the Annex B of this Agreement will be used for the simulations;
 - in case that simulations under the condition of a real sections of the Finnish railway infrastructure are required, the measured track data of the relevant track sections has to be delivered to the Contractor in defined form until this date;
 - until 15, 05, 2021:
 - requirements on the minimum range of evaluation of the simulation results (definition of quantities and their assessment which will be used in framework of the vehicle authorization process). If the requirements are not updated until this date, the input data specified in the Annex B of this Agreement will be used for the simulations.

V. Takeover of Works

- 1. The Contractor shall be obliged to inform the Client about the completion of Works and invite him to take them over.
- 2. Except as otherwise agreed herein, the Works shall be taken over at the Contractor's workplace as indicated in Article VIII.

The Contractor shall be represented by:	
The Client shall be represented by:	ı

3. The Contractor represents and warrants that no third party has or will have any claim of ownership for any inventions, improvements, ideas, and/or copyrightable work assigned by Contractor to Client.

VI. Contracting Price and Payment Conditions

- 1. In consideration for the performance of the Works by Contractor under this Agreement Client shall pay within 30 days a fixed fee of 5 150 (five thousand one hundred and fifty) EUR (hereinafter referred to as the "Contracting Price"). As the reverse charge system is applicable, no VAT shall be charged.
- 2. The Contracting Price shall include all costs related to the completion, takeover and handover of the Works.

- 3. The Contractor shall invoice the Works upon their takeover by the Client. Each invoice shall contain all particulars of a tax document; failing that, the Client shall have the right to return such invoice for completion or readjustment. In such case, the due time interrupts and the new term of payment starts running on the date of service of the adjusted invoice to the Client.
- 4. The date of the Works takeover as indicated in the handover protocol shall be the date of taxable payment.
- 5. Providing the Client fails to pay the invoice in due time, the Contractor shall have the right to apply the contracting penalty amounting to 0.05% of the due amount for each delayed day.

VII. Contractor's Liability for Defects

- 1. The Contractor shall be responsible for the completion of contracting Works in terms of the Contract and in accordance with objectives of the Subject of Contract.
- 2. The Contractor is not responsible for the defects due to the use of false or biased information and other documents provided to him by the Client, and where the Contractor cannot find out its impropriety despite acting with due diligence, or despite he notifies the Client of such impropriety, whereas the latter insists on its use.
- 3. Providing the Contractor is delayed with the individual parts of the Works, the Client shall have the right to apply the contracting penalty of 0.05% of the appropriate parts of the Works for each delayed day. The contracting penalty shall not be applicable on condition that the reason for such delay is on the Client's side or in case of Force Majeurc.

VIII. Special Provisions

- 1. The Works shall be carried out at the premises of the University of Pardubice, at the Subsidiary of the Faculty of Transport Engineering in Česká Třebová.
- 2. Work Results shall mean any information, know how, discoveries, inventions and results generated within the scope of the execution of the Works, and any intellectual property rights appurtenant thereto. All rights to the Work Results will be the exclusive property of Client.
- 3. Any information, know how, data or technology released by the Client or gathered during the Works completion shall be considered as Client's Confidential Information. The Contractor accepts Client's Confidential Information with the sole objective of the execution of the Works (hereinafter referred to as the "Purpose"). The Contractor shall not (i) use Client's Confidential Information for any purpose other than the Purpose; nor (ii) publish or disclose Client's Confidential Information to any third party without the prior written consent of Client.
- 4. Contractor agrees that all Confidential Information received hereunder shall remain property of Client. Upon Client's written request Contractor will return all originals, copies, reproductions, summaries and other tangible forms of Client's Confidential Information to Client, or at Clients option, will certify to its destruction.

IX. Governing Law and Dispute

All disputes arising in connection with this Agreement involving the parties to this Agreement shall be settled through friendly consultation. In the event such consultation fails to settle the disputes, then the Parties agree to submit any such dispute or litigation related to this Agreement to the competent courts of the Czech Republic and all questions related to the construction, interpretation or execution of this

contract and to all matters pertaining or related thereto shall be subject to Czech law, with exclusion of its conflict law provisions.

X. Severability

If any or more of the provisions of this Agreement becomes invalid, illegal or unenforceable, the invalid, illegal or unenforceable provision shall not effect any other provision. This Agreement shall then be construed as if such provision or provisions had never be contained herein.

XI. Miscellaneous

- 1. All communications shall be in English (including all documents).
- 2. Contractual relations not regulated by this Agreement and the legal relations arising hereunder shall be governed by the relevant provisions of the Civil Code.
- 3. This Agreement may be amended or supplemented only by an explicit written agreement signed by authorised representatives of both Contracting Parties and such an amendment must take the form of a numbered Annex.
- 4. Neither Party shall use the names, trademarks or logos of either the other Party nor the names of any of the employees or staff of the other Party in any commercial advertisement or similar used to promote or sell products or any news release without the prior written approval of the other Party.
- 5. The Client takes note, that Contractor as public higher educational institution established by law is obliged to provide information according to Act No. 106/1999 Coll., on Free Access to Information, as amended.
- 6. This Agreement is personal to the Parties hereto and the agreement and rights and obligations of each Party under this Agreement shall not be assignable by either Party without the prior written and unambiguous consent of the other Party.
- 7. This Agreement may not be modified in any respect by any verbal statement, representation, or agreement made by any employee, officer, or representative of a party, or by any written documents unless it is signed by authorized officers of Contractor and Client.
- 8. This Agreement constitutes the entire agreement between Consultant and Client with respect to the subject matter hereof and supersedes all prior agreements, negotiations and discussions between the Parties relating to it.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their authorized representatives in two (2) original copies, one (1) for Client and one (1) for Contractor.

For and on behalf of Client	For and on behalf of Contractor	
Chairman of the Management Board	Dean	
Date: 16 04 2021	Date: 6 1. 2027	