**PURCHASE AGREEMENT**

The contracting parties:

**Technická správa komunikací hl. m. Prahy, a.s.**

with registered office at: Řásnovka 770/8, Staré Město, 110 00 Praha 1

identification number (IČ): 03447286, tax identification number (DIČ): CZ03447286

a company registered in the Commercial Register maintained by the Municipal Court in Prague,

section B, file 20059

banking details: [TO BE COMPLETED], account number: [TO BE COMPLETED]

represented by: Mgr. Jozef Sinčák, MBA, chairman of the board of directors and

prof. Ing. Karel Pospíšil, Ph.D., vice-chairman of the board of directors

(hereinafter the “**Purchaser**”)

*Purchaser’s agreement number:* [TO BE COMPLETED]

and

**[TO BE COMPLETED BY THE CONTRACTOR]**

with registered office at: [TO BE COMPLETED BY THE CONTRACTOR]

identification number (IČ): [TO BE COMPLETED BY THE CONTRACTOR], tax identification number (DIČ): [TO BE COMPLETED BY THE CONTRACTOR]

a company registered in the Commercial Register maintained by the [TO BE COMPLETED BY THE CONTRACTOR],

section [TO BE COMPLETED BY THE CONTRACTOR], file [TO BE COMPLETED BY THE CONTRACTOR]

banking details: [TO BE COMPLETED BY THE CONTRACTOR], account number: [TO BE COMPLETED BY THE CONTRACTOR]

represented by: [TO BE COMPLETED BY THE CONTRACTOR]

(hereinafter the “**Seller**”)

*Seller’s agreement number:* [TO BE COMPLETED BY THE CONTRACTOR]

entered into this agreement on today’s date in accordance with the provisions of Art. 2079 et seq. of Act No. 89/2012 Coll., the Civil Code (hereinafter the “**Civil Code**”) (hereinafter the “**Agreement**”).

The contracting parties, aware of their obligations contained in this Agreement and with the intention of being bound by this Agreement, have agreed upon the following text of the Agreement:

1. INTRODUCTORY PROVISIONS
   1. The Purchaser declares that:
      1. it is a joint-stock company established for the purpose of the administration, maintenance, repairs and further development of designated real estate properties within the territory of the city of Prague, and
      2. it fulfills all of the conditions and requirements set out in this Agreement and it is authorized to enter into this Agreement and to duly perform the obligations contained herein.
   2. The Seller declares that:
      1. it is a legal entity duly established and existing in accordance with [TO BE COMPLETED BY THE CONTRACTOR] law,
      2. it fulfills all of the conditions and requirements set out in this Agreement and it is authorized to enter into this Agreement and to duly perform the obligations contained herein, and
      3. as of the date of execution of this Agreement, no proceedings are being conducted in regard to it under Act No. 182/2006 Coll., on Bankruptcy and Manners of Dealing With It (the Insolvency Act), as amended, and, at the same time, it undertakes to inform the Purchaser of all circumstances relating to impending bankruptcy without delay.
   3. On the date of [TO BE COMPLETED], through a notification of open procedure, the Purchaser notified of its intention to award an over-the-threshold public contract entitled “**Purchase of Multifunctional and Measuring Vehicle**”, reg. no. [TO BE COMPLETED] (hereinafter the “**Public Contract**”) in accordance with Act No. 134/2016 Coll., the Public Procurement Act (hereinafter the “**PPA**”). On the basis of such procurement procedure, the Purchaser’s bid was selected in accordance with Art. 122 (1) of the PPA for the performance of the Public Contract.
2. PURPOSE OF THE AGREEMENT
   1. The purpose of this Agreement is to secure the realization of the object of the Public Contract in accordance with the tender documentation for the Public Contract, which is attached to this Agreement as its [Annex No. 5](#ListAnnex01) (hereinafter the “**Tender Documentation**”), i.e., to set out the terms for enabling the subsequent acquisition of a multifunctional measuring vehicle and related performance for the comprehensive and effective collection of variable roadway parameters in accordance with the needs of the Purchaser as the entity administrating, maintaining, repairing and developing the road infrastructure network within the territory of the city of Prague, and possibly elsewhere as well, in the interest of effecting a roadway management system, in accordance with the Purchaser’s requirements as defined in this Agreement and its annexes.
   2. Under this Agreement, the Seller guarantees the Purchaser the fulfillment of the specifications of the Public Contract and of all of the conditions and obligations arising therefrom in accordance with the Tender Documentation. Such guarantee takes priority over the other conditions and guarantees set out in this Agreement. For the avoidance of any doubts, this shall mean that:
      1. in case of any uncertainty regarding the interpretation of the provisions of this Agreement, such provisions shall be interpreted in such a way so that they take into consideration, to the greatest extent possible, the purpose of the Public Contract as expressed in this Agreement and in the Tender Documentation,
      2. in the event of this Agreement lacking provisions, the sufficiently specific provisions of the Tender Documentation shall apply,
      3. the Seller is bound by its bid submitted to the Purchaser within the procurement procedure for the award of the Public Contract, which shall apply subsidiarily to the regulation of the mutual relations arising from this Agreement.
3. OBJECT OF THE AGREEMENT
   1. The object of this Agreement is the Seller’s obligation:
      1. in collaboration with the Purchaser, to draw up and subsequently submit to the Purchaser a detailed study (hereinafter the “**Implementation Study**”) containing a detailed specification of the Carrier Vehicle under section 3.1.2 of this Agreement, as well as of the hardware and software equipment in accordance with section 3.1.3 of this agreement, which shall be subsequently installed and delivered as a part of the supply of the Object of Purchase in accordance with section 3.1.3 of this Agreement, whereby such Implementation Study must respect the binding requirements of the Purchaser set out in the technical specifications, which comprises Annex No. 1 to this Agreement (hereinafter the “**Technical Specifications**”);
      2. to supply to the Purchaser a vehicle which shall fulfil the requirements and parameters set out in the Implementation Study and in the Technical Specifications (hereinafter the “**Carrier Vehicle**”);
      3. to supply to the Purchaser all of the hardware and software equipment, which shall fulfil the requirements and parameters set out in the Implementation Study and in the Technical Specifications (hereinafter the “**Hardware and Software Equipment**”), whereby such Hardware and Software Equipment shall, as of the date of commencement of acceptance tests in accordance with section 3.1.4 of this Agreement, be duly installed into the Carrier Vehicle (the Carrier Vehicle and the Hardware and Software Equipment being referred to jointly as the “**Object of Purchase**”);
      4. to put the Object of Purchase into operation, to conduct acceptance tests (hereinafter the “**acceptance tests**”) and to deliver the Object of Purchase to the Purchaser for use under the terms as set out in this Agreement;
      5. to acquaint the Purchaser’s staff with the requirements in regard to the operation and maintenance of the Object of Purchase under the conditions as set out in this Agreement (hereinafter the “**acquainting of operators with the Object of Purchase**”);
      6. to deliver and submit to the Purchaser all documentation (installation documentation, operating documentation, documentation of the actual execution, and other documentation under which it will be possible to re-create the whole Object of Purchase if necessary – to be specified in more detail in the Implementation Study), papers, warranty certificates, technical and user manuals and other documents that are necessary for the proper use of all components or equipment comprising the Object of Purchase, as well as for the use of a part or the whole of the Object of Purchase (hereinafter the “**Documentation**”),

(the Implementation Study, the Carrier Vehicle, the hardware and software equipment, the acceptance tests, the acquainting of operators with the Object of Purchase, and the Documentation hereinafter jointly referred to as the “**Performance**”).

* 1. Within the scope of performance under this Agreement, the Seller also undertakes:
     1. to ensure service for the Hardware and Software Equipment comprising a part of the Object of Purchase (with the exception of the Carrier Vehicle itself) in the form of annual maintenance for a period of 10 (ten) years after its handover to the Purchaser (hereinafter the “**Hardware and Software Service**”);
     2. to perform software modifications beyond the scope of the operations that are a part of the Hardware and Software Service and of the warranty under this Agreement (primarily modifications of software after acceptance, as a result of a change in regulations, settings for reports, etc.), on an ad hoc basis in accordance with the Purchaser’s needs (hereinafter the “**Software Modifications**”).
  2. For duly supplied Performance, provided Hardware and Software Service and performed Software Modifications, the Purchaser undertakes to pay the Seller the price stipulated in this Agreement.
  3. The Seller undertakes to provide performance in accordance with this Agreement by itself, or by utilizing subcontractors as set out in [Annex No. 4](#ListAnnex05) to this Agreement. The contracting parties expressly state that, when providing performance under this Agreement through any third party under this paragraph, the Seller is liable as if it were executing performance under this Agreement itself*.*

1. TIME AND PLACE OF PERFORMANCE
   1. The place of supply (handover and receipt) of the Performance, the Hardware and Software Service, and the Software Modifications is the city of Prague and therein any place as specified by the Purchaser, unless the contracting parties agree otherwise.
   2. The Seller is obligated to provide the Purchaser with a draft Implementation Study within 30 calendar days of the effective date of this Agreement. The Purchaser shall subsequently, within 15 calendar days, send the Seller its comments in regard to the to the draft Implementation Study, which the Seller is obligated to incorporate within 15 calendar days of having received them. This procedure may also take place repeatedly.
   3. The Seller is obligated to hand over the Object of Purchase, including Documentation and including the successful execution of acceptance tests and the acquainting of operators with the Object of Purchase, no later than within 14 months of the effective date of this Agreement.
   4. The Seller is obligated to provide Hardware and Software Service in accordance with the Purchaser’s needs and in accordance with the conditions set out in this Agreement and in the Implementation Study in such a way so that the operability of the Hardware and Software Equipment, as necessary for the proper fulfilment of the purpose of this Agreement, is maintained, but at least once per year.
   5. The Seller is obligated to provide Software Modifications in accordance with the Purchaser’s requirements, and in accordance with the requirements under section 6.17 of this Agreement.
   6. The supply of the Object of Purchase is understood to mean the recorded handover of the Object of Purchase by the Seller to the Purchaser in accordance with Art. 6 of this Agreement.
2. PURCHASE PRICE AND PAYMENT TERMS
   1. The price for the Implementation Study is CZK [TO BE COMPLETED BY THE CONTRACTOR] not including VAT (in words: [TO BE COMPLETED BY THE CONTRACTOR] Czech crowns not including VAT).
   2. The price for the Carrier Vehicle is CZK [TO BE COMPLETED BY THE CONTRACTOR] not including VAT (in words: [TO BE COMPLETED BY THE CONTRACTOR] Czech crowns not including VAT).
   3. The price for the Hardware and Software Equipment including the Documentation, conducting acceptance tests, and the acquainting of operators with the Object of Purchase is CZK [TO BE COMPLETED BY THE CONTRACTOR] not including VAT (in words: [TO BE COMPLETED BY THE CONTRACTOR] Czech crowns not including VAT).
   4. The total price under sections 5.1, 5.2 and 5.3 of this Agreement is CZK [TO BE COMPLETED BY THE CONTRACTOR] not including VAT (in words: [TO BE COMPLETED BY THE CONTRACTOR] Czech crowns not including VAT) (hereinafter the “**Purchase Price**”).
   5. The Purchase Price is final, the highest permissible, and includes all of the costs necessary in order to supply the Object of Purchase and to perform the Seller’s other obligations in accordance with this Agreement, unless stated otherwise below.
   6. The Purchase Price may only be increased or decreased in cases expressly specified in this Agreement, on the basis of the consent of both contracting parties.
   7. A change in the Purchase Price or a change in the deadlines for the provision of the Performance or significant deviations in the scope or quality of the Performance as compared to this Agreement that result in an increase or decrease in the Purchase Price may only be dealt with by way of written amendments to this Agreement entered into in accordance with the PPA.
   8. The Purchaser shall pay the Purchase Price to the Seller in the amount according to section 5.4 of this Agreement on the basis of an invoice issued no sooner than on the day following after the date of the handover under record of the Object of Purchase including the Documentation, and after the conducting of the acceptance tests and the acquainting of operators with the Object of Purchase. VAT in accordance with the currently effective legal regulations shall be added to the Purchase Price if it is to be charged in connection with the payment of the Purchase Price.
   9. Hardware and Software Service shall be paid as part of the annual service fees, in arrears in each case, after each year of the proper provision of Hardware and Software Service, at a price of CZK [TO BE COMPLETED BY THE CONTRACTOR] not including VAT (in words: [TO BE COMPLETED BY THE CONTRACTOR] Czech crowns not including VAT) for each year of the proper provision of Hardware and Software Service. In each case, invoicing can occur no sooner than on 1 January of the year following after the year in which the Hardware and Software Service was provided.
   10. The Software Modifications shall be paid on the basis of the number of ordered and utilized man-days (hereinafter “**Man-Days**”), at a price of CZK [TO BE COMPLETED BY THE CONTRACTOR] not including VAT (in words: [TO BE COMPLETED BY THE CONTRACTOR] Czech crowns not including VAT) per 1 Man-Day. In the event of the utilization of only a proportionate part of a Man-Day, a proportionate amount of the price of 1 Man-Day shall be charged. Section 5.8 shall apply similarly in relation to payment for Software Modifications.
   11. An invoice shall be issued by the Seller within the statutory deadline from the date of taxable supply (hereinafter the “**DTS**”) and must include all of the required content of an accounting and tax document. In addition to the content required by Act No. 235/2004 Coll., on Value Added Tax, as amended (hereinafter the “**VAT Act**”) and Act No. 563/1991 Coll., on Accounting, as amended, must also contain the following information:
       1. Purchaser’s agreement number,
       2. Seller’s agreement number,
       3. Seller’s banking details,
       4. stamp and signature of authorized person,
       5. copy of the relevant handover report.
   12. The contracting parties agree to the issuance of invoices in accordance with the Agreement exclusively in electronic form (an invoice is in electronic form if it is issued and received in electronic form – hereinafter an “**Electronic Invoice**”). The contracting parties have agreed that the veracity of the origin of an invoice in electronic form and the integrity of its content shall be ensured in accordance with the valid legal regulations. The Seller is obligated to deliver the invoice to the Purchaser electronically, specifically, exclusively by email to the email address: [fakturace@tsk-praha.cz](mailto:fakturace@tsk-praha.cz). The sending of an Electronic Invoice by the Seller to a different email address than as specified in the previous sentence is ineffective. In order to send an Electronic Invoice, the Seller is obligated to utilize only the Seller’s email address specified for such purpose in Annex No. 3 to this Agreement, otherwise the sending of an Electronic Invoice is ineffective, with the exception of cases where the email accompanying the Electronic Invoice or the Electronic Invoice itself includes the Seller’s guaranteed electronic signature or guaranteed electronic seal. In each case, an Electronic Invoice must be sent to the Purchaser in PDF format, and, at the same time, also in ISDOC (ISDOCX) format, if possible. Attachments to an Electronic Invoice that are not a part of the tax document shall be sent to the Purchaser only in RTF, PDF, JPG, DOC, DOCx, XLS, XLSx formats. An electronic invoice must include a guaranteed electronic signature or a guaranteed electronic seal, both based upon a qualified certificate within the meaning of Act No. 297/2016 Coll., on Services Fostering Confidence in Electronic Transactions, as amended, whereby the qualified certificate must be issued by one of the providers of certification services accredited by the Ministry of the Interior of the Czech Republic. If an Electronic Invoice does not include a guaranteed electronic signature or a guaranteed electronic seal within the meaning of the previous sentence, or if one of these is not included at least in the email accompanying the Electronic Invoice, the Electronic Invoice must be sent by email exclusively from the Seller’s email address specified for such purpose in the Agreement, with the Electronic Invoice as its attachment. The Electronic Invoice shall be drawn up in a count of 1 email - 1 Electronic Invoice in a separate file and its attachments in a separate file(s). The Seller undertakes that if an Electronic Invoice is sent to the Purchaser, the Seller shall not send the same invoice as a duplicate in paper form. The Seller is obligated to send an invoice to the Purchaser in the manner as specified above no later than within five (5) business days of having become entitled to the payment of the Price.
   13. Payments of monetary amounts are made by bank transfer to the other contracting party’s account specified in the invoice. A monetary amount is considered to have been paid as of the moment of its debiting against the sender’s account in favour of the recipient’s account. The payment deadline for an invoice is 30 calendar days.
   14. In case the sent invoice does not include the content required for a tax document or does not contain the information specified in this article, does not contain the correct invoiced amount, or is incomplete and incorrect, the Purchaser is entitled to return it (or its copy) to the Seller within the payment deadline to be corrected or completed. In such a case, the Purchaser is not considered to be in delay and a new invoice payment deadline commences from the moment of delivery of a corrected invoice to the Purchaser.
   15. The Purchaser shall only pay received invoices to the bank accounts published in the registry of taxpayers and identified persons within the meaning of Art. 98 of the VAT Act. If the Seller’s relevant account is not published, the Purchaser shall pay only the tax base, and shall pay the amount of the VAT only after the publication of the relevant account in the registry of taxpayers and identified persons.
   16. The Seller declares that, prior to the execution of this Agreement, the tax authority did not decide that the Seller is an unreliable taxpayer within the meaning of Art. 106a of the VAT Act. If the tax authority decides that the Seller is an unreliable taxpayer, the Seller undertakes to inform the Purchaser of such fact within 2 business days. If the Seller becomes an unreliable taxpayer, the Purchaser shall pay the Seller only the tax base. The relevant VAT amount shall be paid only upon written proof of its payment to the relevant tax authority. In such case, advances, if the Seller were to otherwise be entitled to them, will not be paid by the Purchaser.
3. MANNER OF REALIZATION OF PERFORMANCE, HARDWARE AND SOFTWARE SERVICE, AND SOFTWARE MODIFICATIONS

**Implementation Study**

* 1. The Seller is obligated, within the deadline set out in section 4.2 of this Agreement, to deliver to the Purchaser a prepared draft Implementation Study, organized and drawn up in compliance with the requirements and content as set out in Annex No. 6 to this Agreement. Subsequently, the Seller is obligated to modify or complete the draft Implementation Study and to incorporate the Purchaser’s comments, also within the deadlines set out in section 4.2 of this Agreement.
  2. When preparing the Implementation Study, the Seller is obligated to actively collaborate with the Purchaser, to heed its requirements and comments in such a way so that it can be accepted without unnecessary iterations.
  3. The draft and working version of the Implementation Study may be drawn up in the English language and in electronic form. The Seller’s communication with the Purchaser during the process of creating the Implementation Study may also be conducted in the English language. The Seller is obligated to draw up the final version of the Implementation Study in the Czech language, both in printed form as well as in electronic form.

**Acceptance Tests**

* 1. The Seller is obligated, no later than 30 calendar days prior to the deadline set out in section 4.3 of this Agreement, to prepare the Object of Purchase including the Documentation for the acceptance tests to be conducted and to enable the Purchaser to participate in the acceptance tests, at the place specified in section 4.1 of this Agreement.
  2. As part of the acceptance tests, the Seller shall put the Object of Purchase into operation and shall, in collaboration with the Purchaser, conduct validation operations on the Object of Purchase. The acceptance tests (validation operations) shall consist in demonstrating the complete functionality of the Object of Purchase, enabling the functionality to be tested by the Purchaser, and responding to any enquiries that the Purchaser may have, in accordance with the acceptance test plan as specified by the Seller in the Implementation Study.
  3. Acceptance tests will be conducted within a period of up to 30 days, whereby they shall be conducted until the time when the Object of Purchase achieves the required measuring accuracy (as compared to the reference vehicle designated by the Purchaser or in another manner specified in the Implementation Study) and full compliance with the Implementation Study and the requirements of the Purchaser as set out in the Technical Specifications. During such time, the Seller shall be obligated to conduct modifications on the Object of Purchase in such a way so that the required measuring accuracy is achieved. After the required measuring accuracy is achieved, the Object of Purchaser along with the Documentation shall be handed over to the Purchaser under record, in regard to which the Purchaser and the Seller shall sign a handover report.
  4. The Seller is obligated to propose to the Purchaser in writing the date of commencement of the acceptance tests at least 10 business days prior to their proposed commencement. If the Purchaser does not agree to the proposed date of handover, the Seller is obligated to propose an alternative handover date, including repeatedly. If such procedure leads to the date of handover of the Object of Purchase set out in section 4.3 of this Agreement being exceeded, such a delay cannot be attributed to the Seller to its detriment.

**Acquainting Operators with the Object of Purchase**

* 1. The Seller shall, prior to the commencement of acceptance tests, also conduct the acquainting of a maximum of 8 (eight) persons designated by the Purchaser with the operation of the Object of Purchase, the scope being at least 32 hours for each person being trained, at a place specified by the Seller. The place for conducting the acquainting of operators with the Object of Purchase must be located within the territory of the city of Prague, whereby the Seller shall notify the Purchaser of the precise place and time of its execution no later than 5 (five) business days prior to the commencement of its execution. The acquainting of operators with the Object of Purchase must be completed no later than by the commencement of acceptance tests in accordance with section 6.7 of this Agreement. If the Purchaser cannot ensure the participation of the designated persons at the proposed time, it shall be obligated to notify the Seller of this without delay, and the Seller shall be obligated to propose a new time at which to conduct the acquainting of operators with the Object of Purchase. Upon the consensus of the contracting parties, the acquainting of operators with the Object of Purchase can also be conducted individually in parts or for smaller groups of persons designated by the Purchaser. As part of the acquainting of operators with the Object of Purchase, all of the functions and the operation of the Object of Purchase including all of the hardware and software and including the manner of subsequent processing and evaluation of acquired data must be presented. The price of such acquainting with the Object of Purchase is included in the total Purchase Price under section 5.4 of this Agreement. The acquainting of operators with the Object of Purchase shall be conducted by the Seller’s experienced and qualified service technician. The acquainting shall be conducted in the Czech language. If the Seller’s service technician is not fluent in the Czech language to a sufficient extent, the Seller shall arrange for simultaneous interpretation by a qualified interpreter who is familiar with the relevant technical terminology. The costs of such an interpreter are included in the total Purchase Price within the meaning of section 5.4 of this Agreement. The Purchaser may make an audio and/or video recording of the course of the acquainting of operators with the Object of Purchase.

**Documentation**

* 1. Along with the commencement of the acceptance tests on the Object of Purchaser, the Seller is also obligated to provide the Purchaser with all of the Documentation. The language of the Documentation, as well as of all of the systems and other software comprising a part of the Performance under this Agreement, as well as the language of communication between the contracting parties in general, is Czech, unless this Agreement provides otherwise or unless the contracting parties agree otherwise in a specific case. The costs of any translations into the Czech language are included in the total Purchase Price within the meaning of section 5.4 of this Agreement.

**Hardware and Software Service**

* 1. The Seller is also obligated to ensure Hardware and Software Equipment Service for the Purchaser beyond the scope of warranty repairs, for a period of 10 (ten) years from the handover of the Object of Purchase under record, whereby Hardware and Software Service consists in the maintenance of the Hardware and Software Equipment including ensuring regular annual inspections of the functionality and capability of the Hardware and Software Equipment to fulfill the purpose of this Agreement. The Hardware and Software Service shall also include arranging for the calibration and certification of the Hardware and Software Equipment as applicable in the Czech Republic, whereby a list of the Hardware and Software Equipment with the required/recommended intervals for calibration shall be drawn up by the Seller as a part of the Documentation. The Seller shall, as part of the Implementation Study, list all operations, including their periodicity, upon which the existence of the warranty is conditional or which need to be conducted for the purpose of ensuring the operability of the Object of Purchase and the accuracy of the measurements being conducted. The Seller is subsequently obligated to conduct the defined service operations in such manner regularly, but at least once a year. For such purpose, the Seller is obligated to notify the Purchaser at least 1 calendar month prior to the planned service inspection, proposing a date and time at which to conduct the Hardware and Software Service. If the Purchaser does not agree to the proposed date and time, the Seller is obligated to propose an alternative date and time, including repeatedly. If such procedure leads to the annual interval of conducting the prescribed Hardware and Software Service being exceeded, this cannot be attributed to the Seller to its detriment.
  2. The Hardware and Software Service shall also include securing a telephone line – HotLine serving for the reporting of defects and responding to the Purchaser’s questions regarding the functioning of the Hardware and Software Equipment. The Seller is obligated to keep the HotLine available on business days between 6:00 and 21:00 hours of the time applicable within the city of Prague in the given part of the calendar year. The Seller is also obligated to set up an email address for the reporting of defects in the Hardware and Software Equipment, which address the Seller shall notify the Purchaser of within the Implementation Study.
  3. The Object of Purchase must be functional and fit to execute the purpose of this Agreement year-round. The maximum cumulative time for which the Object of Purchase may be out of operation due to a defect is 20 business days per year, but never more than 5 consecutive business days. If such values are exceeded, the Purchaser shall become entitled to a discount on the price of the Software and Hardware Service for the relevant year in the amount of CZK 25,000 not including VAT for each commenced day exceeding the values stated above. The Seller is obligated to reflect such discount in the relevant invoice. The time from the occurrence of the defect until it is reported is not counted into this.
  4. The Software and Hardware Service must be conducted within the territory of the city of Prague, otherwise the Seller shall be obligated at its own cost to transport the Object of Purchase to the place where the Hardware and Software Service is to be conducted and subsequently back to the Purchaser’s registered office. The Purchaser is not obligated to request Hardware and Software Service from the Seller, but the Seller must always arrange for the Hardware and Software Service without delay if the Purchaser requests it.
  5. Hardware and Software Service can be terminated by notice by the Purchaser, including without stating any reason. A notice of termination becomes effective as of the delivery of the written notice of termination to the Seller.
  6. In the Implementation Study, upon consensus with the Purchaser, the Seller shall provide a list of operations and repairs that the Purchaser is entitled to conduct independently in relation to the Hardware and Software Equipment in such a way so that the warranty does not become limited.
  7. The servicing of the Carrier Vehicle comprising a part of the Object of Purchase beyond the scope of the warranty repairs shall be arranged for by the Purchaser through its own resources.

**Software Modifications**

* 1. Software Modifications beyond the scope of operations that are a part of the Hardware and Software Service and the warranty under this Agreement shall be requested by the Purchaser ad hoc as necessary. A general definition of the performance that may be executed within the scope of the Software Modifications is set out in the Technical Specifications.
  2. If necessary, the Purchaser shall send the Seller an order in which it shall specify the object of the requested Software Modification, an estimate of the time requirement expressed in Man-Days or parts thereof, and the deadline within which the Software Modification is to be performed. The Seller is obligated, within 5 business days of the receipt of an order, to send the Purchaser a confirmation of the order, and to notify the Purchaser of any reservations in regard to the order that it may have, primarily in the event of an insufficient estimate of the time requirement in Man-Days, a short deadline for the realization of the order, or in case of an insufficient description of the Software Modification being requested. After the clarification of such ambiguities, the Seller shall send the Purchaser the acceptance of the order. An individual work agreement is entered into as of the delivery of the acceptance, and the Seller is obligated to comply with such a work agreement and to commence work on its performance immediately after its execution.
  3. For the avoidance of doubt, the contracting parties have agreed that the Purchaser is not obligated to request any Software Modifications.

**Other Requirements**

* 1. Neither the supplied Object of Purchase including all of the operating and regulating elements nor any other supplied equipment may be blocked or coded in any way in regard to servicing activity and parameterization conducted by the Purchaser, or by a third party commissioned by the Purchaser. If the “locking or coding” of parameters set by the Seller is necessary, the Purchaser shall be provided with the necessary information and the equipment needed to “unlock” the individual elements. This does not mean the option for the Purchaser to intervene in the source codes or the copyrights of the producer of the software.
  2. All of the parts of the Performance being supplied under this Agreement shall be new. “New” within the meaning of this Agreement shall be understood to mean original products, components or parts that are not renovated, overhauled or otherwise changed through production and installation procedures beyond the scope of the procedures necessary for the performance of this Agreement and which, at the time of installation, are not more than 12 months old from the date of first production.
  3. All of the parts of the Performance being supplied under this Agreement shall be approved for operation on roadways in the Czech Republic and must comply with the requirements imposed by all relevant legal, technical and other standards regarding the fitness of the performance under this Agreement for operation in the Czech Republic in effect as of the date of handover of the relevant Performance or part thereof, as well as with the requirements set out in Annex No.1 to this Agreement. The Performance must be free of all customs and other fees.
  4. All measuring instruments and relevant software must be handed over in a calibrated state with the relevant certificate in accordance with the relevant Czech legal regulations and technical and other standards.
  5. A handover record shall be drawn up in regard to the handover and receipt of the relevant performance under this Agreement, a specimen of which is contained in Annex No. 2 to this Agreement.
  6. The Purchaser undertakes to take receipt of all Performance under this Agreement or its individual part if it is supplied in a due and timely manner within the deadline under Art. 4 of the Agreement. The Purchaser does not have such obligation only if the Performance or its individual part is executed with significant defects and gaps preventing the proper use of the Performance or its individual part in accordance with this Agreement in a manner implied by this Agreement and by the nature of the Performance. If the Purchaser takes receipt of the relevant Performance or a part thereof with reservations, it shall state such reservations in the handover report. Receipt with reservations does not relieve the Seller of the obligation to eliminate such defects without undue delay.
  7. If the Purchaser refuses to take receipt of the Performance or an individual part thereof, a report must be drawn up in regard to such fact, containing the opinions of both contracting parties including a justification. The Performance or an individual part thereof shall be considered to have been handed over in the event of the unfounded refusal by the Purchaser to take receipt of the Performance or an individual part thereof.
  8. The risk of damage to an individual part of the Performance shall pass to the Purchaser as of the moment of the supply of such individual part of the Performance and its receipt as of the date of execution of a handover report within the meaning of section 6.24 of this Agreement. In the event of an unfounded refusal to take receipt of an individual part of the Performance, this shall be as of the date of such refusal.
  9. The Seller expressly agrees and undertakes in regard to the Purchaser that, if the fulfilment of the Purchaser’s requirements arising from this Agreement and the proper supply of the Object of Purchase requires additional supplies or work not expressly stated in this Agreement, it shall procure or execute such supplies or work at its own cost and shall include them in its performance without any impact upon the purchase price under section 5.4 of this Agreement.

1. AUTHORIZED PERSONS
   1. Each of the contracting parties shall appoint an authorized person or a representative of an authorized person. The authorized persons shall represent the contracting party in contractual, commercial and technical matters relating to the performance of this Agreement. For the avoidance of doubt, the contracting parties have agreed that:
      1. persons authorized to act in contractual matters are authorized to conduct negotiations of a commercial nature with the other contracting party and to prepare underlying documents for changes or for the cancellation of this Agreement and for amendments to the Agreement in accordance with section 14.1 of this Agreement;
      2. persons authorized to act in commercial matters are authorized to conduct negotiations of a commercial nature with the other party, to negotiate regarding changes to this Agreement, to negotiate within the scope of acceptance procedures in the course of the handover and receipt of performance, primarily to sign the relevant acceptance, handover or other reports in accordance with this Agreement; however, persons authorized in commercial matters are not authorized to change or cancel this Agreement or to execute amendments to this Agreement under section 14.1 of this Agreement;
      3. persons authorized to act in technical matters are authorized to conduct negotiations of a technical nature, to provide opinions on technical issues, and to negotiate on behalf of the parties within the scope of defects claimed under warranty and in exercising the warranty; such persons are likewise not authorized to change or cancel this Agreement or to execute amendments to this Agreement under section 14.1 of this Agreement.
   2. Authorized persons under section 7.1.2 are authorized to take all steps on behalf of the contracting parties within the scope of acceptance procedures under this Agreement and to prepare amendments to the Agreement for written approval by persons authorized to bind the parties (statutory bodies) or by their representatives under power of attorney.
   3. The authorized persons under sections 7.1.2 and 7.1.3 are not authorized to take actions that would directly result in a change of this Agreement or its object.
   4. The identification of the authorized persons is set out in [Annex No. 3](#ListAnnex04) to this Agreement and their roles are specified in this Agreement.
   5. The contracting parties are entitled to change the authorized persons, but they are obligated to notify the other contracting party of such a change in writing. If an authorized person is represented by another person, the Purchaser shall notify the Seller of the existence of the authorization to represent and its extent, whereby the form of such notification is not stipulated. If the authorization to represent for the authorized person’s representative is based upon special legal regulations, the Purchaser shall not be obligated to notify of the existence of such representation of the authorized person in advance.
2. WARRANTY AND LIABILITY FOR DEFECTS
   1. The Seller is liable for all defects that the Object of Purchase has at the time of its handover (including latent defects) and for the defects specified below that occur during the warranty period. The Seller is also liable for the defects of the Object of Purchase that did not arise until after the handover of the Object of Purchase if they have been caused by the Seller through its activity or through a breach of its obligations.
   2. The Seller provides a warranty on the quality of the Object of Purchase and all of its parts for a period of 60 months from the date of the handover under record of the Object of Purchase. Under the warranty period, the Seller guarantees that the Object of Purchase shall, for the duration of the warranty, have the qualities stipulated in the Technical Specifications, Undertakings and this Agreement, and otherwise that it shall have the customary qualities, and that it shall be fit for use for the purpose implied in this Agreement, and otherwise for the usual purpose in view of the nature of the Object of Purchase. The warranty means that the Seller undertakes, after having received the Purchaser’s notification, to eliminate, or have eliminated at its own cost, any defect that has an impact upon fitness for use and which is due to faulty design, execution or materials. The warranty covers the elimination of defects that were proven to have been caused by a defect in material, execution or design. This provision shall also apply similarly to Software Modifications, and/or to performance supplied on the basis of Software Modifications or Hardware and Software Service.
   3. The warranty shall commence as of the signing of the report on the handover and acceptance of the Object of Purchase or of the Software Modifications or upon the receipt of the Object of Purchase after the execution of Hardware and Software Service.
   4. The warranty shall automatically expire in the event of a collision (vehicle crash) having an effect on the functionality of an individual part of the Object of Purchase that is unrelated to a defect to which the warranty applies, but only in relation to such individual part of the Object of Purchase that has been damaged by the collision. In the event of the repair or replacement of such individual part of the Object of Purchase performed by the Seller, the warranty shall commence anew in relation to such individual part of the Object of Purchase, for the duration in accordance with section 8.2 of this Agreement.
   5. The Purchaser is obligated to claim all defects that the warranty applies to with the Seller in writing (hereinafter the “**warranty claim**”). The Seller is obligated to eliminate justified defects claimed under warranty without delay, but no later than within 30 calendar days of delivery of the Purchaser’s warranty claim, unless the parties agree upon a different deadline. A different deadline for the elimination of defects must always be agreed in writing. The Seller is obligated to eliminate a defect due to which the Purchaser could incur damage within 72 hours of it being reported in writing, unless the contracting parties agree upon a different deadline for the elimination of a reported defect.
   6. It is expressly agreed that the Purchaser is not liable to the Seller for lost profit if the circumstances of the specific case do not show that the Purchaser acted with gross negligence. The Purchaser’s liability in regard to the Seller for suspension of production, lost profit, loss of use, loss of contract or other economic or indirect consequential damage or harm is excluded.
   7. Under this Agreement, the Seller guarantees the Purchaser that the Object of Purchase provides a level of safety as required by the standards and regulations of the Czech Republic and EU effective at the time of the execution of this Agreement, including the regulations and standards pertaining to the registration of the Object of Purchase, and which is implied in the operating manual and other issued instructions.
3. OWNERSHIP RIGHT AND LICENSE
   1. The Purchaser shall become the owner of the Object of Purchase and of all of the parts incorporated therein (primarily including the Hardware and Software Equipment) as of the handover of the Object of Purchase under record.
   2. The Seller shall be exclusively liable for all defects, errors and deficiencies in the Documentation and shall exclusively bear all of the costs of eliminating any defects, errors, deficiencies or mistakes in the Documentation, whereby the Purchaser shall not be liable in any way in this regard.

***Basic Scope of License for Performance That Is Not Standard Software***

* 1. In view of the fact that the Performance under this Agreement also includes performance that, within the meaning of Act No. 121/2000 Coll., on Copyright, on Rights Related to Copyright, and on Changes to Certain Acts (the Copyright Act), as amended (hereinafter the “Copyright Act”), may fulfil the definition of a copyright work or be considered a copyright work within the meaning of the Copyright Act (hereinafter the “**Copyright Work**”), a license or sublicense (hereinafter the “**License**”) is being granted, assigned or arranged for such performance (hereinafter the “**Granting**”) under the terms as agreed in this article of the Agreement below.
  2. The Purchaser is authorized, from the moment of the effect of the Granting of the License to the Copyright Work under section 9.4.5 of this Agreement, to use this Copyright Work for any purpose arising from this Agreement and to an extent as it considers necessary, appropriate or reasonable. For the avoidance of doubt, this shall mean that the Purchaser is authorized to use the Copyright Work in an unlimited quantitative and territorial scope, in all possible manners and with a scope in terms of time that is limited only as regards the duration of the property copyrights to such Copyright Work.
     1. The Purchaser is authorized, without needing any other consent from the Seller, to grant a third party a sublicense to use the Copyright Work or to assign its right to use the copyright work to a third party.
     2. The License includes the unlimited right of the Purchaser to perform any modifications, adaptations, changes to the Copyright Work comprising a part of the performance, including the Purchaser’s right to intervene into the Copyright Work, to incorporate it into other Copyright Works, to include it in collected works or in databases, etc., including through third parties, all of which it may do in its own discretion.
     3. The License to the Copyright Work is being Granted as non-exclusive. The Purchaser is not obligated to utilize the License.
     4. In the case of computer programs, the License pertains to the same extent to the Copyright Work in object code and source code, as well as to conceptual preparatory materials, including possible other versions of computer programs provided under this Agreement. The Purchaser has the right to be provided with the source code of the Copyright Work, as well as of the other parts of the software being provided that are not copyright works.
     5. The License is established as of the moment of the receipt under record of the part of the performance that contains the relevant Copyright Work; until such time, the Purchaser is entitled to use the Copyright Work to the extent and in the manner as necessary to execute the receipt of the relevant part of the performance.
     6. The granting of the License cannot be terminated by notice from the Seller. The License shall endure even after this Agreement ceases to have effect, unless the contracting parties expressly agree otherwise.
     7. For the avoidance of all doubt, the contracting parties expressly declare that if, in the course of the provision of performance under this Agreement, a work of joint authorship is created through the activity of the Seller and the Purchaser, provided that the contracting parties do not expressly agree otherwise, it shall be presumed that, as of the moment of the creation of such a work of joint authorship, the Seller assigned to the Purchaser the right to exercise the property copyrights to the work of joint authorship and granted the Purchaser consent to any change or other intervention in regard to the work of joint authorship. The price of performance is stipulated in view of this provision and the Seller shall not become entitled to any new rights to remuneration in the event of the creation of a work of joint authorship.
     8. The Seller is obligated to proceed in such a way so that it secures the granting of the License to the Copyright Work under this Agreement, including the right to grant a sublicense and related rights, without detriment to third party rights.
     9. The Seller declares that it is authorized to exercise, in its own name and on its own behalf, the property rights of authors to the Copyright Works comprising a part of the performance under this Agreement, and/or that it has the consent of all of the relevant third parties in order to grant the License to the Copyright Works in accordance with this Art. 9 of this Agreement; this declaration also includes such rights that are yet to come into existence through the creation of the Copyright Work.

***Option to Use Standard Software***

* 1. The Seller’s or a third parties’ proprietary (standard) software or open-source software (hereinafter the “**Standard Software**”) for which the Seller cannot grant the Purchaser a License within the scope according to section 9.4 of this Agreement or where this cannot be fairly required from the Seller may be a part of the performance only if the development of the software is not being paid for by the Purchaser under this Agreement and, at the same time, one of the following conditions is fulfilled:
     1. At the time of execution of the Agreement, it is a software that is demonstrably being used in a productive environment by at least ten entities that are independent of each other and not mutually connected and is widely available on the market, i.e., it is offered by at least three entities that are independent of each other and not mutually connected:
        1. provided that such entities are authorized to implement such software, adapt it to the Purchaser’s requirements, and maintain it; or
        2. provided that the granting of a License in regard to such software within the scope under section 9.4 of this Agreement is not practical, and it does not prevent the further development of the System by the Purchaser (primarily including development software, database software, office software, operating systems, etc.).

The Seller is obligated to provide the Purchaser with a written declaration of such fact and to prove such fact upon the Purchaser’s request.

* + 1. It is a software that is being provided to the public and will be provided to the Purchaser free of charge, including detailed commentary in regard to source codes and the right to change the software. The Seller is obligated to provide the Purchaser with a written declaration of such fact and to prove such fact upon the Purchaser’s request .
    2. It is a software in regard to which the Seller shall, no later than within 30 days of the conclusion of Implementation, provide to the Purchaser, or arrange for provision to the Purchaser of, complete source codes with commentary and the unconditional right to perform any modifications, adaptations, changes to such software and to intervene in such software, incorporate it into other Copyright Works, to include it in collected works or in databases, etc., all of which in its own discretion, and including through third parties. The Seller is obligated to provide the Purchaser with a written declaration of such fact and to prove such fact upon the Purchaser’s request.
    3. It is a software (i) that is an integral part of the hardware being supplied as part of the performance of the Agreement, or (ii) that merely provides an abstractive layer over such hardware for the programming of applications, all of which under the condition that the utilization of such software is prescribed by the producer of the relevant hardware for its proper functioning, and, at the same time, it is a software in regard to which the granting of a License within the scope under section 9.3 of this Agreement is not practical and it does not prevent the further development of the System by the Purchaser (primarily including operating programs such as BIOS or hardware controllers). The Seller is obligated to provide the Purchaser with a written declaration of such fact and to prove such fact upon the Purchaser’s request.
    4. It is a software for which the Seller shall grant, in view of its (i) marginal significance, (ii) uncomplicated connectivity, or (iii) severability and substitutability within the System without the need to expend substantial funds, a written guarantee stating that the further development of the System by a person other than the Seller can be conducted without it impacting upon the rights of authors of such software, as it will not be necessary to intervene into the source codes of such software or because any potential replacement of such software will not constitute a substantial complication and cost on the part of the Purchaser. The Seller is obligated to provide the Purchaser with a written declaration of such fact and to prove such fact upon the Purchaser’s request.
  1. If the Seller breaches an obligation arising from the use of Standard Software under section 9.5 of this Agreement, fails to submit a relevant declaration to the Purchaser in accordance with section 9.5 of this Agreement, or does not prove the relevant facts no later than within 1 month upon the Purchaser’s request, the Purchaser is entitled to require payment of a contractual penalty in the amount of CZK 200,000 for each individual case and compensation of damage in full, as well as immediate rectification, including a replacement of the relevant software.

***Minimum License Scope***

* 1. In case of the use of Standard Software fulfilling the conditions under section 9.5 of this Agreement, it shall suffice, unlike the License for the other parts of performance granted under section 9.4 of this Agreement, for the granted License to such Standard Software to include a non-exclusive right to use it in a manner as necessary in order to secure the purpose of this Agreement for at least a period of 10 years from the handover under record of the Object of Purchase to the Purchaser, within the territory of the Czech Republic, and in a quantitative scope corresponding at least to double the quantitative scope of the license that is objectively necessary in order to cover the Purchaser’s needs as of the date of execution of this Agreement, including the Purchaser’s right to intervene in the Standard Software and further specific rights of the Purchaser, if so provided by the relevant provision of section 9.5 of this Agreement.
  2. The Seller is obligated to ensure the fulfilment of all obligations relating to the use of Standard Software, primarily including the identification of the author, statement of information regarding its licensing terms, etc.
  3. In case of a notice of termination or withdrawal from the Agreement, the Seller undertakes to offer the Purchaser the right to use the Standard Software to the extent in which such is necessary for the proper use of the Object of Purchase. That shall not affect the Purchaser’s right to also acquire the Standard Software from a third party regardless of the licenses previously acquired by the Seller. In case of the utilization of such right of priority, the Seller undertakes to offer the Purchaser the right to use the Standard Software under this paragraph of the Agreement under normal market conditions and shall base its offer upon the book value of the licenses that it has acquired.
  4. If it cannot be fairly required from the Seller or if it is not necessary for the fulfilment of this Agreement and if it is not in breach of the provisions of section 9.5 of this Agreement, the Purchaser need not be provided with the source codes to the Standard Software, and likewise, the Purchaser need not be provided with the right to intervene into the Standard Software, but it must always be provided with the complete user, administrator, safety and operating Documentation, unless the parties agree otherwise.
  5. The Seller undertakes to independently document all utilization of Standard Software within the scope of performance and to provide the Purchaser with a comprehensive overview of the utilized Standard Software, including the licensing terms for such Standard Software, a list of its alternative Sellers, and a list of obligations that the Purchaser has due to the use of such Standard Software. In each case, the Seller is obligated to provide the Purchaser with such an overview within 3 business days after the acceptance of the performance within the scope of which the Seller has utilized Standard Software, as well as within 1 month of the delivery of a request notice from the Purchaser, which the Purchaser may make at any time, but no later than within 2 years of the termination of the effect of the Agreement for any reason.
  6. If the use of Standard Software is associated with one-off fees, the Seller is obligated to duly pay all such fees for a period of 10 years from the handover of the Object of Purchase to the Purchaser under record as part of the price of performance.

***Passing of Rights, Licensing Fee and Guarantee of License Scope***

* 1. Rights acquired within the scope of the performance of this Agreement shall also pass to any legal successor that the Purchaser may have. Any change in the person of the Seller (e.g., legal succession) shall not have an impact upon the rights granted by the Seller to the Purchaser under this Agreement.
  2. For the avoidance of doubts, the contracting parties have expressly agreed that all data created within the scope of the utilization of the Object of Purchase belong to the Purchaser, regardless of whether they may potentially be modified within the scope of performance on the part of the Seller.
  3. The remuneration for the granting of the rights to Copyright Works is included in the price of performance. However, regardless of the form of the provision of rights, the Seller is always obligated to ensure the granting of rights in accordance with the terms set out in the Agreement, regardless of any potentially differing content of standard licensing terms of the executor of the property rights to such Copyright Works.

1. CONTRACTUAL PENALTIES
   1. For each commenced day of delay on the part of the Purchaser in paying the Purchase Price in accordance with this Agreement, the Purchaser is obligated to pay the Seller a contractual late interest at a rate of 0.05% of the due amount. In the event of a delay on the part of the Purchaser in regard to paying the price of a relevant Software Modification, the Purchaser is obligated to pay the Seller a contractual late interest at a rate of 0.05% of the due amount of the price of the relevant Software Modification.
   2. For each commenced day of delay in regard to fulfilling the deadline for the delivery of the draft Implementation Study or incorporating the Purchaser’s comments in regard to the Implementation Study under section 4.1 of this Agreement, the Purchaser shall become entitled to a discount on the price of the Implementation Study under section 5.1 of this Agreement in the amount of CZK 5,000. The Seller is obligated to reflect such penalty in the relevant invoice.
   3. For each commenced day of delay on the part of the Seller in regard to supplying the Object of Purchase and the Documentation, the acceptance tests, and the acquainting of operators with the Object of Purchase in accordance with this Agreement, the Seller is obligated to pay the Purchaser a contractual penalty in the amount of 0.05% of the Purchase Price.
   4. For each commenced day of delay on the part of the Seller in regard to supplying a Software Modification within the deadline agreed upon under section 6.18 of this Agreement, the Seller is obligated to pay the Purchaser a contractual penalty in the amount of 0.05% of the price of such Software Modification. In the event of a delay on the part of the Seller in regard to responding to an order under section 6.18 of this Agreement, the Purchaser shall become entitled to a contractual penalty in the amount of CZK 500 for each commenced day of delay.
   5. For each commenced day of delay on the part of the Purchaser in regard to taking receipt of the Object of Purchase under this Agreement, the Purchaser shall be obligated to pay the Seller a contractual penalty in the amount of 0.05% of the Purchase Price.
   6. If the Seller is executing performance through a subcontractor not specified in [Annex No. 4](#ListAnnex05) to this Agreement or not approved through the procedure under section 14.9 of this Agreement, the Seller is obligated to pay the Purchaser a contractual penalty in the amount of CZK 100,000 for each such case.
   7. A contractual penalty is due within 30 days after the delivery of a notice – invoice for payment of the contractual penalty.
   8. A notice for payment of a contractual penalty shall contain a specification of the event establishing the right of the contracting party to a contractual penalty under the executed Agreement. The notice must also contain information on the manner of payment of the contractual penalty.
   9. Unless provided otherwise below, the payment of an agreed contractual penalty does not relieve the Seller of the duty to fulfil its obligation. The contracting parties expressly exclude the application of Art. 2050 of the Civil Code.
   10. The Purchaser is entitled to unilaterally set off all of its rights (including those not yet due) to the payment of contractual penalties under this Agreement against the Seller’s right to the payment of the Purchase Price.
   11. The payment of a contractual penalty shall not have an impact upon the Purchaser’s right to compensation of damage in full, or upon the Seller’s obligation to eliminate the defective situation without delay.
2. COMPENSATION OF DAMAGE
   1. Each of the parties is obligated to compensate for damage caused within the scope of the valid legal regulations and this Agreement. Both parties undertake to make a maximum effort to prevent damage and to minimize any damage incurred.
   2. The Seller is obligated to compensate the Purchaser for all damage caused through a breach of this Agreement or of the obligations imposed upon the Seller under the legal regulations. The Seller also undertakes to indemnify the Purchaser for any damage that it incurs as a result of a breach of the Seller’s obligations under a final decision of a court or other public authority.
   3. Neither of the parties is obligated to compensate damage that occurred as a result of a materially erroneous or otherwise incorrect assignment that it received from the other party. If the Purchaser has provided the Seller with an incorrect assignment and the Seller, in view of its obligation to provide performance in accordance with this Agreement with professional care could and should have ascertained the incorrectness of such assignment, it may assert the provisions of the previous sentence only if it has alerted the Purchaser in writing as to the incorrect assignment and the Purchaser insisted upon the original assignment.
   4. Neither of the contracting parties has an obligation to compensate damage caused through a breach of its obligations arising under this Agreement, if any of the impediments excluding the obligation to compensate damage prevented it from performing them within the meaning of Art. 2913 (2) of the Civil Code.
   5. The contracting parties undertake to notify the other contracting party without undue delay of the occurrence of impediments excluding the obligation to compensate damage preventing the proper performance of this Agreement. The contracting parties undertake to make a maximum effort to avert and overcome the impediments excluding the obligation to compensate damage.
   6. Any compensation of damage shall be paid in the currency valid within the territory of the Czech Republic, whereby, for the calculation to such currency, the exchange rate of the Czech National Bank as of the date of the occurrence of damage is decisive.
3. WITHDRAWAL FROM THE AGREEMENT
   1. The Purchaser is entitled to withdraw from the Agreement if the Seller fails to supply the Object of Purchase including the Documentation within 3 (three) months after the contractually agreed date of supply in accordance with Art. 4 of this Agreement.
   2. The Purchaser is entitled to withdraw from the Agreement at any time until the date of the acceptance under record of the Implementation Study, on grounds of failure to deliver a satisfactory Implementation Study or even without having to state a reason. In such a case, the Purchaser is obligated to pay the Seller the reasonably expended costs of creating the Implementation Study, which cannot, however, exceed the price of the Implementation Study under section 5.1 of this Agreement. In such case, such amount shall be considered to constitute a severance fee and the Purchaser is entitled to keep the created Implementation Study and to utilize it for any purpose.
   3. In case of a force majeure event, i.e., an unforeseeable event or circumstance that the affected contracting party is not able to influence and which prevents it from performing obligations, there is a right to the termination of the Agreement only if the effects of the force majeure event last for more than 3 (three) months. The affected contracting party shall notify the other contracting party of the occurrence of a force majeure event as soon as possible and shall provide it with clear evidence of such event.
   4. Both the Purchaser and the Seller are entitled to withdraw from this Agreement in the event of the breach of an obligation arising from this Agreement by the other contracting party in a significant manner that has not been eliminated even upon a written notice from the other contracting party calling for rectification in which a deadline for rectification of at least 20 business days was set.
   5. The Purchaser is also entitled to withdraw from the Agreement if:
      1. it is found that the Seller does not have the necessary professional eligibility and the corresponding authorization to supply the Object of Purchase or if it loses such eligibility; and/or
      2. any significant defects of the Object of Purchase (including defects under the quality warranty) have not been eliminated under the terms as set out in the Agreement; and/or
      3. the Object of Purchase has other defects due to which it cannot be used for the purpose for which it was intended; and/or
      4. the Seller’s obligation to supply the Object of Purchase ceases to exist for reasons that the Purchaser is liable for, whereby in such case the Purchaser is obligated to compensate the Seller for reasonably expended costs.
      5. the Seller fails to fulfil its obligations within the agreed deadline (including the presumption under the provisions of Art. 3 (2) of Act No. 182/2006 Coll., the Insolvency Act, as amended);
      6. the Seller is over-indebted;
      7. a decision on the Seller’s bankruptcy has been issued;
      8. the Seller has entered into liquidation or has been dissolved (with the exception of cases of mergers and/or transformations);
      9. measures are taken for the realization of a pledge right (or of multiple pledge rights) in regard to the Seller’s property;
      10. execution and/or enforcement of a decision has been ordered in regard to the Seller’s property;
      11. criminal prosecution has been commenced in regard to the Seller under Act No. 418/2011 Coll., on Criminal Liability of Legal Entities and Proceedings Against Them, as amended (hereinafter the “**ACLLE**”).

Withdrawal from the Agreement under this section 12.5 is not conditional upon a previous notice calling for rectification within the meaning of section 12.4 of this Agreement.

* 1. The Seller is entitled to withdraw from this Agreement in the event of a delay on the part of the Purchaser in regard to the payment of any due amount under this Agreement for a period of more than 60 days, if the Purchaser fails to rectify the situation even upon the Seller’s written notice calling for rectification, containing a deadline for rectification of at least 30 days.
  2. Withdrawal from the Agreement is effective as of the date of delivery of a written notification to the other contracting party, with effects as of the date of execution of the Agreement.
  3. Regardless of the above, the right of the contracting parties to terminate the Agreement on other grounds set out in the valid legal regulations is not affected in any way. No reference in the Agreement to a specific right and/or remedy shall prevent a contracting party from exercising any other right and/or remedy and/or from filing an action that the Purchaser is entitled to.
  4. Withdrawal from the Agreement shall not affect the withdrawing party’s right to compensation of damage separately and in full.

1. VALIDITY AND EFFECT OF THE AGREEMENT
   1. This Agreement becomes valid as of the date of its signing by both contracting parties, and becomes effective as of the date of publication in the contracts registry in accordance with Act No. 340/2015 Coll., on the Contracts Registry, as amended, and is entered into for a period of 10 (ten) years from the date of proper handover of the Object of Purchase to the Purchaser. The contracting parties have agreed that this Agreement shall be published in the contracts registry by the Purchaser.
   2. Termination of the effect of this Agreement shall not have an impact upon the provisions of the Agreement pertaining to licenses, rights under defects, the obligation to compensate damage or the obligation to pay contractual penalties, provisions regarding protection of information and personal data, or other provisions and entitlements the nature of which implies that they are to endure even after the termination of the effect of this Agreement.
2. FINAL PROVISIONS
   1. This Agreement constitutes the full agreement of the contracting parties regarding the object of this Agreement. This Agreement can only be changed by written consensus of the contracting parties in the form of numbered amendments to this Agreement entered into in accordance with the relevant provisions of the PPA and signed by persons authorized to act on behalf of the contracting parties, unless expressly stated otherwise in this Agreement.
   2. An amendment is not required for changes to the Agreement of an administrative or technical character, such as a change in the Seller’s business name, a change in the representatives of the contracting parties, or the banking details for payment of the Seller’s invoices, or for changes that do not change the rights and obligations of the contracting parties. Such changes become effective through a unilateral written notification demonstrably delivered to the other contracting party.
   3. All rights and obligations arising from this Agreement shall pass, if the nature of such rights and obligations does not preclude it, to the legal successors of the contracting parties.
   4. Without the previous written consent of the other contracting party, the contracting parties shall not use confidential information that they have obtained in connection with the performance of this Agreement for any purposes other than for the purposes of supplying the Object of Purchase and fulfilling the obligations under this Agreement; primarily, they shall not use them for purposes of obtaining a contract for the provision of services or for the direct provision of services in third party projects; and they shall not disclose or otherwise provide confidential information to any third party, with the exception of their employees, members of their internal bodies, professional advisors and legal representatives, if such disclosure is necessary in order to fulfil the object of this Agreement. However, such persons may only be provided with confidential information if they will be bound to maintain the secrecy of such information as if they were a party to this Agreement. In this regard, for the purpose of this Agreement, confidential information is considered to include all information provided to the Seller by the Purchaser, unless stated otherwise in writing. Information provided to the Purchaser by the Seller is considered confidential only if the Seller has previously alerted the Purchaser to its confidentiality in writing and the Purchaser has confirmed its undertaking to maintain the confidentiality of such information to the Seller in writing.
   5. In case of a breach of obligation not to disclose confidential information under section 14.4 of this Agreement, the contracting party is obligated to pay the other contracting party a contractual penalty in the amount of CZK 200,000 for each individual case.
   6. The Seller acknowledges that, under Art. 2 (c) of Act No. 320/2001 Coll., on Financial Control in Public Administration and on Changes to Certain Acts (the Financial Control Act), as amended, it is a person obligation to cooperate in the performance of financial control being conducted in connection with payment for performance under this Agreement out of public budgets, and undertakes to provide such cooperation.
   7. The Seller is not entitled to assign this Agreement as a whole or individual rights or obligations arising under it to a third party.
   8. The Seller is not entitled to assign monetary claims against the Purchaser to a third party without the previous written consent of the Purchaser.
   9. The Seller is entitled to change the subcontractors set out in [Annex No. 4](#ListAnnex05)to this Agreement or the scope of their performance only on the basis of the previous written consent of the Purchaser. If a change of subcontractor is to pertain to the subcontractors through which the Seller proved the fulfilment of qualifications in the procurement procedure for the Public Contract, the new subcontractor must fulfil the same minimum qualification as the original subcontractor and the same must be proven to the Purchaser without any doubts.
   10. All of the parties’ practice and all of their usage is expressed in the Agreement. The parties shall not assert any of the parties’ usage or practice that is not expressly provided for by the Agreement.
   11. If any obligation arising from this Agreement or any provision of this Agreement (including any of its paragraphs, articles, sentences or words) is or becomes invalid, unenforceable and/or ostensible, then such invalidity, unenforceability and/or ostensible nature shall not affect the other provisions of this Agreement. The parties shall replace such invalid, unenforceable and/or ostensible obligation with such a new valid, enforceable and not ostensible obligation the object of which will correspond to the greatest possible extent to the object of the original severed obligation. If any of the provisions of this Agreement (including any paragraph, article, sentence or word of this Agreement) is found to be ostensible, the effect of such defect on the other provisions of this Agreement shall be assessed similarly according to the provisions of Art. 576 of the Civil Code.
   12. The contracting parties are relieved of liability for partial or full non-performance of contractual obligations, if such has occurred as a result of exceptional, unforeseeable and insurmountable impediments that have arisen beyond the control of the contracting parties. For the purposes of this Agreement, such impediments are considered to mean circumstances that have arisen after the execution of this Agreement, as a result of events of an exceptional nature that are unforeseeable for the contracting parties that have a direct impact upon the proper production and supply of the Object of Purchase. If one of the contracting parties is not able to perform its obligations arising from this Agreement as a result of impediments under this article, it shall be obligated to immediately notify the other contracting party of such fact in writing, as well as of the fact that such impediments have passed.
   13. Both contracting parties have agreed that they shall attempt to resolve all disputes arising from the performance of this Agreement or in connection with it by way of amicable out-of-court negotiations. If this is not possible, the Purchaser’s common court shall decide all arisen disputes. The contracting parties have agreed that the rights and obligations arising from this Agreement shall be governed by Czech law.
   14. Each of the contracting parties declares:
       1. that it has not participated and is not participating in the commission of criminal activity within the meaning of the ACLLE;
       2. that it has implemented appropriate inspection and other similar measures in regard to the activities of its employees and other responsible persons within the meaning of Art. 8 of the ACLLE;
       3. that it has taken the necessary measures in order to prevent the occurrence of its criminal liability and to preclude or avert any potential consequences of the commission of a criminal act;
       4. that, in terms of preventing criminal liability of legal entities, it has done everything that it may fairly be required to do within the meaning of the ACLLE.
   15. Each of the contracting parties confirms that, when negotiating this Agreement, it acted honestly and transparently, and, at the same time, it undertakes to also act in such way during the performance of this Agreement and all activities relating thereto. The Seller confirms that it has acquainted itself with the principles of the Purchaser’s Criminal Compliance Program (hereinafter the “**CCP**”), which are published on the Purchaser’s website, primarily with the CCP Codex, and undertakes to comply with such principles for the duration of the contractual relationship.
   16. Each of the contracting parties undertakes:
       1. not to provide, offer or promise a bribe to another or for another in connection with its activity for the purpose of influencing or rewarding provided performance;
       2. not to accept or demand a bribe or have a bribe promised, whether for itself or for another, in connection with its activity for the purpose of influencing or rewarding provided performance;
       3. to take all measures so that neither it nor its employees or representatives commit any form of acts of corruption, primarily including actions consisting in bribery, that could fulfil the definition of a criminal act under Act No. 40/2009 Coll., the Criminal Code, as amended (hereinafter the “**Criminal Code**”), specifically the criminal act of accepting a bribe under Art. 331 of the Criminal Code, the criminal act of bribery under Art. 332 of the Criminal Code, the criminal act of indirect bribery under Art. 333 of the Criminal Code, or another criminal act associated with corruption under the Criminal Code;
       4. not to tolerate any form of corruption among its business partners either.
   17. Within the meaning of the Criminal Code, a bribe is an undue/unfair/unjustified advantage consisting in direct property enrichment or other benefit that is being received or is to be received by a bribed person or by another person with the bribed person’s consent, and to which there is no entitlement.
   18. In conclusion of this Agreement, the contracting parties expressly declare that they are not aware of any circumstances preventing the execution of this Agreement.
   19. The Agreement has been drawn up in 4 (four) counterparts, of which, upon the signing of the Agreement, the Purchaser shall receive 3 (three) counterparts and the Seller shall receive 1 (one) counterpart. If the Agreement is being entered into electronically with the use of recognized electronic signatures, 1 (one) counterpart of the Agreement containing the recognized electronic signatures of representatives of the contracting parties shall suffice.
   20. The following annexes comprise an integral part of the Agreement:

|  |  |
| --- | --- |
| [Annex No. 1](#Annex01): | Technical Specifications |
| [Annex No. 2](#Annex03): | Specimen Handover Report |
| [Annex No. 3](#Annex04): | Authorized Persons |
| [Annex No. 4](#Annex05): | List of Subcontractors |
| [Annex No. 5](#Annex05): | Tender Documentation |
| [Annex No.](#Annex05) 6: | Implementation Study Requirements |

The contracting parties declare that they have read this Agreement prior to signing it, and that they found that its content corresponds precisely to their true free will, that it establishes the legal consequences the achievement of which they were pursuing through their actions, and that they themselves are free of error, fraud and distress, and thus they are signing it below as being correct.

|  |  |
| --- | --- |
| Purchaser  In \_\_\_\_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_\_\_\_\_\_\_ | **Seller**  In \_\_\_\_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| .........................................................................  **Technická správa komunikací hl. m. Prahy, a.s.** | .........................................................................  **[TO BE COMPLETED BY THE CONTRACTOR]**  [TO BE COMPLETED BY THE CONTRACTOR] |
|  |  |
| Purchaser  In \_\_\_\_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| .........................................................................  **Technická správa komunikací hl. m. Prahy, a.s.** |  |

Annex No. 1

Technical Specifications

**Basic Technical Requirements for the Purchase and Supply of a Multifunctional and Measuring Vehicle**

**Carrier Vehicle**

Basic Parameters:

Vehicle Type: utility - van

Engine Power: a minimum of 120 kW

Vehicle Length: a maximum of 5 m

Seats (Number): 2

Cargo Space: no glass

Total Vehicle Mass: a maximum of 3.5 t

It must be a vehicle type and make that has a branded service garage within the city of Prague.

Vehicle Accessory Fittings:

Automatic transmission

Cruise control

Axle spring shock absorber, stabilizers

Boosted/ auxiliary alternator and accumulator

230 V socket

12 V socket

Built-in shelving

Roof ventilator in cargo space

Heated and electrically adjustable rear-view mirrors

Fog lights with corner light mode function

High performance LED headlamps

Rear LED light

Warning beacon – 2 pcs

Rain sensor

Electrically heated windshield

Heated windscreen washer nozzles

Heated driver’s seat and passenger seat

Comfort suspension seats for driver and passenger with armrests

Steering wheel with elevation and tilt adjustment capability

Lateral airbags for driver and passenger

Automatic air-conditioning

Multimedia system with a minimum of 7'' touch screen

Higher standard navigation + traffic sign recognition assist

Blind spot assist

Lane assist

Front assist

Parking assist with rear-view camera

Brake assist

Automatic driving beam switch assist

Wireless tire air pressure gauging

Security system (alarm, anti-theft protection)

Winter and summer tires with ALU rims

Special Requirements:

* console for attachment of monitor and keyboard located between the driver’s seat and the passenger seat,
* roof carrier along the circumference of the vehicle to attach cameras and consoles to attach equipment for 3D recording of road surface, etc.,
* cable entries in bodywork (2 GNSS antennas, cameras, etc.),
* case in the cargo space to attach control units, back-up storage equipment, etc.,
* configuration for cabling to connect individual systems.

**Localization Equipment**

The equipment shall be attached within the carrier vehicle, see above, for the purposes of determining position in the course of measuring, i.e., while travelling at a speed of up to 100 km/h.

A combination of 3 systems is required:

* GNSS (global navigation satellite system) with 2 antennas,
* IMU (inertial measurement unit containing gyroscopes and accelerometers),
* DMI (distance measuring instrument to measure distance travelled, attached to the wheel of the vehicle, odometer).

The minimum requirements for post-processing determined position accuracy are:

* in case of GNSS signal availability: coordinates x, y = 0.02 m, z = 0.05 m,
* in case of GNSS signal unavailability: coordinates x, y = 0.12 m, z = 0.1 m.

If the Contractor has another technical localization equipment solution available that fulfils the requirement of determined position accuracy, such other solution is permissible as well.

**Equipment for 3D Road Surface Recording**

The equipment shall be fitted in the rear section of the carrier vehicle and shall be connected to the localization equipment, see above.

Required parameters:

* 3D recording of road surface at a width of at least 4 m,
* minimum resolution: transversally 1 mm, longitudinally 1 mm (at a travel speed of 100 km/h), to a depth of 0.2 mm,
* enabling measuring under impaired light conditions,
* output formats: JPEG, XML, 3D model data,
* evaluation software includes functions for:
  + automatic detection and analysis of the following parameters:
    - defects according to inspections under Ministry of Transport Technical Specification TP 82 and the addendum issued by the Purchaser in regard to such Technical Conditions (cracks, potholes, loss of texture, patching, loss of cobbles, degree of filling of joints etc.) for various types of pavements wearing surfaces – asphalt, including low-noise, concrete, cobbled,
    - cut joints,
    - road markings,
    - man-made objects (e.g., covers), etc.
  + calculation of the following road surface parameters:
    - longitudinal roughness - IRI (International Roughness Index), in accordance with ČSN 73 6175 (values every 20 m within the selected line in a longitudinal direction, at minimum on the vehicle path),
    - transverse roughness - R (rut depth), W(theoretical water depth) in accordance with ČSN 73 6175 (in transverse profiles within the selected measuring step),
    - macrotexture - MTD (Mean Texture Depth), in accordance with ČSN EN 13036-1,
    - macrotexture - MPD (Mean Profile Depth), in accordance with ČSN EN ISO 13473-1, even if the required accuracy of depthward measuring (= 0.05 mm) is not achieved,
    - transverse and longitudinal slope of the road surface.
* additionally, ensuring the creation of a digital terrain model (LDTM - Laser Digital Terrain Mapping) for specific purposes requiring greater accuracy, primarily for dimensioning transport infrastructure in software utilizing 3D, regulating the course of milling and laying the roadway layers in 3D (Machine Control Systems):
  + required minimum absolute vertical accuracy is +/- 3 mm, position accuracy +/- 4 mm,
  + output in LAS format and in formats used by Bentley MicroStation.

**Equipment for Measuring Macrotexture and Longitudinal Roughness of Pavement Surfaces and Calculation of MPD and IRI Parameter**

The equipment shall be attached to the chassis of the carrier vehicle, see above, in proximity to its front axle.

Requirements:

* measuring will be conducted with 3 profilometers: in both vehicle tracks and in the middle between them,
* the travel speed during measuring will be up to 100 km/h,
* the profilometers must fulfil the requirements under ČSN EN ISO 13473-1 (vertical resolution of 0.5 mm or better, sampling step ≤ 1.0 mm etc.),
* monitoring of sensor fluctuations must be ensured when travelling in a vertical direction, or another method necessary in order to measure distance to the surface conducted from a known elevation, see section 5.1 of ČSN EN ISO 13473-1,
* when calculating the MPD parameter, data from the localization equipment shall be utilized, see above,
* processing of measured data and calculation of the MPD parameter will be conducted in accordance with the requirements under ČSN EN ISO 13473-1,
* processing of measured data and calculation of the IRI parameter will be conducted in accordance with the requirements under ČSN 73 6175,
* the output is 3 MPD parameter sequences in connection to the distance travelled, in table and graphic form, with evaluation into 5 classification levels according to Tab. A.3 ČSN 73 6177 and Tab. A.1 ČSN 73 6175,
* the raw measured data must be available for the purpose of subsequent calculation of parameters other than MPD and IRI.

**Cameras Monitoring Front View and Road Surface**

The devices shall be attached to the roof carrier of the carrier vehicle, see above.

Requirements:

* measuring will be conducted with 2 digital cameras and 1 thermal camera,
* the vehicle travel speed during recording will be up to 100 km/h,
* when taking images and working with them, data from the localization equipment attached within the vehicle will be utilized, see above (enter the travelling distance during which images will be taken, utilize GNSS coordinates to display the position of the image within the map),
* it must be possible to change the placement of the cameras on the roof carrier and their tilt, and it must be possible to easily detach the cameras when not measuring,
* front color digital camera displaying the situation as viewed by the driver, taking images every 3 or more meters at a speed of up to 100 km/h,
  + minimum resolution: 2400 x 1900,
  + adapted for outdoor use (enclosure, ingress protection: IP65), enables quality recordings under impaired light conditions and while travelling,
  + file format: JPEG, RAW.
* rear colour digital camera displaying the road surface: for a vertical view of the road surface behind the vehicle at a width of at least 4 m,
  + the same requirements as for the front camera.
* rear thermal camera displaying the road surface: for a view of the road surface behind the vehicle in order to scan a width of at least 4 m,
  + taking images every 5 or more meters at a speed of up to 100 km/h,
  + camera detector type: cooled MWIR,
  + minimum resolution (IR pixels): 1900 x 1500,
  + maximum camera detector integration time: 150 μs (for a temperature range of +10 °C to +80 °C),
  + minimum temperature range: -10 to +120 °C,
  + minimum measuring accuracy: +/- 1 °C,
  + minimum temperature differentiation at 30 °C: 0.05 K,
  + minimum imaging frequency at full resolution (full-frame rate): 10 Hz,
  + minimum dynamic range: 14 bit,
  + motoric (automatic) lens focus,
  + adapted for outdoor use, minimum ingress protection: IP65, air-cooled camera casing,
  + the supply includes software for analysis of measured data and implementation into superstructural software applications (SDK).
* when displaying images taken in the viewer, their localization must be clear (by displaying a horizontal line or lines with such data, targeting through the centre of the image, etc.) and the position of the image within the map (in a separate window).

**Panoramic Camera**

The camera shall be attached to the roof carrier of the carrier vehicle, see above.

Requirements:

* optics: a minimum of 6 lenses,
* A/D converter: 12-bit minimum,
* minimum resolution: 2400 × 1900,
* minimum imaging frequency (frame rate): 30 FPS (JPEG),
* minimum spatial accuracy (pixel spatial accuracy): 2 mm at a distance of 10 m,
* minimum ingress protection: IP65,
* when making recordings and working with them, data from the localization equipment will be utilized, see above,
* includes the actual structure for attaching the camera to the vehicle,
* it must be possible to easily detach the camera and its carrier when not measuring,
* includes software to display and go through measured data in 3D in connection to data from the localization equipment.

**Control Unit and Other Equipment**

* individual systems, including complete software, and measuring equipment must be attached and installed in/on the measuring vehicle and put into operation,
* the control unit, a computer, must ensure the regulation and interconnection of individual systems, including the localization equipment,
* all measured/recorded data must be synchronized in terms of time and georeferenced (the relationship between the position of data within the instrumentation coordinate system and the geographic or map position being determined) and localized in relation to the nodal localization system (ULS) that the Purchases utilizes,
* the equipment will provide results in the Czech Coordinate Geodetic System (S-JTSK) and Baltic Height System (Bpv). In the case of S-JTSK, a global implementation of this system valid from 1. 1. 2018 (S-JTSK 2018) is required. In the case of the Bpv altitude system, global implementation is required by the Czech-2005 geoid model. Details and methodology of ETRS transfer vers. S-JTSK can be found, for example, on the website <https://www.cuzk.cz/Zememerictvi/Geodeticke-zaklady-na-uzemi-CR/GNSS/Nova-realizace-systemu-ETRS89-v-CR.aspx>,
* power for all of the systems located within the carrier vehicle must be ensured,
* transmission of measured and saved data through a computer network (upon arrival at the station) must be possible,
* back-up equipment in the form of replaceable SSD disks must be included, enabling storage of data for at least 500 km of measured lane kilometres with all systems turned on,
* the control unit must enable the connection of other measuring equipment and installation of software to operate the same; a reserve of at least 15% storage capacity, computational performance and ports must be available for this,
* an LED touch screen, positioning equipment and keyboard shall be placed on a console attached between the driver’s seat and the passenger seat, for the purposes of:
  + monitoring the course of data being measured/recorded,
  + operating the equipment,
  + data evaluation and working with data.

**Software**

Software (5 licenses: 1x installation on the control unit in the vehicle and 4x on other computers) in the Czech language, compatible with the current 64-bit version of Microsoft Windows, including:

* software to operate the control unit (setting the recording step for cameras, switching off and on of individual systems for the purposes of measuring must be possible – e.g., panoramic cameras, thermal cameras, profilometers for monitoring the MPD and IRI parameter, etc.),
* software for basic visualization of recordings from executed measuring, including:
  + localization in the form of distance travelled, GNSS coordinates and position within the map,
  + images from 2 digital cameras and a thermal camera (when displaying images taken in the viewer, their localization must be clear - by displaying a horizontal line or lines with such data, targeting through the centre of the image, etc.),
  + data from 3 profilometers for monitoring the MPD and IRI parameter in connection with distance travelled,
  + data regarding functionality and recording under way on:
    - the equipment for 3D recording of the road surface,
    - the panoramic camera.
* the evaluation software for processing data from the equipment for 3D recording of the road surface according to the specification set out in the section of this annex entitled “**Equipment for 3D Recording of Road Surface**”functions separately and is a part of the supply of this equipment,
* the software for processing data from the panoramic camera functions separately and is a part of the supply of this equipment,
* the software for analysis of the thermal camera image functions separately and is a part of the supply of this equipment.
* the supplied software must enable documented access to primary measured data, it must provide the option of parameterized outputs, and it must provide such a documented open interface that enables on-line access to third party applications, e.g., k synchronization with other measured data.
* documentation for the evaluation software must, in addition to a detailed manual, also contain the source code,
* modifications to the software beyond the scope of steps included in the HW and SW Service and the warranty under this Agreement shall be requested by the Purchaser ad hoc as necessary. A general definition of the performance that is executable within the scope of SW Modifications includes primarily the following:
  + adding new evaluation functionalities,
  + integration of measuring outputs from third party equipment,
  + modifications to the software interface.

**Acceptance Tests:**

The goal of the acceptance tests is to verify the full functionality of the measuring vehicle, including all hardware and software, and the measurement accuracies achieved thereby. The acceptance tests will be conducted at the Test Site of Pacov-Kámen Airport (approx. 110 km east from Prague) and on 5 urban type segments and 5 rural type segments, each having a maximum length of 5 km as determined by the Purchaser. The acceptance tests shall also include a comparison test with other equipment. Details will be described in the Implementation Study.

**Selected specifying information under Czech technical standards and other regulations regarding requirements for monitored roadway parameters – informational data, not constituting an exhaustive overview.**

**Equipment for 3D Recording of Road Surface**

* + calculation of the following road surface parameters:
    - longitudinal roughness - IRI (International Roughness Index), in accordance with ČSN 73 6175 (values every 20 m within the selected line in a longitudinal direction, at minimum on the vehicle path),
    - transverse roughness - R (rut depth), W(theoretical water depth) in accordance with ČSN 73 6175 (in transverse profiles within the selected measuring step),
    - macrotexture - MTD (Mean Texture Depth), in accordance with ČSN EN 13036-1,
    - macrotexture - MPD (Mean Profile Depth), in accordance with ČSN EN ISO 13473-1, even if the required accuracy of depthward measuring (= 0.05 mm) is not achieved,
    - transverse and longitudinal slope of the road surface.

**Equipment for Measuring Macrotexture and Calculation of MPD Parameter**

* + the profilometers must comply with the requirements under ČSN EN ISO 13473-1 (vertical resolution of 0.05 mm or better, sampling step ≤ 1.0 mm etc.),
  + monitoring of sensor position must be ensured when travelling in a vertical direction, or another method necessary in order to measure distance to the surface conducted from a known elevation, see section 5.1 of ČSN EN ISO 13473-1,
  + processing of measured data and calculation of the MPD parameter will be conducted in accordance with the requirements of ČSN EN ISO 13473-1,

Classification of defects according to revised version of TP 82 (Ministry of Transport Technical Specification – Catalog of Defects of Flexible Pavements).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Affected layer** | **Defect groups** | **No.** | **Defect name** | **Developmental stage, severity** | | | | | | | | | **Measurable parameters** |
| Surface | Skid resistance | 1 | Polished aggregate (microtexture loss) |  | | | | | | | | | Fp (LFC) |
| 2 | Bleeding (macrotexture loss) |  | | | | | | | | | MPD, MTD |
| Surface course | Loss of material | 3 | Caverns | increasing frequency per unit area | | | | | | | | |  |
| 4 | Wear of slurry surfacing | loss | | | | | flake off | | | |  |
| 5 | Loss of aggregate from surface dressing |  | | | | | | | | |  |
| 6 | Deep corrosion | loss of binder | loss of aggregate | | | | | | | decay of layer |  |
| 7 | Pothole | in surface course | | | | in surfacing / base | | | | |  |
| Cracks | 8 | Transverse crack | < 0.5 cm | | 0.5 – 5 cm | | | | branched | | |  |
| Surfacing and base | 9 | Longitudinal crack |  |
| 10 | Block cracking (only in surface course) |  | | | | | | | | |  |
| 11 | Fatigue cracking (in more layers) |  | | | | | | | | | bearing capacity |
| Deformation | 12 | Ruts (in wheel paths) | < 1 cm | | | 1 – 3 cm | | | | > 3 cm | | profilograph |
| Pavement | 13 | Areal deformation | < 1 cm | | | 1 – 3 cm | | | | > 3 cm | | IRI |
| 14 | Bumps | local | | | areal | | | | across entire width | |
| 15 | Drops | local | | | areal | | | |
| 16 | Break of pavement |  | | | | | | | | |  |
|  | Others | 17 | Edge cracking |  | | | | | | | | |  |
| 18 | Pathing |  | | | | | | | | |  |
| 19 | Blister | increasing frequency per unit area | | | | | | | | |  |
| 20 | Drainage problems | outflow of water, raised curb, clogged ditch | | | | | | | | |  |

Classification of defects according to the Purchaser’s Addendum TP 82:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Defect group** | Note | Permissible defect characteristics at permitted speed in km/h | | | | | | | | | |
| 1 | | 2 | | 3 | | 4 | | 5 | |
|  |  | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 |
| Surface roughness (ruts left by vehicles, bulge, dip, planar roughness), mm (max.) | natural stone  concrete | 15  10 | 15  10 | 15  10 | 15  10 | 20  15 | 30  20 | 30  20 | 50  30 | >30  >20 | >50  >30 |
| Vertical connection of paving elements, mm (max.) | natural stone  concrete | 5  2 | | 5  2 | | 10  5 | | 20  10 | | >20  >10 | |
| Deviation from specified joint width, mm   * + - * large blocks       * small blocks       * mosaic blocks       * slabs       * concrete elements |  | 10 – 20  10 – 15  max. 5  8 – 10  3 - 5 | | 10 – 20  10 – 15  max. 5  8 – 10  3 - 5 | | >20  >15  >5  >10  >5 | | roughness occurs | |  | |
| Vertical drop of built-in elements, mm (max.) |  | 5 | | 8 | | 10 | | 30 | | >30 | |
| Quality of joint filler, % filling of joint height |  | 100 | | 80 | | 50 | | 50 | |  | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Catalog sheet number and defect name** | | Note | Permissible damaged surfaces at permitted speed in km/h | | | | | | | | | |
| 1 | | 2 | | 3 | | 4 | | 5 | |
| 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 | 50 | 30 |
| 1 | Smoothing of paving elements | 1) |  |  |  |  |  |  |  |  |  |  |
| 6 | Corrosion of paving elements | 2) | 0 | 0 | 0 | 0 | 2 | 5 | 5 | 10 | >5 | >10 |
| 7 | Missing paving elements | 2) | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 5 | >2 | >5 |
| 10 | Cracks in paving elements  - paving elements  - paving slabs | 2)  3) | 0  0 | 0  0 | 0  0 | 0  0 | 1  10 | 2  30 | 3  20 | 10  30 | >3  >20 | >10  >30 |
| 11 | Loosened paving structure, loss of joint filler | 2) | 0 | 0 | 1 | 5 | 5 | 15 | 15 | 30 | >15 | >30 |
| 12 | Ruts left by vehicles | 2) | 0 | 0 | 10 | 10 | 20 | 30 | 30 | 50 | >30 | >50 |
| 13 | Planar roadway roughness | 2) | 0 | 0 | 0 | 0 | 10 | 20 | 20 | 40 | >20 | >40 |
| 14 | Bump | 2) | 0 | 0 | 0 | 0 | 5 | 10 | 10 | 20 | >10 | >20 |
| 15 | Drop | 2) | 0 | 0 | 0 | 0 | 10 | 20 | 20 | 40 | >20 | >40 |
| 17 | Curbs, margin tiles |  | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 10 | >5 | >10 |
| 18 | Patching | 2) | 0 | 0 | 0 | 0 | 10 | 25 | 30 | 50 | >30 | >50 |

**Table 1: Classification Scale for Characteristics of Pavements and Walkways from Paving Elements (mainly Cobblets)**

**Table 2: Indicative Classification Scale of the State of Pavements and Walkways from Paving Elements (mainly Cobblets) in View of the Percentage of Surface Damaged by Individual Defects**

Notes:

1. The smoothing classification is determined by the classification of the specified friction coefficient under ČSN 73 6177.
2. The increasing frequency of individual defects serves to classify the state of the roadway. Routine maintenance serves to maintain paved areas through spot repairs so that a critical state does not necessarily occur. Repairs or renovations of the roadway (or conducting diagnostic surveys) are necessary in the case of defects 12, 13, 14, 15 and 18.
3. Cracks in paving slabs in the case of pumping parts of slabs are always in classifications 4 and 5 due to traffic and pedestrian safety concerns.

Selected information from Czech standards:

**ČSN 73 6175 from the year 2015 – IRI parameter:**

**3.2.1 c)** The international roughness index *IRI* (m/km) is a parameter of longitudinal roughness determined through simulation of travel of a dual mass reference response system – a quarter of the vehicle (with parameters as set out below), at a speed of 80 km/h along longitudinal roughness.

*k*1 = *k*t / *M*s = 653 s-2 *u* = *m*u / *M*s = 0.15

*k*2 = *k*s / *M*s = 63.3 s-2 *c* = *C*s / *M*s = 6.0 s-1

where the following applies:

*k*t is the tire rigidity coefficient

*k*s is the chassis rigidity coefficient

*M*s is sprung mass

*m*u is unsprung mass

*C*s is the linear chassis damping coefficient

**10** Measuring the longitudinal and transverse profile of the roadway through accurate levelling

**10.4.1** A series of detailed points in a longitudinal direction of communication is determined with a sampling interval of 0.25 m.

**10.5.2** The method for determining the international roughness index *IRI*:

a) quantification of four variables that are a function of elevations of *Y*i longitudinal profile points. For each profile point, a set of four recursive equations is solved:

*Z*1 = *s*11 × *Z*1' + *s*12 × *Z*2' + *s*13 × *Z*3' + *s*14 × *Z*4' + *p*1 × *Y*' (3)

Z2 = *s*21 × *Z*1' + *s*22 × *Z*2' + *s*23 × *Z*3' + *s*24 × *Z*4' + *p*2 × *Y*' (4)

Z3 = *s*31 × *Z*1' + *s*32 × *Z*2' + *s*33 × *Z*3' + *s*34 × *Z*4' + *p*3 × *Y*' (5)

Z4 = *s*41 × *Z*1' + *s*42 × *Z*2' + *s*43 × *Z*3' + *s*44 × *Z*4' + *p*4 × *Y*' (6)

where the following applies:

*Y*' is (*Y*i – *Y*i–1) / *dx*, which is the input quantity of slope;

*Z*j' *Z*j is from the previous sample, *j* = 1,2,3,4;

d*x* is the sampling interval of 0.25 m;

*s*ij and *p*j are the coefficients that are constant for the given sampling interval of 0.25 m and for the simulation of travel of a dual mass reference response system at a speed of 80 km/h.

*s*11 = 0.9966071 *s*12 = 0.01091514 *s*13 = –0.002083274 *s*14 = 0.00031900145

*s*21 = –0.5563044 *s*22 = 0.9438768 *s*23 = –0.8324718 *s*24 = 0.05064701

*s*31 = 0.02153176 *s*32 = 0.00212676 *s*33 = 0.7508714 *s*34 = 0.008221888

*s*41 = 3.335013 *s*42 = 0.3376467 *s*43 = –39.12762 *s*44 = 0.4347564

*p*1 = 0.005476107 *p*2 = 1.388776 *p*3 = 0.2275968 *p*4 = 35.79262

b) determining the rectified slope (*RS*) in each sampling interval according to the formula:

*RS*i = |*Z*3 – *Z*1|

c) calculation of the international roughness index *IRI* in each vehicle track, which is defined as the average of the variable quantity *RS* on the measured length according to the formula:

where *n* is the number of measurements.

d) determining 20 m averages of such evaluated international roughness indexes *IRI* in both measured vehicle tracks;

e) information on roughness of wavelengths shorter than 0.5 m is not utilized to calculate the international roughness index *IRI* according to the stated method.

**10.5.3** The second method of determining the international roughness index *IRI* from values measured through accurate levelling is the algorithm contained in the free-access ProVAL (Profile Viewing and Analysis Software) software from the University of Michigan. This program enables wavelength filters ranging from 0.5 m, reference speed as well as other variable parameters to be set at will. The ProVAL software can be downloaded at <http://www.roadprofile.com/>

**A.2** Evaluation of longitudinal roughness

****Table A.1 – Evaluation of a segment of 20 m length according to the international roughness index *IRI*

**ČSN 73 6175 from the year 2015 – parameter R and W:**

**7** Measuring transverse roughness parameters

Measuring transverse roughness parameters is conducted in accordance with ČSN EN 13036-8.

*Note: This EN standard was transposed by translation.*

**A.4** Evaluation of transverse roughness

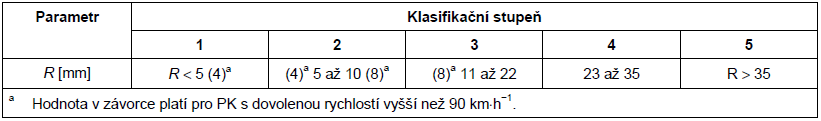
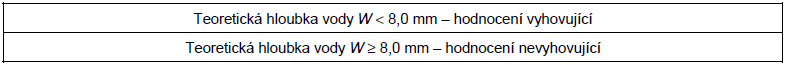
****Table A.3 – Evaluation of rut depth *R* in individual profiles

Table A.4 – Evaluation of theoretical water depth *W* in individual profiles

¨

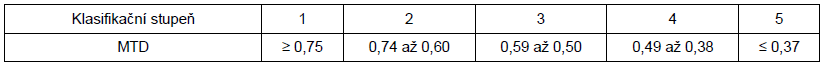
**ČSN 73 6177 from the year 2015 – MTD parameter**

**6** Ascertainment of mean roadway surface texture depth using a volumetric method (MTD)

Ascertainment of mean roadway surface texture depth using a volumetric method (MTD) is conducted in accordance with ČSN EN 13036-1.

*Note: This EN standard was transposed by translation*

**A.3** Evaluation of mean roadway surface texture depth ascertained using a volumetric method (MTD) in accordance with ČSN EN 13036-1

Table A.2 – Evaluation of mean roadway surface texture depth ascertained using a volumetric method (MTD)

**ČSN 73 6177 from the year 2015 –MPD parameter**

**7** Ascertainment of mean roadway surface profile depth (MPD)

Ascertainment of mean roadway surface profile depth (MPD) is conducted in accordance with ČSN EN ISO 13473-1, ČSN ISO 13473-2, ČSN ISO 13473-3.

*Note: These EN ISO standards were transposed.*

**A.4** Evaluation of mean roadway surface profile depth (MPD)

Table A.3 – Evaluation of mean roadway surface profile depth (MPD)

Annex No. 2

**Specimen Handover Report**

**HANDOVER REPORT**

*Public Contract “Purchase of Multifunctional and Measuring Vehicle”, reg. no. [TO BE COMPLETED]*

**Technická správa komunikací hl. m. Prahy, a.s.**

with registered office at: Řásnovka 770/8, Staré Město, 110 00 Praha 1

identification number (IČ): 03447286

(hereinafter the “**Purchaser**”),

and

Name: [TO BE COMPLETED BY THE CONTRACTOR]

with registered office at: [TO BE COMPLETED BY THE CONTRACTOR]

identification number (IČ): [TO BE COMPLETED BY THE CONTRACTOR]

(hereinafter the “**Seller**”)

hereby confirm that, on the day, month and year specified below:

1. The Seller has delivered, and the Purchaser has taken receipt from the Seller of, the following performance:

description of performance: [TO BE COMPLETED]

1. The Purchaser states that:

the Purchaser has taken receipt of the performance specified above without apparent defects.

the Purchaser has taken receipt of the partial performance specified above with the following apparent defects: [ TO BE COMPLETED]

1. This handover report is being signed in two (2) counterparts, whereby one (1) counterpart is intended for the Purchaser and one (1) counterpart is intended for the Seller.

|  |  |
| --- | --- |
| In Prague on \_\_\_\_\_\_\_\_\_ | In Prague on \_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Technická správa komunikací hl. m. Prahy, a.s.**  [to be completed] | [to be completed] |

Annex No. 3

Authorized Persons

**For the Purchaser:**

in contractual matters:

|  |  |
| --- | --- |
| Name and Surname | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Position | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Address | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Email | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Telephone | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |

in commercial matters:

|  |  |
| --- | --- |
| Name and Surname | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Position | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Address | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Email | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Telephone | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |

in technical matters:

|  |  |
| --- | --- |
| Name and Surname | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Position | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Address | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Email | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |
| Telephone | “[TO BE COMPLETED prior to SIGNING OF AGREEMENT]” |

**For the Seller:**

in contractual matters:

|  |  |
| --- | --- |
| Name and Surname | [TO BE COMPLETED BY THE CONTRACTOR] |
| Address | [TO BE COMPLETED BY THE CONTRACTOR] |
| Email | [TO BE COMPLETED BY THE CONTRACTOR] |
| Telephone | [TO BE COMPLETED BY THE CONTRACTOR] |

in commercial matters:

|  |  |
| --- | --- |
| Name and Surname | [TO BE COMPLETED BY THE CONTRACTOR] |
| Address | [TO BE COMPLETED BY THE CONTRACTOR] |
| Email | [TO BE COMPLETED BY THE CONTRACTOR] |
| Telephone | [TO BE COMPLETED BY THE CONTRACTOR] |

in technical matters:

|  |  |
| --- | --- |
| Name and Surname | [TO BE COMPLETED BY THE CONTRACTOR] |
| Address | [TO BE COMPLETED BY THE CONTRACTOR] |
| Email | [TO BE COMPLETED BY THE CONTRACTOR] |
| Telephone | [TO BE COMPLETED BY THE CONTRACTOR] |

Seller’s email address for invoicing purposes: [TO BE COMPLETED BY THE CONTRACTOR]

Annex No. 4

List of Subcontractors

|  |  |
| --- | --- |
| Name | [TO BE COMPLETED BY THE CONTRACTOR] |
| Registered Office | [TO BE COMPLETED BY THE CONTRACTOR] |
| Identification No. (IČ) | [TO BE COMPLETED BY THE CONTRACTOR] |
| Specification of Subcontractor’s Performance | [TO BE COMPLETED BY THE CONTRACTOR] |

|  |  |
| --- | --- |
| Name | [TO BE COMPLETED BY THE CONTRACTOR] |
| Registered Office | [TO BE COMPLETED BY THE CONTRACTOR] |
| Identification No. (IČ) | [TO BE COMPLETED BY THE CONTRACTOR] |
| Specification of Subcontractor’s Performance | [TO BE COMPLETED BY THE CONTRACTOR] |

**Annex No. 5**

**Tender Documentation**

*(to be attached at the signing of the Agreement as a separate document)*

**Annex No. 6**

**Implementation Study Requirements**

1. Specification of contact details, including telephone number for the HotLine, email addresses.
2. Detailed specification of the carrier vehicle, make, type, parameters.
3. Detailed specification of hardware:
   * of that which is expressly listed in the tender documentation
   * of that which is not listed but is necessary for the supply
4. Clarification of requirements under standards and other Czech regulations and their application when processing data
5. Detailed specification of software:
   * description of user interface, including graphic display
   * description of software setting options, including user changes in relation to classification levels of individual roadway defects and other parameters
   * description of functions:
     + operating the measuring devices
     + automated evaluation of measured values
     + need for manual intervention in evaluation of measured data
   * description of outputs, table, graphic, export formats
   * detailed specification of acceptance tests
6. Detailed specification of Hardware and Software Service terms
7. Detailed specification of documentation and papers being provided
8. Specification of acceptance tests

The draft or working version of the Implementation Study may be drawn up in the Czech or English language. The final version intended for acceptance must be created in the Czech language.