



CONTRACT FOR WORK [No. 011/19]

concluded in accordance with Section 2586 et seq. of Act No. 89/2012 Coll., the Civil Code, as amended (hereinafter the "**Civil Code**" and the "**Contract**")

1. Parties

1.1. Client:

Ústav jaderné fyziky AV ČR, v. v. i.

(Nuclear Physics Institute of the Czech Academy of Sciences, public research institution)

registered office: Husinec - Řež 130, 250 68, Czech Republic

represented by: RNDr. Petr Lukáš, CSc., Director

registered in the Register of Public Research Institutions administered by the Ministry of Education, Youth and Sports of the Czech Republic (hereinafter the "**MEYS**" or "**Sponsor**")

bank details:

ID No.: 61389005

Tax ID No.: CZ 61389005

(hereinafter the "**Client**")

and

1.2. Contractor:

Ionplus AG

registered office: Lerzenstrasse 12, 8953 Dietikon, Switzerland

represented by Joël Bourquin, CEO Ionplus AG

registered in Erlinsbach AG, Switzerland

Bank details:

IBAN:

ID No.: CHE-418.217.794

Tax ID No.: CHE-418.217.794 MWST

(hereinafter the "**Contractor**")

(the Client and the Contractor also referred to as the "**Parties**").

2. INITIAL PROVISIONS

- 2.1. The Client is the beneficiary of a grant provided by the Sponsor (MEYS) from the Operational Programme Research, Development and Education (OP RDE) for implementation of the project RAMSES: “Ultra-trace isotope research in social and environmental studies using accelerator mass spectrometry“, Reg. No.: CZ.02.1.01/0.0/0.0/16_019/0000728 (hereinafter the “**Project**”).
- 2.2. The Project involves, among others, expanding the Client’s portfolio of accelerator and nuclear analytical methods by Accelerator Mass Spectrometry (AMS) which is a technique for measuring long-lived radionuclides and is mainly used to determine ¹⁴C for radiocarbon dating in archaeology. Successful implementation of the Project would add to the Client’s current accelerators an AMS accelerator and result into a unique complex of accelerators centred at the same location. Fulfilment of this task requires cooperation with a proficient supplier who shall develop, design, construct and deliver the AMS system to the Client as well as to provide related performance. The AMS system to be delivered by the Contractor as a result of the Work to be executed hereunder shall be capable of determination of selected nuclides and fission products. Execution of the Work hereunder is necessary prerequisite for successfully implementing the Project within which the supply of an AMS system shall be realised and funded, includes important elements of research and development activities and represents a unique supply for the research and development Project implemented in cooperation between the Client and its partners. Execution of the Work hereunder falls outside the Contractor’s serial production.
- 2.3. The Contractor has been selected as the winning bidder in the above-the-threshold public contract for supplies administered in the form of a negotiated procedure without publication named “Tender for an AMS system” (hereinafter referred to as “**Procurement Procedure**”) in accordance with Section 64 letter a) of Act No. 134/2016 Coll., on public procurement, as amended (hereinafter the “**Act on Public Procurement**”).
- 2.4. Prior written consent of the Client’s Supervisory Board and its founder was properly granted prior to the conclusion hereof.
- 2.5. Execution of the Work hereunder shall be based on the following Annexes which form an integral part hereof:
 - 2.5.1. **Annex No. 1** which contains detailed **Technical Specifications** of the System (hereinafter the “**Annex 1**”);
 - 2.5.2. **Schedule of Deliveries and Payments**, which forms **Annex No. 2** hereto, contains a timetable for delivery of Partial Performances within the Work and Payments by the Client (hereinafter the “**Annex 2**”); and
 - 2.5.3. **Incentive and Risk Management Instruments** represents a document constituting **Annex No. 3** hereto, which includes sanctions and other incentive mechanisms for timely and proper performance of the Contract according to the required specifications in the highest possible quality (hereinafter the “**Annex 3**”).

- 2.6. In case of any discrepancy between the provisions of this Contract and the provisions of its Annexes the provisions of this Contract shall prevail, except for the provisions of Annexes containing conditions and specifications that are more favourable to the Client (i.e. higher technical specification values and/or more technically advanced or demanding solutions etc.), in which case such provisions of Annexes shall prevail. In case of any discrepancy between the provisions of the Annexes the provisions containing conditions and specifications that are more favourable to the Client shall prevail.
- 2.7. The Contractor acknowledges that the Client cannot be classified as an entrepreneur in relation to the subject matter hereof, nor it is connected with the Client's business activities.
- 2.8. The Contractor declares that in accordance with Section 5 (1) of the Civil Code, it is able to perform this Contract with the required knowledge, diligence and due care that is associated and expected of well-experienced experts in its profession and that its potential performance lacking such professional care would give rise to corresponding liability on its part. The Contractor shall not misuse its professional expertise or its economic position to create or exploit the weaker party's dependence or to seek to achieve a clear and unjustified imbalance in the mutual rights and obligations. The Contractor represents that it has all the professional prerequisites required for the proper fulfilment of this Contract, is fully authorized to perform this Contract and there exist no obstacles on its part that would prevent it from executing the Work hereunder.
- 2.9. The Contractor declares that it assumes the risk of a change in circumstances within the meaning of Section 1765 (2) of the Civil Code.
- 2.10. The Contractor acknowledges it is aware that duly and timely execution of Work or its parts hereunder is fundamentally essential for the Client, in particular, given the relevant deadlines and results to be observed within the framework of the Project as well as its follow-on activities, and that if these will not be observed, e.g. in the event of a failure by the Contractor to meet the requirements or deadlines stipulated hereunder, the Client may incur substantial damage.

3. SUBJECT-MATTER AND SCOPE OF WORK

- 3.1. This Contract concerns supply of an accelerator mass spectrometer and its accessories (hereinafter the "**System**"). The supply of the System mainly involves necessary research and development activities, a detailed technical design, manufacturing and delivery of the System, including connections to interfaces, software with controlling system, licence and free updates, installation, alignment and testing of the System, training of the Client's personnel as well as a free licence to use the System for the needs of the Project and its follow-up phases, all included in the price for the System (the System and related activities included in the supply shall be also referred to jointly as the "**Work**").
- 3.2. The Contractor undertakes to carry out the Work, at his own cost and risk, for the Client and supply the relevant parts of the Work to the Client in accordance with this Contract. The Contractor shall duly deliver, under the terms and within the time frame agreed herein, the

System to the Client at the prescribed location, hand it over to the Client and transfer the System ownership to the Client. The Contractor shall be liable for delivery of the said System fully in accordance with this Contract, its bid submitted within the Procurement Procedure and applicable legal, technical and quality regulations; the Contractor shall ensure and is responsible that the System meets valid safety, technical and quality EU standards. For the sake of clarity, the Contractor's obligations hereunder to deliver the System, performance of which has been included in the Price, shall also include all the activities within the supply of the System as defined in the above paragraph of this Article.

- 3.3. During execution of the Work the Contractor proceeds independently, unless herein stated otherwise. If receiving instructions from the Client the Contractor shall follow such instructions unless these are inappropriate or in contradiction to this Contract, applicable law or valid Czech or EU standards. If the Contractor finds out or should have found out by exercising due professional care that the Client's instructions are inappropriate or in such contradiction it must promptly notify the Client.
- 3.4. This Client undertakes to take over the duly and timely delivered parts of Work (including the System or its parts) and pay the Price, under the terms hereof, to the Contractor. For the sake of clarity, the Client is hereunder obliged to accept and take over only the parts of Work that are fully in compliance with all requirements specified in this Contract (including its Annexes).
- 3.5. The System and its components and parts shall be delivered new (i.e. not remanufactured).
- 3.6. The System shall fully comply with all the requirements and specification stipulated herein, including the Technical Specification as stipulated in Annex 1, and be delivered to the Client within the deadlines stipulated in Annex 2. It shall be also understood that the Contractor is bound to deliver the System reaching all the parameters described in the Technical Specifications (including both the Minimal System Requirements and Designed System Requirements) and guarantees that they all will be met at the time of the System handover and takeover as well as thereupon at least during the whole warranty period.
- 3.7. By signing this Contract, the Contractor agrees to the Technical Specifications of the System as defined in Annex 1, acknowledges, at the time of execution hereof, that no deficiencies are therein and declares to be able to carry out the Work, on the basis of these Technical Specifications, in full extent and required quality without the need for any additional work.
- 3.8. For avoidance of doubt, the Parties acknowledge that additional work as well as Work modifications are subject to relevant provisions of the Act on Public Procurement.
- 3.9. **Work modifications:** Given the experimental nature of the Work modification of its specification may be necessary. Therefore, the Client may request modifications to the Work or parts thereof at any time before the completion of the Work, by means of a written notification addressed to the Contractor. Should the Parties not agree in writing otherwise, the Contractor shall, within ten (10) business days following the receipt of such notification, propose and submit to the Client's for approval documentation defining modification of the performance in the form of a "**Modification Order**". The Contractor is entitled to appraise

any work or deliveries related to the requested modification as additional or omitted work. The price of this additional and/or omitted work will be specified in the Modification Order.

- 3.10. Each Modification Order shall include in particular the following:
- 3.10.1. detailed description of the modification;
 - 3.10.2. impact of the modification on the deadlines for the execution of the Work stipulated herein;
 - 3.10.3. impact of the modification on other Client's facilities in the context of the execution of the Work;
 - 3.10.4. impact of the modification on the Price;
 - 3.10.5. effect of the modification on other provisions hereof;
 - 3.10.6. calculation of the costs of the modification; and
 - 3.10.7. a proposal for the method of reimbursement of the costs associated with such modification.
- 3.11. The value of the agreed omitted work will be deducted on the basis of the Contractor's specification (unit price + Contractor's margin) of the total price of the Work and the price for the respective part of Work to which the omitted work relates, to be settled within the next payment.
- 3.12. A written agreement of the Parties shall be necessary in order that modifications under the above Article 3.10 are considered valid and billable.
- 3.13. The Parties acknowledge that, as regards conclusion of an agreement on modifications under the above Article 3.12, the Client is obliged to respect the applicable legislation (including, in particular, the Act on Public Procurement) and Project rules as well as the budget capacity of the Client.

4. DOCUMENTING INTANGIBLE RESULTS OF THE WORK

- 4.1. Intangible Results of the Work will be documented in the following documents, which will be prepared in English (unless specified otherwise); these documents include:
- 4.1.1. a description of the solution used to complete the Work (see Section 5 in Annex 1);
 - 4.1.2. detailed engineering design of the System (see D1 in Annex 2);
 - 4.1.3. monthly and/or quarterly interim reports on the execution of the Work, if required by the Sponsor or under the subsidy conditions determined by the Sponsor;
 - 4.1.4. technical documentation / reports submitted for individual Partial Performances;

- 4.1.5. technical documentation submitted along with System delivery (see D2 in Annex 2);
- 4.1.6. System verification reports based on testing protocols including performance parameters reached (FAT and OSAT); and
- 4.1.7. System user guidelines including Contractor's instructions with respect to packaging, storage, maintenance and common operation (see Article 11.1, Section 5 in Annex 1, point 2.6.13 in Annex 3).
- 4.2. All documents must be clearly structured and prepared in sufficient detail to enable an expert in the field to assess correctness of the Contractor's course of action in dealing with relevant parts of the Work and use of the methods specified to achieve the required parameters specified herein.
- 4.3. The Detailed engineering design of the System shall contain a detailed set of information necessary for the technical solution of the System complying with the requirements and specifications hereof; this information shall be prepared in detail so that it can be used as a basis for the implementation of the relevant Partial Performances and involve especially drawings of the System and its parts, list of components and their parameters, materials to be used, manufacturing methods, requirements for outer interfaces, proposed factory acceptance tests and estimated manufacturing and delivery dates.
- 4.4. Documentation demonstrating intangible results of the Work shall also be subject to the Contractor's obligation to comply with publicity rules within the meaning of Article 12.9, penultimate sentence, hereof.

5. PLACE OF PERFORMANCE

- 5.1. The place for delivery of the Work, including the System, or parts thereof shall be the Client's registered office (hereinafter the "**Site**").
- 5.2. The Contractor shall deliver the Work or its parts to the Client at the Site on the stipulated deadlines for their delivery and the Client shall provide to the Contractor for this purpose necessary cooperation. In case of delivery of the System, this cooperation involves ensuring proper access to the building where the System shall be assembled and installed as well as heavy lifting equipment necessary for the individual parts of the System (i.e. a portal crane of maximum crane load specified in the Technical Specifications).

6. TERM OF PERFORMANCE

- 6.1. Unless agreed by the Parties otherwise, the part of the Work consisting of the System shall be executed, delivered and handed over to the Client within the deadlines specified in Annex 2 hereto. Delivery prior to that deadlines is permissible if an agreement to that effect has been reached by the Parties beforehand.

- 6.2. Prior to shipment of the System in accordance with this Contract to the Site, the Contractor shall notify its readiness as well as delivery time to the Client and confirm with the Client the readiness of the Site as well. In case that the System is ready for duly and timely delivery to the Site but the Site will not be ready for such delivery at the latest by the end of the stipulated deadline, the Client shall be entitled to choose whether the System (its tangible parts) shall be stored in the meantime at the Client's ,the Contactor's (where feasible) or third party's premises on the Client's expenses including appropriate System insurance.

7. INSPECTIONS, HANDOVER AND ACCEPTANCE OF PERFORMANCE

- 7.1. The Contractor undertakes to keep the Client informed about the current progress of the works, including achievement of interim results, and enable the Client to inspect the Work and asses the Contractor's activities' results hereunder; whereby an expert team appointed by the Client shall review and evaluate the execution of the Work as to its technical aspects.
- 7.2. Prior to shipment the System shall be subject to Factory Acceptance Test (FAT) that will be carried out by the Contractor at his site witnessed by the Client. Upon delivery of the tangible parts of the System to the Site, their handover at the Site shall be subject to a handover protocol to be drawn up and executed by the Parties (hereinafter the "**Handover Protocol**"); the Handover Protocol must include:
 - 7.2.1. details on the Contractor and Client and their representatives;
 - 7.2.2. description of all individual items involved in the supply that is subject to handover;
 - 7.2.3. declaration of the Client as to whether the Client takes over or refuses the supply;
 - 7.2.4. the date and time of execution of the Handover Protocol; and
 - 7.2.5. signatures of the representatives of both Parties.
- 7.3. For acceptance of Partial Performance(s), as defined in Annex 2, or other parts of Work to be delivered hereunder, acceptance procedures and practices defined herein shall apply (hereinafter referred to as the "**Acceptance Procedure**"). During the Acceptance Procedure the Client may provide to the Contractor any comments regarding the individual Partial Performance(s) or other parts of Work. The Contractor shall be obliged, without undue delay, either to act on the basis of these comments or justify why these are unacceptable.
- 7.4. Upon delivery of Partial Performance(s) or other parts of Work and their handover to the Client, the Contractor shall, under its responsibility, demonstrate their completeness and correctness to the Client as well as enable and assist in assessing such by the Client; however, the Client shall not be obliged to verify correctness of any calculations and details of the technical solution constituting the Work. In accordance with the above, the Contractor shall especially demonstrate completeness and correctness of the System upon its delivery to the Site and thereafter its proper functioning within its commissioning on Site as well as meeting the Minimal System Requirements and Designed System Requirements,

all witnessed by the Client.

- 7.5. Provided that the relevant Partial Performance or other part of Work complies with the requirements of the Client hereunder, the Client shall issue to the Contractor, without undue delay, a confirmation attesting to the due execution of that part of Work (hereinafter the "**Acceptance Certificate**").
- 7.6. Individual Partial Performance(s) or other parts of Work shall be considered duly completed only upon successful completion of the Acceptance Procedure by executing the relevant Acceptance Certificate by both Parties confirming the completeness and correctness of the relevant part of Work pursuant to this Contract. The Contractor's obligation to supply the System complying with this Contract shall be deemed to have been fulfilled by the issuance of the Acceptance Certificate on the Partial Performance D3 (i.e. System installation, alignment and validation tests) confirming that the System meets the Minimal System Requirements as well as the Designed System Requirements. Assessment and subsequent acceptance of individual parts of the Work does not relieve the Contractor of the responsibility for correctness and completeness of the entire Work.
- 7.7. In case that a modification of an already accepted part of the Work will be required in order to achieve required parameters of the entire Work, the Contractor undertakes to make the modification and accepts that the costs related to such modification shall be considered to have already been included in the Price.
- 7.8. Should it be necessary to arrange a meeting for the purposes of inspection, assessment, acceptance or modification of the Work or parts thereof, the Party by their premises the relevant part of Work is being executed shall invite the other Party to attend the meeting at least one (1) week in advance; the Parties may upon mutual agreement replace meetings in person by other forms of communication. Each Party shall bear its own expenditure related to participation in the meetings at the other Party's premises; however, costs incurred as a result of error, defective performance or breach of arrangements made by the Parties shall be borne by the Party which caused such error, defective performance or breach.
- 7.9. In case that the Work or its part has any defects, deficiencies and/or backlogs (hereinafter jointly referred to also as the "*defect*") the Client shall be entitled to refuse its takeover and/or acceptance. In such a case, the Client shall list the ascertained defects of the Work in writing in the relevant Handover Protocol or Acceptance Certificate respectively and the Contractor shall remedy the defects as soon as technically possible but no later than within one (1) month upon the Client's refusal, unless the Parties agree otherwise; however, these periods do not imply that the Contractor is not in delay with proper delivery of the Work. If the Contractor fails to remove the defect within the stipulated deadline, the Client may charge the Contractor with a contractual penalty in the amount of 0.5 % of the part of the Price corresponding to the defective part of the Work for each, even incomplete, day of delay.
- 7.10. The Client shall be entitled (but not obliged) to take over and/or accept the defective part of Work despite its defect, in particular if the defect does not have a material impact on the System functionality and does not hinder using the System for its supposed purpose as

indicated herein. In such a case the Client is entitled to issue the Acceptance Certificate to the defective part of Work; the defects shall be described and a reasonable deadline for their repair/removal shall be specified by the Client in the Acceptance Certificate. If these defects will not be repaired/removed within the stipulated deadline, the Client shall be entitled to repair/remove them on its own but at the Contractor's costs.

- 7.11. If the System does not meet the Minimal System Requirements or the Contractor fails to demonstrate that it does meet the Minimal System Requirements during the Acceptance Procedure, this fact (including description of the particular parameter and the rate in which the parameter has not been achieved) shall be recorded in the relevant Acceptance Certificate and the Client shall be entitled to take over the System and claim either removal of the defect (provision of the above [Article 7.10](#), second and third sentence, shall apply) or, unless specified otherwise, for a discount from the price for the System; save for the below [Article 7.13](#), the discount shall be in the amount corresponding to the significance (reflecting its total weight as evaluation criterion within the Procurement Procedure, where applicable) of the unfulfilled parameter (i.e. Minimal System Requirement) and the rate in which such parameter has not been achieved.
- 7.12. If the System meets the Minimal System Requirements but does not meet the Designed System Requirements or the Contractor fails to demonstrate that it does meet the Designed System Requirements during the Acceptance Procedure, this fact (including description of the particular parameter and the rate in which the parameter has not been achieved) shall be recorded in the relevant Acceptance Certificate and the Client shall be obliged to take over the System but entitled to claim either removal of the defect (provision of the above [Article 7.10](#), second and third sentence, shall apply) or for a discount from the price for the System; save for the below [Article 7.13](#), the discount shall be in the amount corresponding to the significance of the unfulfilled parameter (i.e. Designed System Requirement) and the rate in which such parameter has not been achieved. If not agreed by the Parties otherwise, the discount shall be calculated as follows: the price discount [as a percentage of the price for the System] = the rate of non-achieving the particular parameter * the relative weight of the parameter as the evaluation criteria under the tender documentation of the Procurement Procedure.
- 7.13. The Parties acknowledge that achieving the Designed System Requirement (and the more the Minimal System Requirement) "uncertainty for measurement of 1 graphite sample prepared from secondary OXAI (NIST SRM 4990C)" in BP [i.e. years BP of the Conventional radiocarbon age, following generally accepted Stuiver-Polach Convention (1977)¹, one sigma uncertainty] for a ¹⁴C sample graphite of max. 2 mg of sample carbon amount with max. sample measurement time of 2 hours, is crucial for the Client in terms of proper use of the System for the intended purpose, Project goals fulfilment and follow-up activities. It is deemed achieved if confirmed by the Acceptance Test according to [Article 7.14](#) hereof. If not agreed by the Parties otherwise, the price discount for not achieving that Designed System Requirement or Minimal System Requirement shall be calculated, depending on the rate of non-achieving, as follows:

¹ Stuiver M, Polach HA. 1977. Reporting of ¹⁴C data. *Radiocarbon* 19(3): 355-363.

- 7.13.1. In case that the Designed System Requirement on the above “uncertainty” is not met (i.e. the achieved uncertainty is worse than its Designed value but still better or at least equal to its Minimal value) the price discount [as a percentage of the price for the System] = the rate of non-achieving the particular parameter * the relative weight of the parameter as the evaluation criteria under the tender documentation of the Procurement Procedure;
- 7.13.2. In case that the Minimal System Requirement on the above “uncertainty” is not met (i.e. the achieved uncertainty is worse than its Minimal value) the price discount shall consist of the part according to the letter a) above and the following additional part: If the achieved uncertainty would be equal to its Minimal value the additional part of discount would be 0 % of the price for the System. If the achieved uncertainty is equal or worse than 22 BP the additional part of discount is 50 % of the price for the System. If the achieved uncertainty is between the Minimal value and 22 BP the additional part of discount [percentage of the price for the System] shall be calculated linearly within the scale from 0 % to 50 % of the price for the System based on the particular uncertainty achieved.
- 7.14. Achievement of the Designed System Requirement “uncertainty for measurement of 1 graphite sample prepared from secondary OXAlI (NIST SRM 4990C)” shall be subject to the Acceptance Test as follows:
- 7.14.1. The Contractor shall be entitled to prepare the samples for the test measurement of required radionuclides provided that he informs the Client about their origin and describes in detail the routine used for their preparation. The Client shall be entitled to oversee preparation of the samples and examine their characteristics.
- 7.14.2. Based on sufficient and statistically significant number of samples, the Contractor shall demonstrate that the measured data correspond to the parameters offered in his Bid and that the same data (measurement results) can be measured (achieved) repeatedly. A minimum of 20 samples is prescribed for radiocarbon measurements in order to be sufficiently convincing. For other nuclides this number may be reduced based on well-founded reasons acknowledged by both Parties.
- 7.14.3. The measurement results will be evaluated by a One-Sample Chi-Squared Test on Variance to test whether the standard uncertainty of measurements is equal or less than the standard uncertainty offered in the Contractor’s Bid. Statistical description of the Test is attached in Section 4 of Annex 1.
- 7.14.4. The measurement and evaluation methodology may be further specified by the Client based on well-founded request of the Contractor, while respecting in general the above principle of convincing measurement results and taking into account the R & D aspects as well as other specifics of the technical solution on which the System is based.
- 7.14.5. During the System installation and alignment on the Client’s Site, the Contractor shall be allowed to measure as many samples and make as many test measurements as needed. Once the Contractor is ready to demonstrate the System functionality, the

Contractor shall measure within the measurement for such demonstration the required number of samples on the System and submit the measurement results to the Client for evaluation pursuant to the Acceptance Test. If not passing the Acceptance Test the Contractor may continue to align the System and repeat the measurements as convenient until expiry of the below deadline.

- 7.14.6. The Contractor has to pass the Acceptance Test no later than by the deadline for delivery of the Partial Performance D3 (i.e. "System installation, alignment and validation tests") according to Annex 2. The date of the Acceptance Test may be reasonably postponed by agreement of the Parties based on well-founded reasons, mainly for the purposes of System alignment improvements or solving unexpected issues (including removal of malfunctions if they are not considered "defects").
- 7.15. Till the remedy of defects, the Client shall be entitled to postpone any due payments up to the amount corresponding to the significance of the defects.
- 7.16. Should the Work or its parts have defects which are not apparent at the handover (i.e. hidden defects) the Parties shall follow regulation stipulated in Section 2112 (1), second sentence, of the Civil Code to make claims.
- 7.17. The Parties wish to deviate from provisions of Section 2609 of the Civil Code and agree that the Contractor shall not be authorized to use institutes established therein.

8. PRICE OF THE WORK; INVOICING; PAYMENTS

- 8.1. The price of the Work has been agreed by the Parties as the maximum total non-negotiable price for the execution of the entire Work in the amount of **CZK 66'360'000.00 excluding VAT** (in words sixtysixmillionthreehundredsixtythousand 00/100 Czech *korunas* excluding VAT, hereinafter the "**Price**"). The Price reflects the Contractor's bid price submitted in the Procurement Procedure.
- 8.2. Payments will be invoiced including VAT in accordance with applicable law. The applicable VAT rate is 0 %, the VAT is CZK 0 and the total price including VAT is CZK 66'360'000.00. The Contractor is not a VAT payer with respect to the Czech Republic.
- 8.3. All prices according to this Contract have to be expressed herein as well as invoiced in the same currency which has to be CZK or another currency provided that it is normally convertible to CZK while all payments according hereto shall be paid in CZK. If the price currency expressed in this Contract is other than CZK the price to be paid shall be calculated according to the Czech National Bank foreign exchange middle-market rate valid as of the last day of the deadline for Bid submission in the Procurement Procedure. The relevant exchange rates as fixed quite daily by the Czech National Bank are available (online) at https://www.cnb.cz/en/financial_markets/foreign_exchange_market/exchange_rate_fixing/daily.jsp.
- 8.4. The Price shall cover all of the Contractor's activities executed within the proper

performance of the Work in order to meet all of the Client's requirements hereunder and shall include all of the Contractor's costs associated with the performance of the Work hereunder, including delivery of the System (exempt for unloading on the Client's Site), all travel expenses and expenses related to the stay of the Contractor's employees, any duties, customs, fees, insurance, etc., as well as the costs associated with creation of intellectual property and their protection.

- 8.5. The Parties agreed that the Price will be paid in accordance with Annex 2 hereto. The Parties acknowledge that one or more payments are paid to the Contractor in a pre-payment fashion in which case they include also a portion representing the value of one or more future Partial Performances still to be realized by the Contractor as better detailed in the Schedule under Annex 2 hereto.
- 8.6. **Early payment option:** In the event of the Contractor's delay with delivery of individual Partial Performances, the Client is entitled to pay a part of the funds pertaining to the relevant Partial Performance at the request of the Contractor. This option available to the Client may be exercised at his discretion, and in doing so the Client shall take into account (i) the value of the completed part of the Work and the course of the acceptance procedure; (ii) the Contractor's plan submitted to the Client describing the Contractor's steps for prompt completion of the Partial Performances with which the Contractor may be in delay, as well as other follow-on performance in accordance with Annex 2 as well as any risks associated with late payments in relation to the follow-on Partial Performances. The purpose of this Client's option is to enable the Contractor to proceed with the execution of the Work while maintaining the appropriate standard of public funds management entrusted to the Client in accordance with the so-called "private debtor/creditor" principle.
- 8.7. **Change in the schedule of payments:** At the request of the Contractor, the Client is entitled to unilaterally modify the schedule of payments in Annex 2 effective upon delivery of the modified Annex 2 to the Contractor. The purpose of this Client's option is to enable the Contractor to proceed with the execution of the Work and minimise project risks while maintaining the appropriate standard of public funds management practices entrusted to the Client in accordance with the so-called "private creditor" principle.
- 8.8. The invoices will become mature as specified in Annex 2 (hereinafter the "**Payment Maturity**"). Payment of invoiced amount shall be understood as the date on which it was remitted to the Contractor's account.
- 8.9. Tax documents – invoices issued by the Contractor pursuant to this Contract shall, in accordance with relevant Czech legislation, include in particular the following data:
- 8.9.1. business name / name and registered office of the Client;
- 8.9.2. tax identification number of the Client;
- 8.9.3. business name / name and registered office of the Contractor;
- 8.9.4. tax identification number of the Contractor;

- 8.9.5. serial number of the tax document;
- 8.9.6. scope and subject-matter of performance;
- 8.9.7. date of the tax document;
- 8.9.8. date of the performance or the date of receipt of the payment, whichever happens first, if different from the date of the tax document;
- 8.9.9. Payment Maturity;
- 8.9.10. price of the performance provided;
- 8.9.11. a statement that the invoiced performance is provided for the purposes of the project RAMSES: “Ultra-trace isotope research in social and environmental studies using accelerator mass spectrometry“, Reg. No.: CZ.02.1.01/0.0/0.0/16_019/0000728 (or other relevant project as indicated by the Client); and
- 8.9.12. number of the Client’s order.
- 8.10. Tax documents – invoices shall comply with double taxation treaties, if applicable.
- 8.11. All invoices shall include an annex with detailed breakdowns of the amounts invoiced.
- 8.12. All invoices shall include an annex demonstrating handover and takeover of the performance provided / acceptance certificate signed by the Client and the Contractor.
- 8.13. The last invoice in each calendar year needs to be delivered by the Contractor to the Client by the 15th of December of the respective calendar year.
- 8.14. The Client shall not be obliged to effect payments based on incorrectly issued tax documents – invoices. If the tax document – invoice is not issued in accordance with the payment terms stipulated in the Contract or will not meet the required legal requirements or if it is not delivered to the Client by the date specified above, the Client is entitled to return the tax document – invoice as incomplete or incorrectly issued to the Contractor for completion or for new issue within ten (10) business days after its delivery to the Client. In such a case, the Client shall not be deemed to be in delay with payment of the Price or part thereof, and the Contractor shall issue a corrected invoice with a new identical Payment Maturity period which shall commence running upon the delivery of the corrected or newly issued tax document – invoice to the Client.
- 8.15. The Client’s invoicing data are provided in Article 1.1 hereof.

9. RIGHTS AND OBLIGATIONS OF THE PARTIES

- 9.1. The Contractor undertakes to fulfil all obligations arising herefrom duly, timely and with due professional care in the standard applicable to a world-leading manufacturer performing work of an experimental and developmental nature in the field of Accelerator Mass

Spectrometry and systems using this method for measuring of long-lived radionuclides.

- 9.2. The Client shall, without undue delay, provide the Contractor with all documents, materials or other information which are necessary for the execution of the Work and which the Contractor has reasonably requested from the Client under Article 14.4 hereof, provided that the Contractor has made such request in good time ensuring that the deadlines for execution of the relevant part of the Work can be met.
- 9.3. If there is any delay with submission of the documents, materials or information which the Contractor requested from the Client under Article 9.2 above and the Contractor presumes that such delay (especially with regard to its duration and importance for the current stage of execution of the Work) may lead to delay in the Contractor's delivery within the framework of execution of the Work, the Contractor shall promptly notify the Client thereof. The Contractor shall demonstrate that such a delay may actually lead to delay in delivery in question, otherwise provision of documents will be considered to be made on time, rather than delayed within the meaning of Article 9.7 hereof.
- 9.4. The Contractor shall be obliged to record progress in execution of the Works in reports on an ongoing basis and to submit these reports to the Client for consultation at the working meetings held in accordance herewith, at the request of the Client, in good time before the working meeting for the Client to become properly acquainted with the interim report. If requested by the Client the Contractor is obliged to arrange for the participation of its specialists on the meetings at least on a three (3) month basis via videoconferencing equipment. The Contractor is obliged to inform the Client about the progress of the Work in the form of an electronic message in English at least one week before the date of the meeting. If so required by the Sponsor or the subsidy conditions determined by the Sponsor, the Contractor is obliged to also inform the Client about the progress of the Work every three (3) months in the form of an electronic message sent to the Client's representative pursuant to Article 14 hereof.
- 9.5. In the event of the Contractor's delay with the execution of the Work, the Contractor undertakes to pay to the Client contractual penalty in accordance with Annex 3 hereto. Unless herein stipulated otherwise, the Contractor shall pay any of the contractual penalties charged under this Contract no later than within thirty (30) calendar days from the day, on which the Client enumerated its claim for the contractual penalty.
- 9.6. In the event of the Client's delay with payment of the Price or any part thereof, the Client undertakes to pay the Contractor late payment interest in accordance with Annex 3 hereto.
- 9.7. For the avoidance of any doubt, the Parties agree that during a Party's delay the other Party's liability for delay is excluded; in that case the respective performance deadlines of the latter Party are adequately extended for the period of that delay.
- 9.8. The Client is entitled to offset at any time its claims for the payment of the contractual penalty under this Contract against any claims of the Contractor for the payment of any part of the Price.

- 9.9. The Parties exclude application of Section 2050 of the Civil Code, and agree that the Client, in addition to the contractual penalty hereunder, is also entitled to damages in excess of contractual penalties hereunder actually paid by the Contractor.
- 9.10. If a Party violates any obligation hereunder or if it knows or should know of such violation, that Party shall, without undue delay, notify the other Party which may incur harm to that effect and shall inform it of the possible consequences; in such a case, the injured Party is not entitled to compensation for the harm it could have prevented after the notification.
- 9.11. Under the terms hereof, the Contractor undertakes, in accordance with the Client's instructions and exercising all due professional care, to:
- 9.11.1. archive all documents produced in connection with the execution of the Work, and allow the Client at any time during that period to access to these archived documents for a period of ten (10) years after the end of performance under the Contract, but at least until the year 2033. The Client shall be entitled to take possession of the above documents from the Contractor free of charge after the period of ten (10) years from the end of performance under the Contract;
- 9.11.2. cooperate within the framework of potential financial control procedures pursuant to Act No. 320/2001 Coll., on financial control, as amended, which includes, but is not limited to, allowing the Sponsor or the competent Managing Authority access to the parts of the bid submitted in the Procurement Procedure, Contract, orders, subcontracts for work and related documents that are subject to protection under specific legislation, provided that all legislative requirements for the manner of conducting such controls are met; the Contractor is also obliged to bind its potential subcontractors to fulfilling this obligation;
- 9.11.3. observe and enable observance of any publicity obligations stemming from the rules of the Project and/or relevant Operational Programme; and
- 9.11.4. enable the Client to fulfil its obligations pursuant to the Act on Public Procurement.
- 9.12. The Contractor shall promptly inform the Client about any bankruptcy or insolvency proceedings held under any legal jurisdiction against the Contractor and/or about any relevant documents and/or facts which could lead to the initiation of any such proceedings.

10. PASSAGE OF OWNERSHIP RIGHT AND RISK OF DAMAGE

- 10.1. The ownership right to any part of the Work (including the System) as well as the risk of damage to the thing passes from the Contractor to the Client by the acceptance of that part, upon its handover and takeover at the Site, confirmed by the relevant Acceptance Certificate (OSAT); this fact shall not relieve the Contractor from its liability for damage caused as a consequence of defects of the Work or part thereof.

11. TRAINING AND GUIDING THE CLIENT'S PERSONNEL

- 11.1. The Contractor shall provide the Client's personnel with written guides for maintenance and regular operation of the System as well as with a training in functioning, maintenance and regular operation of the System including training sessions focusing on daily routine and measurements of samples; the measurements will be preferably carried out with respect to the planned measurement time percentage for the individual isotopes as indicated in the Technical Specification. Any provision of such customer support under this Article 11 is included in the Price.
- 11.2. The Contractor shall ensure the training on Site at the Client's facility in the following extent: (i) four (4) weeks during execution of the Partial Performance D3 (System installation, alignment and validation tests, including demonstration of its functioning) and thereupon (ii) additional four (4) weeks within that the Contractor shall keep on Site at least two (2) of its experts/engineers/physicists to supervise and provide technical advice to the Client during the initial phase of System operation upon its commissioning at the Client's facility. The Contractor undertakes to train at least six (6) of the Client's personnel (with the following background/specialisation: engineer, physicist or radionuclide chemist), or more at the discretion of the Contractor. Training activities shall not exceed forty (40) days per trainee (max. 5 days per week and 8 hours per day). Each Party bears its travelling, accommodations, feeding and subsistence expenses.
- 11.3. The Parties may agree on the following modifications to the above training schedule while replacing any 2 or 4 of the above 8 weeks with the following 2 or 4 weeks, respectively:
- 11.3.1. The first two (2) weeks of training will take place at the Contractor's facility during Factory Acceptance Test before System delivery; and/or
- 11.3.2. The last two (2) weeks of training will be carried out within two (2) months upon one (1) month from the On-Site Acceptance Test.
- 11.4. The Contractor has the right to exclude any of the Client's personnel from training for any well-grounded reason, in particular for any unresolved issues relating to safety, health and security on the Client's workplace. Reasons for the exclusion must be specified by the Contractor in writing and delivered to the Client as well as to the member of Client's personnel involved. Should the Contractor exclude any of the Client's personnel from training, the Client shall be entitled to assign, for the purposes of the relevant training, a substitute for each member of its personnel thus excluded. The training already provided to the excluded member does constitute just partly fulfilment of the obligations set forth herein and the Contractor shall be obliged to provide the training in the remaining extent to another member..
- 11.5. The Contractor shall bound its staff to observe all relevant safety rules applicable to the Site and not to disclose any confidential information that they have learned from the Client on Site. The Contractor shall be liable for any breach of confidentiality, damage or injury caused by its staff to the Client, to the Client's property (including the System), the Client's personnel or to any third party during the training.

12. CONFIDENTIALITY, PUBLISHING, PUBLICITY

- 12.1. **Confidential information:** For the purposes of this Contract, confidential information means any data or information which is owned or possessed by one of the Parties and is not generally known to the public, or which has not yet been made available, whether in tangible or intangible form, at any time and place, and which the Party explicitly marks as confidential information or business secret. Examples of such information include:
- 12.1.1. scientific or technical information, inventions, designs, processes, procedures, formulae, improvements, technologies or methods;
 - 12.1.2. concepts, samples, news, data, know-how, progress work, designs, drawings, photographs, development tools, technical data, software, source code, object code, flowcharts and databases;
 - 12.1.3. marketing strategies, plans, financial data or estimates, operations, sales estimates, business plans and performance results relating to past, present or future business activities of the Party or its branches, subsidiaries and affiliates;
 - 12.1.4. business secrets; product or service plans and lists of clients or suppliers; or
 - 12.1.5. any other information that could reasonably be considered confidential by the Parties.
- 12.2. The Parties hereby acknowledge that business secrets / confidential information protected by each of the Parties have been developed and obtained through a considerable effort, and are therefore viewed and held as business secrets / confidential information (hereinafter the "**Confidential Information**").
- 12.3. **Originality:** The Parties have agreed that Confidential Information does not have to be original, unique, patentable, and it does not have to be subject to copyright or constitute a business secret to be classified as Confidential Information and therefore protected.
- 12.4. **Designation:** In case of written documents, information communicated orally, or written documents which are not designated, Confidential Information must be designated as such by notifying the other Party of the confidential nature of the information disclosed. This notification must be made orally, by e-mail or written correspondence or by other appropriate means of communication.
- 12.5. **Notifier and Recipient:** For the purposes of this Contract, the Party that discloses Confidential Information under the terms set forth herein to the other Party is considered the notifier (hereinafter the "**Notifier**"). Similarly, the Party that receives Confidential Information is considered the recipient (hereinafter the "**Recipient**").
- 12.6. **Exclusion of protection:** Notwithstanding the above, Confidential Information excludes information which:

- 12.6.1. is already publicly known at the time of its disclosure by the Notifier to the Recipient or becomes publicly known thereafter without any breach of the terms herein;
 - 12.6.2. was known to the Recipient prior to the disclosure (subject to the provision of appropriate evidence or a written record of such disclosure);
 - 12.6.3. is subsequently legally obtained by the Recipient from a third party;
 - 12.6.4. becomes publicly accessible in a way other than the violation of the Recipient's confidentiality obligation (i.e. other than the result of the Recipient's fault or omission);
 - 12.6.5. is (or was) developed/acquired by employees, advisors or representatives of the Recipient completely independently of its provision stipulated in this Contract (to be sufficiently demonstrated) without violating the provisions hereof or access to any Confidential Information concerning the Parties; or
 - 12.6.6. is or was provided by the Recipient based on a binding and final act of a public authority (including a requirement of control and audit authorities to submit the documents).
- 12.7. **Purpose of disclosure of Confidential Information:** The Notifier, in connection with the exercise of rights and obligations under this Contract or in the context of related negotiations, may provide the Recipient with Confidential Information. The Recipient undertakes to use Confidential Information solely for the purpose intended by the Parties under this Contract and is not entitled to use Confidential Information for any other purpose without the prior written consent of the Notifier.
- 12.8. **Confidentiality obligation:** The Recipient shall not disclose and shall maintain confidentiality of the information received, with the exception of its employees, representatives or agents who need access to Confidential Information for the fulfilment of their obligations in connection with the agreed subject-matter of the Contract. The Recipient shall inform them of the confidentiality of the information received and ensure that they keep confidentiality under the conditions set out in this Contract. The Recipient must ensure compliance with these confidentiality obligations and the prohibition of use contained herein, strictly observe them and assume full responsibility for any acts or omissions concerning and caused by its employees or representatives.
- 12.9. **Publications:** The Parties undertake to not include in their publications any Confidential Information, unless the prior written consent of the Notifier is given for such publication (it is sufficient in the form of data communication, e.g. e-mail, etc.). The Contractor undertakes that as part of its publishing activity concerning the subject-matter of this Contract, it shall provide information about the Project and sources of financing in accordance with the publicity rules applicable to the Project, especially in the Acknowledgments section of the publication. In the publications about the subject-matter of this Contract, the Client undertakes to indicate, in an appropriate manner, the Contractor as the authorized supplier. The Contractor undertakes to adhere to any applicable publicity rules resulting from the binding documentation of the Operational Programme and/or Project. The Parties undertake that in their publishing activities they shall protect the legitimate interests of the

other Party.

13. INTELLECTUAL PROPERTY RIGHTS

- 13.1. If, in connection with the performance of the Contract, the Work or any part thereof constitutes an author's work within the meaning of Act No. 121/2000 Coll., on copyright, on rights related to copyright and amending certain acts, as amended (hereinafter the "**Copyright Act**"), it is a contract work in the sense of Section 61 of the Copyright Act. In this case, the Contractor grants to the Client a royalty-free licence to use the author's work (or part thereof) for the purposes of the Project and other research and educational activities as well as for the purposes of this Contract on the territory of the whole world for the duration of the property rights to author's works, including sub-licence for the purpose of implementing the Project and its follow-up phases.
- 13.2. For the purposes of this Contract, author's works and industrial rights are hereinafter jointly referred to as intellectual property rights. In the event that a work or part thereof is created in connection with the performance of the Contract, and the Contractor is entitled to register such work or part thereof through any of the forms of industrial property rights (i.e. trademark, patent or invention, utility or industrial design, etc.) protected under applicable legislation of the Czech Republic, foreign State or an international or supranational organization, the Contractor shall grant to the Client a royalty-free licence to use the work for the purposes of the Project and other research and educational activities as well as for the purposes of this Contract on the territory of the whole world for the duration of the protection of the relevant industrial property rights, including sub-licence for the purpose of implementing the Project and its follow-up phases. The Client hereby undertakes not to provide the results of the work to third parties without the prior consent of the Contractor.
- 13.3. The licence stipulated in the above paragraphs 1 and 2 of this Article 13 includes:
 - 13.3.1. permission to operate the System at the Client's facility and to use its output for providing operation time to both internal (employees of the Client) and external users (third parties) mainly for experimental purposes, irrespective of contracting and financial arrangement between the Client and the users;
 - 13.3.2. permission to provide necessary technical documents about the System to a third party for the purpose of System maintenance at the Client's facility. Within the documentation handed over to the Client along with the System, the Contractor may specify documents which are irrelevant to the maintenance and, containing description of Contractor's proprietary information, which are not to be disclosed to any third parties;
 - 13.3.3. permission to provide necessary technical documents about the System to a third party in case of repairs and/or future upgrades of the System at the Client's facility. Within the documentation handed over to the Client along with the System, the Contractor may specify documents which are irrelevant to the repairs and/or upgrades and, containing description of Contractor's proprietary information, which are not to be

disclosed to any third parties.

- 13.4. Any provision of documents to third parties foreseen and allowed by the Contractor herein shall be only made based upon a standard non-disclosure agreement signed by the Client and any such third party.
- 13.5. The intellectual property rights according to this Article 13 shall pass to the legal successor of the Client, for the duration of the protection period granted to that particular intellectual property right and/or period of existence of ownership rights to copyrighted work on the territory of the whole world.
- 13.6. The Parties have agreed that the Contractor's fee for granting the licence under paragraphs 1 and 2 of this Article 13 is already reflected and included in the Price under Article 8 of this Contract.
- 13.7. In the event that any intellectual property rights arising hereunder are infringed, their owner is entitled to enforce them with the competent public authorities or bodies. The licensee is obliged to inform the owner of the intellectual property rights without undue delay if the licensee becomes aware of the infringement under the previous sentence.
- 13.8. In the event that the work or part thereof is created as a result of a joint activity of the Contractor and the Client, the two Parties undertake to file a joint application for any intellectual property rights as co-authors.
- 13.9. In the event that any products constituting intellectual property rights are created or co-created by the Contractor under the relevant financial contribution under this Contract is commercialized by the Contractor in the future, the Contractor undertakes to pay to the Client from its own proceeds of such commercialization a share corresponding to the financing rate under this Contract. This provision does not apply if the share of profit so determined does not exceed 0.1 % of the gross proceeds of commercialization.

14. REPRESENTATIVES, NOTIFICATIONS

- 14.1. The Contractor has authorized the following representatives responsible for managing the execution of the Work under the Contract and communicating with the Client:

In technical matters:

- Herrmann Andreas
E-mail:

In project matters:

- Joël Bourquin
E-mail:

In contract matters:

- Joël Bourquin
E-mail:

- 14.2. The Client has authorized these representatives responsible for communicating with the Contractor in the execution of the Work under this Contract:

In technical matters:

- Prof. Ing. Jan Kučera, CSc.
E-mail:

In project matters:

- Ing. Martin Matějka
E-mail:

In contract matters:

- RNDr. Petr Lukáš, CSc.
E-mail:

- 14.3. Unless this Contract provides otherwise, all notifications between the Parties under this Contract must be made in writing and delivered to the other Party by an authorised delivery service, in person (with written confirmation of receipt), by registered mail sent using a postal service provider, or may be made by electronic communication with an electronic signature to the Client at _____ and to the Contractor at _____.

- 14.4. In design, expert or technical matters (e.g. negotiation of the preliminary assessment of part of the Work, claiming the warranty, etc.), electronic communication through the above representatives is permitted.

15. TERMINATION OF CONTRACT, FORCE MAJEURE

- 15.1. This Contract may be terminated by its completion, by agreement of the Parties or by withdrawal from the Contract for reasons specified by law or the Contract.

- 15.2. The Client is entitled to withdraw from this Contract without any sanction if any of the following circumstances occur:

- 15.2.1. the Client is withdrawn from or loses the financial subsidy and/or funding for the implementation of the Project or will not be awarded such subsidy and/or funding;

- 15.2.2. the expenditure or part thereof incurred under this Contract is identified ineligible by

- the Sponsor or any other control body;
- 15.2.3. the Contractor breaches this Contract in a substantial manner;
- 15.2.4. the Contractor is in delay with delivery of any part of Work hereunder for a period exceeding three (3) calendar months, except where the delay has been caused solely by the Client;
- 15.2.5. any of the reports submitted to the Client under this Contract do not meet the technical or other parameters foreseen by this Contract, even after the Client has requested the Contractor twice to meet or supplement them;
- 15.2.6. during execution of the Work it is shown that the System cannot be delivered with at least the Minimal System Requirements stipulated herein and/or to serve for the intended purpose according to hereof;
- 15.2.7. the Work or any part thereof has a material defect (e.g. a defect that prevents the proper use of the System for the intended purpose and/or the System does not meet at least the Minimal System Requirements) and the Contractor fails to remove the defect within the deadlines stipulated herein or it cannot be removed; or
- 15.2.8. should it become apparent that the Contractor is bankrupt and/or insolvency proceedings are initiated or pursued against the Contractor or his assets; or
- 15.2.9. it is shown that the Contractor has provided information or documents during the Procurement Procedure or in its bid which are false and which had or could have had an effect on the result of the Procurement Procedure which led to the conclusion of this Contract.
- 15.3. The Contractor is entitled to withdraw from this Contract without any sanction if any of the following circumstances occur:
- 15.3.1. the Contractor is in delay with delivery of the System hereunder for a period exceeding three (3) calendar months and the results of the Work carried under this Contract demonstrably (to be demonstrated by the Contractor) show that the delay has been caused predominantly by research and development risks related to the System and that the System is, given the present global scientific knowledge, technically not feasible to deliver meeting at least the Minimum Technical Requirements;
- 15.3.2. the Client is in delay with the payment of the Price or part thereof for more than three (3) calendar months after an additional period for the relevant payment specified by the Contractor pursuant to point 1.2 of Annex 3 to this Contract had been provided; or
- 15.3.3. the Client breaches this Contract in a substantial manner.
- 15.4. The Party which is hereunder entitled to withdraw from hereof may withdraw entirely or just with respect to relevant Partial Performance(s). If herein or in the withdrawal not expressly stated otherwise, a withdrawal terminates this Contract entirely. The act of

withdrawal from the Contract shall become effective on the date when the written notification of the withdrawal by one of the Parties is delivered to the other Party, with consequences of the Contract termination effective in the “*ex nunc*” regime.

- 15.5. In the event of termination of this Contract for other reasons than for breach of obligations on the part of the Contractor, the Contractor shall be entitled to get reimbursement for the costs which he accrued in connection with the fulfilment of his obligations hereunder prior to the Contract termination, provided that such costs could demonstrably not be avoided (e.g. by timely cancellation of orders), have not been already paid by the Client within any instalment of the Price and are not covered from other sources (e.g. by insurance). Under the same conditions and where not included in the previous reimbursement, the Contractor shall be entitled to the portion of Price for the part of the Work actually delivered to the Client pursuant to the Contract prior to and/or within one (1) month upon the Contract termination. Alternatively to the above reimbursement with respect to unsupplied parts of the Work and provided that the Client’s termination of this Contract does cancel the Contractor’s obligation to deliver the System to the Client, the Contractor may choose to apply a flat rate cancellation fee determined as follows:
 - 15.5.1. In case of termination (cancellation) one month before the scheduled delivery of the System, the cancellation fee shall be 80 % of the Price for the delivery of the System.
 - 15.5.2. In case of termination (cancellation) within the first month upon Contract conclusion the cancellation fee shall be 0 %.
 - 15.5.3. In case of termination (cancellation) between the first month upon Contract conclusion and the last month before the scheduled delivery of the System this flat rate should be proportionally decreased with respect to the day of termination (cancellation) within the framework between the first day of the second month upon Contract conclusion and the first day of the last month of the scheduled delivery of the System.
- 15.6. In other events of termination of this Contract, the Contractor shall not be entitled to any reimbursement but to the portion of Price for the part of the Work actually delivered to the Client pursuant to the Contract prior to the Contract termination. In any event, things, rights and any other values whose price was paid for by the Client to the Contractor according to this provision shall pass, by payment, into the ownership of the Client, and the Contractor shall be obliged to allow the Client to dispose with such accordingly. The Parties shall strive and cooperate to avoid or minimize further cost that might arise as a consequence of the Contract termination (e.g. to cancel orders etc.).
- 15.7. Circumstances excluding liability are considered to include an obstacle that has occurred independently of the will of the obligated Party and prevents it from fulfilling its obligation, unless it can be reasonably assumed that the obligated Party could have averted or overcome such an obstacle or its consequences and, in addition, that it could have anticipated this obstacle upon the creation of the obligation (hereinafter the “**Force Majeure**”). Liability is not excluded by an obstacle which occurred only when the obligated Party was in delay with fulfilling its duty or arose out of its economic circumstances. Effects excluding liability are limited only to the duration of the obstacle with which these effects

are associated. Force Majeure under this Contract does not include the Contractor's research and development risks in the execution of the Work.

- 15.8. In the event that a Party considers a situation to be an event of Force Majeure and the situation may affect the fulfilment of its obligations, it shall promptly notify the other Party and shall endeavour to continue to fulfil its obligations to the extent reasonably possible. At the same time, such Party shall notify the other Party of all proposals, including any alternative means of performance, but shall not proceed to provide such alternative means of performance without the consent of the other Party.
- 15.9. If case of Force Majeure, the deadlines stipulated in the Contract will be extended for a period corresponding to the duration of a Force Majeure event.

16. GOVERNING LAW, DISPUTE SETTLEMENT

- 16.1. This Contract and any and all legal relationships arising there from are governed by the laws of the Czech Republic.
- 16.2. The Parties acknowledge that areas not expressly regulated by this Contract are governed by the relevant provisions of the Civil Code (Act No. 89/2012 Coll., as amended).
- 16.3. Any and all disputes arising out of this Contract or legal relationships related thereto shall be settled by mutual negotiation between the Parties. If a dispute cannot be settled amicably by negotiation within sixty (60) days, such a dispute shall be decided by the competent court in the Czech Republic having jurisdiction according to the registered office of the Client based on application of any of the Parties.

17. TRANSITIONAL AND FINAL PROVISIONS

- 17.1. This Contract constitutes the complete and comprehensive agreement between the Client and the Contractor.
- 17.2. The Contractor shall not be entitled to transfer rights and duties from this Contract or its part on third parties, to transfer its claims against the Client that arose on the basis or in connection with this Contract on third parties, nor to set off any of its claims or his debtor's claims against the Client's claims.
- 17.3. If any Party breaches any duty under this Contract and knows or should have known about such breach, the Party shall notify and warn the other Party of possible consequences.
- 17.4. If any provision of this Contract becomes or is declared null, ineffective, non-existent or unenforceable, then such nullity, ineffectiveness, non-existence or unenforceability shall not make the Contract null, ineffective, non-existent or unenforceable as a whole. In such a case, the Parties shall without undue delay clarify such a defective provision within the meaning of Section 553 (2) of the Civil Code, or replace it, to the extent permitted by the

applicable laws, by mutual agreement with a new provision, whose meaning is as close as possible to the intention of the Parties at the conclusion of this Contract.

- 17.5. This Contract becomes valid on the date of its signature by the authorised persons of both Parties and effective on the date of its publication in the Register of Contracts.
- 17.6. This Contract may be changed or supplemented solely by means of written numbered amendments, indicating time and place of conclusion, and signed by duly authorized representatives of the Parties. Within the meaning of Section 564 of the Civil Code, the Parties expressly exclude the possibility to amend the Contract by any other means in any different form.
- 17.7. This Contract is made in the English language and executed in four (4) counterparts each of which is deemed original. Each of the Parties shall receive two (2) counterparts.

In witness of the agreement with all the contents of the Contract, the Parties attach their signatures:

In Řež on _____

In Dietikon on February 06, 2019

On behalf of: the Client

On behalf of: the Contractor

Joël Bourquin

Name: RNDr. Petr Lukáš, CSc.
Position: Director

Name: **Joël Bourquin**
Position: **CEO**

Annex 1

Technical Specifications

1. Description of the System

Multi-isotope AMS system.

The AMS system consists of a low energy (LE) part, a tandem accelerator, and a high energy (HE) part with a detection system. For purposes of this tender, the three parts are described as follows:

- LE part in minimal configuration includes ion source, LE magnet with bouncer, and necessary components and ion optics elements allowing selection and monitoring of negative ion beam from ion source with desired mass and charge (in a reproducible way).
- Tandem accelerator has a terminal voltage up to 1 MV and a gas stripper.
- HE part in minimal configuration is made up from HE analysing magnet, electrostatic analyser, HE low background magnet, necessary ion optics for ion beam shaping and monitoring, and ion detection system.
- The LE magnet, accelerator and the HE analysing magnet are in a linear configuration, i.e., the beam exits the accelerator without any designed bending (relative to the direction of the primary beam entering the accelerator) caused by additional device introduced between the stripper and the HE analysing magnet.

Other parts of the system, which are not in contradiction to the above-mentioned ones, may be subject to change in order to design the machine that fulfil all requested technical criteria and detection limits.

2. Minimal System Requirements

Scope of radionuclides to be measured	^{14}C , ^{10}Be , ^{41}Ca , ^{26}Al , ^{129}I Actinides (isotopes of U and Pu)
Upper limit of the terminal voltage	1 MV
Maximum Dimensions	To fit into room 8.5 m x 12 m
Heaviest Part Weight (maximum lifting crane capacity)	4 t
AMS System Weight Restrictions	Maximum floor load 6 t/m ²
Minimal background isotope ratios proved on an AMS system to be delivered or a very similar system (specify)	$^{10}\text{Be}/^9\text{Be}$: 2×10^{-15} . $^{14}\text{C}/^{12}\text{C}$: 2×10^{-15} $^{41}\text{Ca}/\text{Ca}$: 5×10^{-12} $^{26}\text{Al}/^{27}\text{Al}$: 1×10^{-14} $^{129}\text{I}/^{127}\text{I}$: 2×10^{-13} $^{236}\text{U}/^{238}\text{U}$: 8×10^{-11} $^{239}\text{Pu}/^{238}\text{U} < 10^{-10}$

Stripping gas	He
Possibility to switch to other gases	Yes, within several hours
Limiting uncertainty for measurement of 1 target graphite sample prepared from secondary OXAII (NIST SRM 4990C)	≤ 15 BP (1 sigma)
Ion Source Capability	Solid samples for all isotopes, and CO₂ samples for ¹⁴C. Interface for CO₂ producing devices has to be present.
Complete Design Measurement System	Metric (SI units)
Software and IP Capabilities	Possibility to connect user auxiliary modules, free of charge SW updates for the whole duration of the Project
Possibility to switch between isotopes	1 person in less than 8 hours
Maximum delivery time of the AMS system	18 months from the date of order + 2 months for installation

3. Designed System Requirements

This part contains the Designed System Requirements exceeding the Minimal System Requirements. The Designed System Requirements referred herein are the Guaranteed System and Operation Specifications as offered by the Contactor within his bid in the Evaluation Sheet which shall constitute an attachment hereto.

4. One-Sample Chi-Squared Test on Variance

The test whether the standard deviation of X_i , σ , is lower or equal to the standard uncertainty of measurement promised in the bid, σ_0 , against the alternative $\sigma > \sigma_0$ (measurement error is worse than promised) is realized as One-Sample Chi-Squared Test on Variance. We reject the hypothesis $\sigma \leq \sigma_0$ if

$$S_n^2 > \frac{\sigma_0^2 \chi_{n-1}^2(1-\alpha)}{n-1},$$

where

$$S_n = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (X_i - \bar{X}_n)^2}$$

and X_i is the i -th testing measurement, \bar{X}_n is arithmetic mean of n measurements, $\chi_{n-1}^2(p)$ denotes p -quantile of Chi-square distribution with $n-1$ degrees of freedom. For this purpose, we choose $\alpha = 0.05$. The quantiles for sample sizes $n = 20, 30, 40, 50$ are shown in Table 1.

Table 1: Quantiles of Chi-square distribution.

$\chi_{19}^2(0.95)$	$\chi_{29}^2(0.95)$	$\chi_{39}^2(0.95)$	$\chi_{49}^2(0.95)$
30.14353	42.55697	54.57223	66.33865

5. Description of the Contractor's offered solution, including System operation, maintenance, regular components replacements, software and connections to interfaces etc.

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Annex 2
Schedule of Deliveries and Payments

Id.	Partial Performance	Delivery date	Payment % of the Price under Article 8.1	Payment date
D1	Detailed engineering design of the System	Upon Contract signature	30 %	Upon acceptance
D2	Manufacturing and delivery of the System	In 18 months after Contract signature	60 %	Upon acceptance
D3	System installation, alignment and validation tests	In 2 months after System delivery	10 %	Upon acceptance

Annex 3

Incentive Tools and Tools to Reduce and Eliminate Risks

1. Motivation mechanisms

1.1. Contractual penalty – Contractor's delay

1.1.1. **Basic rate of contractual penalty:** The basic rate of contractual penalty for delay with any Partial Performance is 0.05 % of the Price for the System under Article 8.1 hereof for each day of delay after the expiry of an additional period of thirty (30) days specified in the Client's written request.

1.1.2. **Contractual penalty after reaching 7.5 % of the total Price:** From the day when the total amount of contractual penalties for delay with Partial Performance(s) which the Client became entitled to claim from the Contractor under this Contract reaches 7.5 % of the Price for the System under Article 8.1 hereof, a reduced contractual penalty of CZK 2,000 is charged for each day of delay.

1.1.3. The contractual penalty for delay with Partial Performance(s) is charged by the Client on a continuous basis, as the Client becomes entitled to it under this Contract. However, the payment of the contractual penalty is postponed to the scheduled date of the last payment of the price for the Partial Performance(s) under the Schedule of Deliveries and Payments, unless it is obvious that the last payment is not sufficient to cover the contractual penalty to which the Client has become entitled under this Contract.

1.2. **Late payment interest of the Client:** The rate of late payment interest concerning the Client's delay with the payment of the Price or any part thereof is 0.02 % of the due part of the Price for each day of delay after the expiry of an additional time limit of thirty (30) days specified by the Contractor in a written request.

1.3. **Liability for damage:** The Parties are mutually liable for any damage caused by breach of this Contract. The compensation for damage is limited to 100 % of the Price.

2. Risk minimization tools

2.1. **Project implementation plan:** The Contractor is obliged to conduct and periodically evaluate a project implementation plan and inform the Client of any material facts and events having but a potential negative effect on the execution of the Work under this Contract.

2.2. **Risk minimization plan:** The Contractor is obliged to conduct and periodically evaluate a risk minimization plan and inform the Client of any material facts and events having but a potential effect on the possible increase or activation of risks.

2.3. **Separate accounting records:** The Contractor is obliged to keep reasonable separate

accounting records of the costs of execution of the Work and use the means of ongoing financing according to the Schedule of Payments exclusively in connection with the execution of the Work, and the Client acknowledges that within the execution of the Work, in addition to direct and indirect costs, the Contractor also covers the profit and risk items with regard to the experimental nature of the supply. This provision does not impose an obligation on the Contractor to report these items to the Client or control bodies.

- 2.4. **Insurance:** The Contractor is obliged to ensure adequate insurance of the System components/materials during the period of storage at the Contractor's premises, the coverage being equivalent to their value under standard conditions. Furthermore, the Contractor is obliged to maintain general third-party liability insurance for the duration of the execution of the Work, the coverage being equivalent to the value of the System. Additionally, the Contractor is obliged to take out risk insurance with the same coverage for the transport of the System to the Site until its handover to the Client.
- 2.5. **Bank guarantee:** The Contractor is obliged to provide the Client with a Bank Guarantee or Standby Letter of Credit for thirty percent (30 %) of the Price of the System for the delivery period as specified in the Contractor's bid.
- 2.6. Warranty
- 2.6.1. The Work has defects if the execution of the Work or its part does not correspond to the result set forth in this Contract.
- 2.6.2. The Contractor is liable for any defects in the Work or its part at the time of its handover and takeover, and is also liable for any defects in the Work found during the entire warranty period (quality warranty).
- 2.6.3. The Contractor provides a quality warranty on any part of the Work, including the System, of twelve (12) months.
- 2.6.4. The warranty period for each part of the Work shall commence on the day of its handover and takeover confirmed by the corresponding Acceptance Certificate signed by both Parties; the warranty period for the entire System shall commence upon such acceptance of the final Partial Performance (i.e. Installation, alignment and validation tests of the System). If the Acceptance Certificate lists any deficiencies the warranty period shall begin on the day which follows the day in which the last deficiency will be removed.
- 2.6.5. The Contractor shall pass any existing components warranty to the Client. If on the warranty list or other document submitted by the Contractor the warranty period is of longer duration, then this longer warranty period shall have priority over the period stated in this Contract.
- 2.6.6. The Client shall request the Contractor to remove the defects of the Work or a part thereof during the warranty period in writing without undue delay upon their discovery, but no later than on the last day of the warranty period (hereinafter the

“Claim”). Even a Claim asserted by the Client on the last day of the warranty period is considered to have been asserted in due time.

- 2.6.7. The Contractor undertakes to examine the Claim, notify the Client of whether or not it accepts the Claim, and provide in writing the suggested method and deadline for the removal of the defect within two (2) weeks from the delivery of the Claim by the Client.
- 2.6.8. The Contractor undertakes to gratuitously remove any defects of the Work or a part thereof without undue delay and shall bear all the expenses related with removal of the defects. The deadline for the removal of the defect shall be one (1) month from the delivery of the Claim, unless the Parties agree otherwise; which they shall do if the nature of the defect does not permit removal within that deadline.
- 2.6.9. The Contractor is obliged to remove the defects of the Work within the specified time limit, even if it believes that it is not liable for the defects. The costs of removing the defects in these disputed cases shall be borne by the Contractor until the clarification or resolution of the conflict.
- 2.6.10. The Parties shall make a report concerning the removal of the claimed defect which will confirm such removal. The warranty period is extended by the period that elapsed between the assertion of the claim and the removal of the defect.
- 2.6.11. In case that the Contractor does not remove the defect within the stipulated deadline or if the Contractor refuses to remove the defect, then the Client shall be entitled either to claim a reasonable discount from the Price or to remove the defect at its own costs and the Contractor shall provide discount/reimburse these costs within one (1) month after the Client’s request to do so. In such a case the existing warranty remains intact.
- 2.6.12. The acts of the Parties constitute claims hereunder if they are made in writing or by electronic communication by one of the representatives of the Party concerned under the Contract to the address of the other Party.
- 2.6.13. Storage and usage of delivered parts of the Work and System maintenance at the Site must be done by the Client pursuant to the Contractor’s instructions. In the event of non-compliance, the Client is no longer entitled to claim quality warranty.