

Contract

Concerning

Field Emission Gun Scanning Electron Microscope with Automated Mineralogy Software

between

The Geological Survey of Denmark and Greenland
(in the following referred to as "Customer/GEUS")

and

[...]

[...]

[...]

CVR.nr. [...]

(in the following referred to as Supplier)

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1. BACKGROUND AND PURPOSE

This contract has been concluded between the Parties after advertising a prior invitation to tender in the EU Official Journal, see notice of invitation to tender no. *EUTS 2017/S 071-134374 / 2017-047231*.

The contract aims to regulate the cooperation between the Supplier and Customer on the purchase of a Field Emission Gun Scanning Electron Microscope with automated mineralogy software.

2. DEFINITIONS

Working day means Monday to Friday excluding public holidays, Christmas Eve, New Year's Eve and Constitution Day.

Day means calendar day.

Contract means this contract and appendices along with all subsequent amendments and supplements.

Contract Price shall mean the price defined in Appendix 5 and shall include adjustments made in accordance with the Contract.

Deliverables shall mean the products and services defined in Appendix 1

Delivery shall mean the physical handing over of products from the Supplier to GEUS or the Supplier's performance of services.

Acceptance test shall mean that the Scanning Electron Microscope instrument and software are investigated by the Customer for their satisfactory functioning according to the requirements given in Appendix 1 and 2.

Acquisition date means the day where the Customer accepts the Delivery after successful installation and initial Training by the Supplier's delegate.

"Fit for Purpose" shall mean that all the Deliverables are in the condition set out in the Contract, cf. also Appendix 2, thereby ensuring that GEUS's purpose of acquiring the Deliverables, at the time entering into the Contract, can be achieved.

Training shall mean the execution of learning activities to GEUS's personnel regarding their trade in order to improve their academic and skill proficiency with respect to the Deliverables.

Warranty shall mean a guarantee from the Supplier whereby the Supplier undertakes to repair or replace the Deliverables or parts thereof; or in case of Training, to renew the necessary Training sessions, at no extra cost to GEUS, cf. clause 13, when the Deliverables do not conform to all the requirements of the Contract.

3. SUPPLIERS SERVICES

3.1 Scope of delivery

The Supplier is obligated to deliver the products that are stated in the Appendix 2 according to the specifications in Appendix 1.

The Supplier must carry out the tasks described and meet the requirements in the Contract, stated in Appendix 1, 2, and 4 and other tasks that are a natural part of it.

In summary: GEUS wishes to buy a variable pressure field emission gun Scanning Electron Microscope that is suitable for reservoir studies, mining, and general geosciences applications. The Scanning Electron Microscope must contain automated mineralogy analysis software suitable for loose particulate material embedded in epoxy, as well as for the analysis of minerals surrounded by neighbouring grains in polished sections, and must hold Secondary Electrons, Back Scattered-contrast Electrons, Energy Dispersive Spectrometry, Electron Back-Scatter Diffraction and Cathodoluminescence detectors. The Deliverables include Training, and furthermore service and maintenance for 5 years.

The Supplier has, prior to signing of the Contract, prepared the Supplier's solution description (Appendix 2), where the Supplier has further described how the services will be performed and how the requirements of the Customer's task description and requirement specifications Appendix 1 will be met. The Supplier's solution description (Appendix 2) may not lead to the fact that requirements or descriptions in the Customer's task description and requirement specifications Appendix 1 are not met.

If, during the time period covered by the Contract, cf. clause 22.1, doubt arises as to the scope of the task, the Supplier is obligated to immediately notify the Customer in writing thereof.

The Supplier is during the Contract obligated to ensure that the supply is delivered in time and in accordance with the Contract in general.

3.2 Documentation

The Supplier must provide the necessary Documentation to the use and daily maintenance of the delivery.

The Documentation is specified in Appendix 1 and 2, including an indication of the documentation the Supplier must deliver together with the Deliverable as part of the acceptance test. Unless otherwise is stated in Appendix 2 all Documentation must be provided and approved latest at the Acceptance date.

The Documentation must be designed in accordance with the best industry practices and fulfil the Contractually defined requirements see Appendix 1.

If the Supplier carries out changes to the Deliverable, including in the course of maintenance, the Documentation provided must be changed at the same time, to ensure that the Documentation continues to satisfy the said requirements. The same shall apply to Option in clause 7.

The Supplier must ensure the set-up of test protocols to monitor the performance of the instrument and writes a report on instruments performance to GEUS regarding the status on the acceptance day for the instrument.

The Supplier must supply GEUS with at least two copies of the user manuals for the instrument. If in relation to a software update new user manuals will become available, GEUS will receive new copies free of charge.

4. THE SUPPLIER'S DELIVERIES

4.1 Quality of Delivery

The Supplier shall ensure and warrant that any Deliverables provided under the Contract are Fit for Purpose as specified in the Contract, including the recitals and clause 3.1.

If the Contract does not stipulate a specific standard of design, development, or production, the Supplier shall apply best industry practice relevant to the Deliverables.

4.2 Supplier's staffing, Cooperation organisation and Customer's involvement

The Supplier is obliged throughout the duration of the Contract to maintain the necessary capacity and knowledge of its staffing in the performance of the task. The Supplier must ensure that the necessary resources will be provided at all times for the fulfilment of the Contract. The Supplier must ensure that all persons necessary producing, installing, servicing and maintaining the instrument, as well as being responsible for teaching and instruction have been sufficiently educated to perform their job. The Supplier must ensure as well that the persons responsible for Training have a relevant background.

The Supplier must, for the continuity and the quality of work as far as possible, avoid the replacement of persons assigned to the task. If replacing an assigned person, the new employee must have at least the same qualifications as the replaced person. The replacement must not incur costs for the Customer and may not lead to delays in the fulfilment of the Contract.

If the Supplier does not deliver according to the requirement in Appendix 1 and Appendix 2 with adequate quality and in compliance with agreed deadlines, the Supplier must adjust the staffing of the task. The Supplier must, upon the Customer's request, replace an assigned person if the Customer's request is reasonably justified.

The Supplier can expect that the Customer provides a suitable room for the Deliverable and ascertains its accessibility. The Customer is reasonably available to answer the Suppliers's questions related to the installation of the Deliverable.

4.3 Training

The tenderer offers at least 7 days of Training.

Two of these days (initial teaching) are given within one month of the Delivery of the instrument, preferentially though immediately following the installation of the instrument. Initial teaching (2 days) includes A) the basic operation of the instrument for technicians and scientists, including basic functions of the instrument, imaging, SE, BSE, EDS, CL, automated particle analysis, B) introduction into automated mineralogy software for geologists, C) introduction into EBSD for geologists.

Advanced teaching (5 days that can be divided over one to four periods) will be given during the first two year after installation of the instrument. Of these at least one day is dedicated to basic operations of the instrument including imaging, SE, BSE, EDS, CL, automated particle analysis. At least one day is dedicated to the automated mineralogy software, and at least one day is dedicated to EBSD training.

Initial Training and Advanced Training are specified in Appendix 1 and 2. All Training must be completed within 2 years.

In case of major changes in the software the Supplier offers additional training free of charge.

All Training must be given on-site. Change of the Training site may only occur after previous written permission by GEUS. Up to six persons may be present for education at the same time. Travelling costs during the Training sessions are covered by the Supplier.

5. DELIVERY

5.1 Place of delivery

Deliveries upon fulfilment of the Contract must be delivered to the Customer's address. Rigersgade 13, 1316 Copenhagen K.

5.2 Import and Export

5.2.1 *Import Procedures, Customs Duty and Costs of Delivery*

As an integral part of the obligations of the Contract and within the Contract Price, the Supplier shall, if relevant, arrange customs entry and the payment of (i) any customs duties applicable to the Deliverables, (ii) any transportation costs, etc., in order to deliver the Deliverables at the place set out in clause 5.1

GEUS shall not be liable to reimburse the Supplier for any fines or penalties imposed on the Supplier under Danish customs legislation in force from time to time for any offence under such legislation, unless the offence is attributable to GEUS.

Upon request from the Supplier, GEUS will give the Supplier reasonable assistance; e.g. sign documents and confirm applications for approval, etc., required to facilitate the provision of an import license or other approval. However, this shall not in any way limit the full responsibility that rests with the Supplier to take all reasonable steps to ensure the provision of any import license or approval required for the Deliverables.

5.2.2 *Taxes, Customs Duties and Other Government Charges Payable*

All taxes, duties and government charges imposed or levied in connection with the Contract, however exclusive of Danish VAT (*in Danish: Moms*) shall be paid by the Supplier and shall be considered included in the Contract Price.

The Supplier shall submit all invoices inclusive of Danish VAT, if applicable, and shall if the Deliverables in question are subject to VAT specify in the invoice how the VAT is calculated.

5.2.3 Export Procedures

Prior to Delivery of the Deliverables and any part(s) thereof as the case may be, the Supplier shall, if relevant, obtain all necessary valid export licenses and / or other approvals to meet the requirements of the Contract.

Upon request from GEUS the Supplier shall provide a copy of any export license or other export approval relevant for the Deliverables under the Contract, or proof that such license or approval has been obtained.

Upon request from the Supplier, GEUS will give the Supplier reasonable assistance; e.g. sign documents and confirm applications for approval, etc., required to facilitate the provision of an export license or other approval and end-user certificates. However, this shall not in any way limit the full responsibility that rests with the Supplier to take all reasonable steps to ensure the provision of any export license, end-user certificate or approval required for the Deliverables.

The Supplier shall furthermore monitor all necessary transport of the Deliverables to ensure that the export and import procedures conform to schedule so as to further ensure the timely Delivery of the Deliverables.

5.3 Time of the Delivery

The new instrument is delivered at GEUS, Rigersgade 13, 1316 Copenhagen K, within 3 months after the signing of the contract. The instrument is installed within one month after delivery. Initial on-site Training takes place in the same first month after installation. Successful installation and initial Training are requirements for acceptance of the Deliverable.

6. TESTING

Testing of the Deliverable shall consist of an acceptance test.

After a test has been passed, the customer shall sign the approval form and return this to the supplier without undue delay.

No review, commenting or approval on the part of the customer of any test can be taken as an implication of a change of the requirements that may be made under the present contract.

6.1 Acceptance test

The purpose of the acceptance test is primarily to determine whether the agreed functionality is present. The acceptance test shall be conducted by the supplier with the customer's active participation. During the acceptance test, the correct functioning of all software programs and hardware of the Deliverable are investigated individually for faultless performance and Delivery according to Appendix 1 and 2.

If the customer approves the acceptance test with observed defects, these shall be specified in a list of defects. The customer shall only be under the obligation to approve the service level test when such defects have been remedied in all essentials.

In case the acceptance test does not fulfil the requirements in Appendix 1 and 2 and consequently cannot be approved, the supplier shall be entitled, subject to a notice of at least five working days, to repeat the full test until the customer might cancel the contract according to the terms for this.

In case the customer puts the entire Deliverable or parts thereof into use before the acceptance test in order to handle the customer's business activities, the supplier shall be entitled to request the customer in writing to stop such use. In case the customer does not comply with the request within 20 working days, such parts of the Deliverable that have been put into use shall be considered accepted by the customer.

The supplier's obligations to maintain the entire Deliverable or parts thereof, including providing telephone support etc., shall enter into force only upon the customer's approval of the acceptance test, notwithstanding commencement of use by the customer at an earlier stage.

At least two days of Initial Training, as specified in Appendix 1 and 2 are required before the acceptance test can be performed, as specified in clause 4.

The service contract is valid for 5 years after acceptance of the installed instrument.

7. OPTIONS

The customer may order the options specified in Appendix 4 to be delivered simultaneously with the Deliverable and as part thereof as well as during the entire period covered by the Maintenance and Support agreement (Appendix 4). The customer's orders shall be placed within the relevant time limits specified in Appendix 4. In case the customer orders one of the options in due time, the items covered by the option shall become part of the system and shall be dealt with in every respect as if they had been included in the contract originally as part of the system, also with regard to testing, agreed acceptance date and system price, unless otherwise specified in Appendix 4.

8. DEPLOYMENT

The delivery can be deployed by the Customer from the date of installation.

The Supplier is committed to maintain the delivery when the Customer has accepted the delivery, even if the Customer has not yet taken the delivery in use.

9. MAINTENANCE AND SUPPORT

The Supplier undertakes to provide maintenance and support in respect of the Delivery as from the Acceptance Date.

The actual scope of maintenance and support as well as the provision thereof are specified in Appendix 4. Maintenance of Software invariably includes the associated Documentation, cf. clause 3.2

In case of Deployment of an approved Partial Delivery before the Acceptance Date, the Supplier must provide maintenance and support in respect of the Partial Delivery as stated in Appendix 4. The Customer will pay fees for maintenance and support prior to the Acceptance Date as stated in Appendix 4.

The Customer is not obligated to make updates by way of new Versions. If any such update is a condition for the Supplier's achievement of service level goals, this will be set out in Appendix 4, stating the maximum number of Versions with which the Customer may be in arrears. Also, any such update may be a condition for the Supplier's duty to take corrective action in pursuance of the maintenance plan, cf.

clause 9.1.

The Supplier must provide GEUS with at least two new copies of the relevant user manuals after a software update, conf. Appendix 1, paragraph 2.1, requirement 3.

Maintenance must be provided in accordance with Best IT Practice and Best Industry Practice by qualified personnel with knowledge of the Delivery. When providing maintenance and support, the Supplier must achieve the maturity level stated by the Supplier, cf. Appendix 2.

9.1 Maintenance plan time limits

Time limits for the Supplier's commencement of corrective action are set out in Appendix 2 and Appendix 4

The classification of a Fault depends, in particular, upon whether the Fault is critical to the performance of the Customer's tasks, and whether the Fault may be worked around. Work-around means, e.g., use of other and/or additional entries or functions and the Customer's use of changed work processes.

Faults are classified jointly by the Parties in connection with the Customer's report on the Fault. In case of disagreement as to classification of the Fault, the provisions of clause 13 will apply. Pending a resolution of the disagreement as to the reported Fault, the Supplier must remedy the Fault in relation to the Customer's classification.

The time limits for commenced and completed corrective action start to run on the date when the Supplier has received the Customer's exhaustive complaint, until the date when the Supplier has commenced corrective action or has remedied the Fault and has notified the Customer accordingly, respectively, cf. Appendix 4. If the Supplier uses remote diagnosis by agreement with the Customer, any corrective action will be deemed to have been commenced at the date when the Supplier has established or attempted to establish the agreed connection.

9.2 Performance

Corrective action and other maintenance work must be planned and performed so as to cause the least possible inconvenience to the Customer.

In case of maintenance work carried out at the Supplier's instance, and where it has not been determined in advance when the Supplier is to carry out maintenance, the Customer must, if possible, be given not less than 10 Working Days' prior notice thereof, cf. Appendix 4.

The Customer may demand that maintenance work be carried out outside the Customer's business hours. In that case, the Customer will pay an additional charge in accordance with Appendix 4, irrespective of the cause of the maintenance work.

If maintenance work requires the Customer's use to be interrupted in full or in part, the Supplier must obtain prior permission from the Customer to do so. If the Customer refuses to grant such permission immediately following the Supplier's request, this shall be deemed to constitute a postponement of the maintenance work in question at the Customer's request. If the postponed maintenance gives rise to a failure to achieve service level goals, cf. Appendix 4, or any other requirements, the Supplier will not be liable therefor during the postponement of the maintenance.

In the course of corrective action, the Supplier must keep the Customer informed of the progress thereof on a daily basis.

10. REGULATORY REQUIREMENTS, LABOUR CLAUSE AND CSR

The Supplier guarantees that the Supplier's services meet all relevant regulatory requirements that exist at the time of the signing of the Contract and later.

The Supplier must provide services in accordance with the Appendix 3 stated requirements for the labour clause and CSR.

11. REMUNERATION

11.1 General

Remuneration is listed in Danish kroner in Appendix 2 and Appendix 5 and includes all the applicable taxes except for VAT upon concluding the Contract. If the applicable Danish duties or taxes are changed, the prices must be adjusted in accordance with the net change in these so that it does not affect the Supplier.

The Supplier's remuneration is not adjusted during the contract period.

The price quoted in Appendix 5 includes all the Supplier's costs, including any expenses for office supplies and materials, etc. The price must include all costs payable by GEUS to the Supplier, including, fees, expenditure, licenses, hardware, software, transport, installation and Training and travelling for Supplier's delegates. The Supplier is not entitled to additional remuneration other than what is stated in this Contract.

11.2 Deliverable payment

The delivery payment represents payment for all services included in the Deliverable, other than the following amounts: Remuneration payable on the basis for maintenance and support, cf. clause 7 and Appendix 4.

For any changes, including Options, to be delivered as a Separate Task, cf. Appendix 4, a separate delivery payment will be fixed.

For the purpose of calculating the Deliverable payment according to clause 11.2, as well as any remuneration for services payable on the basis of hourly rates at the latest approved estimate, will be included, except for maintenance and support.

11.3 Remuneration for maintenance and support

Remuneration for maintenance and support are regulated in Appendix 4 and 5

The remuneration will be payable from the Acceptance Date, to be adjusted according to the guidelines in this Contract cf. clause 12.1.

12. INVOICING AND PAYMENT TERMS

Invoicing must be in accordance with current regulations on electronic settlement with public authorities.

The Customer is committed to pay the remuneration to the Supplier according to Appendix 5.

12.1 Terms of payment

The Customer shall pay the delivery payment in accordance with the payment schedule in Appendix 5, provided that the Supplier has delivered the services stipulated in Appendix 1 by the date of invoicing. In the case of changes, including Options, to be delivered as a Separate Task, the payment will be made subject to the same conditions according to a separate payment schedule and time schedule.

If any Faults are found during the acceptance tests which do not prevent approval of the acceptance test, 20 % of the amount payable upon approval of the test will be withheld until the Faults have been remedied, or the list of Faults has otherwise been closed by agreement between the Parties.

Fees for maintenance and support will be payable by the Customer as stipulated in Appendix 5.

Services remunerated on an hourly basis will be payable monthly in arrears. Payment will be withheld to the extent that the total amounts payable for a service up to and including the month in question exceed 80 % of total estimated payments until that time. Any outstanding amount will be paid on the Acceptance Date.

However, the Customer is under no obligation to pay until after 60 calendar days from receipt of a satisfactory invoice.

13. WARRANTY

The Supplier guarantees that the delivered SEM instrument meets all requirements under Appendix 1 and 2 as well as requirements of Best Practice within the industry, and that the services will be performed at a professional and qualified level that the Customer with justification can expect under the Contract.

Warranty, service, installation:

The tenderer offers 2 years of warranty, with all service and spare parts included. During the warranty period all costs related to the warranty are burdened upon the tenderer, excluding consumables. However, consumables will be replaced without cost during the warranty time.

The tenderer makes sure that Deliverables are running for at least 5 years, provided that GEUS signs a service contract. This includes the availability of spare parts and other consumables during this period.

The Supplier guarantees throughout the contract period to maintain the necessary capacity and knowledge in the performance of the task, including qualified staff.

The Supplier guarantees that the Supplier in fulfilment of the Contract does not infringe on third party rights, including property rights or intellectual property rights.

The Supplier guarantees that agreed changes will not restrict existing properties or prevent the continued fulfilment of the requirements in the Contract.

13.1 Warranty period

Warranty period for the Delivery is minimum two years starting from the Acquisition date. The warranty is related to third party rights and compliance is indefinitely.

In case of replacement of defective components in the Delivery the new components assign a new 2 years warranty period stated from the day of the replacement. .

Maintenance and support are subject to the warranty. Any claims related to these services must be made within 2 year from the delivery of the services.

14. BREACH OF CONTRACT

14.1 General

If there are no other provisions in this Contract, Danish law on remedies are applicable in connection with the breach of contract by a Party, including rules on proportionate reduction.

14.2 Breach by Supplier

14.2.1 Delay

Duty to notify

The Supplier shall submit a Notice to the Customer, stating the reasons therefor, as soon as the Supplier must anticipate a risk of delay or any other failure of proper fulfilment of the Contract.

14.2.2 Penalty

If one of the deadlines for acceptance test, service level test or any other penalty deadline specified in Appendix 1 is exceeded, the Supplier must pay a penalty for each Working Day or part of a Working Day by which the agreed deadline is exceeded.

If the delay concerns the Delivery of the SEM, the Supplier shall pay 0.2 % of the total remuneration per work day.

If the delay concerns the delivery of Spare Parts, the Supplier shall pay Liquidated Damages of 1% of the price of the Spare Parts delayed per day in which the delay continues, however in no instance Liquidated Damages less than DKK 750 DKK per day. If the spare part requested, but in delay, prevents GEUS from using the Deliverables in whole or in part, the Liquidated Damages shall be calculated on the basis of the price of such part of the Deliverables which cannot be used because of the Delay.

The total penalty for delay concerning a Delivery shall not exceed 110 % of the delivery payment.

Accrued penalty will be payable upon demand by Notice from the Customer. If the Supplier does not receive such Notice from the Customer within 12 months from the agreed Acceptance Date, the Customer's penalty entitlement will lapse.

If the Supplier complies with the original deadline for acceptance test plus any extensions for reasons due to the Customer's circumstances, the Customer's entitlement to penalty in respect of all preceding penalty deadlines will lapse. Any penalty already paid must be repaid together with the instalment of the delivery payment payable upon approved acceptance test.

14.3 Defects

14.3.1 Remediation

For the parts of the Deliverables which are covered by the maintenance plan, the Supplier shall remedy any Faults in the Deliverables in pursuance of the said plan as specified in Appendix 2 and Appendix 4

For the other services, the Supplier shall arrange for any Faults to be remedied if necessary to pass the Acceptance test, or if notice of a Fault is given within the warranty period.

Upon completion of corrective action, the Supplier must notify the Customer accordingly.

Any disagreement as to whether the Supplier's corrective action is adequate must be resolved in accordance with clause 25.

In addition, reference is made to the limitations of the Supplier's duty to undertake corrective action in relation to third-party products as set out in clause 20

14.3.2 Proportionate reduction

The general provisions of Danish law on proportionate reduction apply.

In calculating the relevant depreciation equivalent to the reduction, regard must be had to the useful value that is not available to the Customer as a result of the Fault.

For matters giving rise to the payment of a penalty, a proportionate reduction may only be claimed where the Customer documents a depreciation in excess of the penalty paid.

14.4 Breach by Customer

If the Customer is in breach of its payment obligations under the Contract, the Supplier is entitled to interest in pursuance of the provisions of the Danish Interest Act.

The Supplier is further entitled to terminate the Contract with immediate effect in respect of certain defined services if the Supplier submits a demand by Notice to the Customer to the effect that the Customer has breached its payment obligations concerning the services defined as specified, and that any failure to pay within 40 Working Days will result in termination of the Contract in respect of the said services, unless the Customer fulfils its payment obligations within the time limit.

The Customer will be liable for any documented losses suffered by the Supplier due to the Customer's failure to perform its obligations to participate in the execution of the Delivery, if the Supplier has submitted a demand by Notice, specifying partly that the Customer has committed a specified breach of its obligations to participate, and partly that any failure on the Customer's part to participate within 15 Working Days will render the Customer liable for the Supplier's documented losses.

15. SUPPLIER'S LIABILITY

The Supplier is liable to the Customer in accordance with Danish law. The liability does not include operating loss, loss of profit or other indirect losses.

For conditions that trigger the payment of a penalty, the compensation may only be claimed to the extent the Customer can document to having suffered damages beyond the penalty amount.

The Supplier's liability is maximised to **an amount equal to the total remuneration**, beyond the penalty paid in accordance with cf. clause 14.2.2. This limitation, however, does not apply to the Supplier's liability for any violations of the rights of others.

The restriction also applies only if the loss is not attributable to gross negligence or wilful conduct by the Supplier.

16. INSURANCE

The Supplier shall take out and maintain product liability insurance and professional liability insurance at a level in accordance with good industry standard ensuring coverage for personal injury and property damage caused by the Deliverables or the use of the Deliverables in accordance with any manuals and instructions from the Supplier.

Upon GEUS's request, the Supplier shall submit to GEUS a copy of such insurance policies to demonstrate the existence and the level of coverage. However, the Supplier shall be entitled to delete information concerning the amount of policy premium payment before such submission to GEUS.

17. CUSTOMER'S CONDITIONS

A breach of contract by the Customer is subject to Danish law. Operating loss, loss of profit or other indirect losses are not compensated.

If the Customer defaults on its payment obligations under this Contract, the Supplier is entitled to interest in accordance with the regulations of the Overdue Payments Interest Act.

The Supplier is also entitled to terminate the Contract in part to the Customer with effect for future payments if the Supplier has submitted a demand in writing to the Customer that the Customer has in a specified way defaulted on its payment obligations and that failure to pay within 60 days will result in the termination of the Contract with the Customer, if the Customer does not fulfil its payment obligations by the deadline.

The Customer's liability is maximised in the same way as the Supplier's liability, see clause 15.

18. FORCE MAJEURE

If a force majeure event occurs, the Parties' obligations towards each other shall be suspended for the time being, provided that the force majeure event is notified to the other Party with supporting arguments and particulars describing the nature and extent of the force majeure event as soon as the Party in

question has become aware of a force majeure event, and in any event no less than 5 (five) Working Days from the occurrence of the force majeure event.

To this effect, force majeure shall be defined as an event that is (i) outside the control of the Parties, and of a certain qualified nature; war, hostilities, riots, nuclear or natural disasters, etc., (ii) unforeseeable or not reasonably foreseeable during the time of tender and (iii) ought not to be overcome neither by reasonable investments of work nor money.

It is specifically agreed that any export restriction shall not be regarded as a force majeure event.

If the force majeure event continues beyond 120 (one hundred and twenty) Days - not necessarily consecutive, but within the same 180 (one hundred and eighty) Days - each Party shall be entitled to terminate the Contract. In such instance, the Supplier shall be entitled to receive payment for Deliverables delivered until the force majeure event occurred, and GEUS shall only be liable to pay an amount equivalent to the Deliverables received.

Notwithstanding the foregoing, if the force majeure event only extends to some and not all Deliverables, GEUS shall be entitled, but not obliged, to claim Delivery of such Deliverables.

Neither Party shall make any claim against the other Party based on a force majeure event.

19. RIGHTS

To the extent the Supplier's services result in material, including data and data treatment, protected by intellectual property, the Customer acquires the right to use this material.

The right of use is acquired in line with the production of the material, including data and data treatment, provided that the Supplier receives payment in accordance with the provisions of the Contract.

The remuneration of the right of use is included in the remuneration for the services resulting in material protected by intellectual property.

The Customer's right of use is without any limitation of a temporal, geographic or quantitative nature. Qualitatively, the Customer's right of use includes any use of material internally and externally in connection with the Customer's business. For example, the Customer may publish material, including offering of services corresponding to the Supplier's service under this Contract.

The Customer also has the right to freely work, including maintain and develop, the material, including data and data treatment, as well as the right to use the results of this in the same way as the original material.

The Supplier must make the necessary tools available to the Customer so that the Customer can exercise its right of use in accordance with this clause.

The Supplier retains any intellectual property rights to the tools.

The Customer may assign their right of use in whole or in part in accordance with clause 21. In addition, the Customer transfers its right of use to a third party to the extent the third party assists the Customer in relation to the Customer's business.

If a third party has rights to (a part of) the material, the Supplier guarantees that these rights are fully cleared, so that the Customer acquires the rights as specified under this clause.

The Supplier must indemnify the Customer against any claims that may arise due to the fact that third party rights are not fully cleared as specified under this clause.

If an infringement of third party rights exists, the Supplier is also liable at their own expense by agreement with a third party or by changes or replacement of material to provide the Customer the rights as specified under this clause.

The Customer's legal position under this clause does not change, regardless of whether – and if so, how – the Contract is terminated.

20. SUBCONTRACTORS

If the Supplier uses subcontractors, this is described in Appendix 2, the Supplier's solution description, including how the subcontractor is involved in solving the task under the Contract.

Furthermore, the Supplier has in clause 4.2, the Supplier's staffing, provided the name, contact details as well as the legal representative of the subcontractors that are used in connection with the performance of the contract.

The Supplier has submitted the information mentioned upon the submission of tender. If the subcontractor was not known at the time of the submission of tender, the information must be provided without undue delay after the subcontractor is appointed. This also applies if a new subcontractor is appointed that is replacing a former subcontractor.

Finally, the Supplier must disclose any changes in the subcontractor's information without undue delay. As a result, the contracting entity must have information on the name, contact details as well as the legal representative of the subcontractors that are associated with the execution of the task at any time in the duration of the Contract.

The Supplier is not entitled to replace a subcontractor without the written consent of the Customer. The Customer may not refuse such consent without valid reason.

The Supplier is liable for the tasks performed by the subcontractor as if the tasks were delivered by the Supplier itself. The Supplier's use of subcontractors will not limit the Supplier's responsibility in fulfilling the requirements of the Contract.

To the extent the Supplier bases its implementation of the Contract on the capacity of other legal entities under Section 144 of the Public Procurement Act, this will be apparent from clause 4.2, which will be completed in connection with the tender. The legal entity, whose resources that are referred to in Appendix 2, is liable for the implementation of the Contract in accordance with the appendix.

21. ASSIGNMENT

The Customer has the right to assign its rights and obligations under this Contract in whole or in part to another public institution or an institution owned by the government or is significantly operated by public funds.

The Supplier may not without the written consent of the Customer assign its rights and obligations under this Contract to a third party.

22. DURATION AND TERMINATION

22.1 Duration and expiry of the Contract

The Contract shall become effective at Commencement. The Contract shall expire without notice 5 years after Commencement. The Contract can be extended 2 times for a year, with a notice 4 months before the expiry date.

Any Purchase Order outstanding at the time of expiry or termination of the Contract shall be delivered, unless otherwise agreed.

22.2 Duration and support

The supplier can terminate the maintenance and support cf. clause 7 and 9, with a notice of 12 months but not before the expiration of two years after the Acquisition date.

The Customer can terminate the maintenance and support with a notice of six months but not before the expiration of one year after the Acquisition date.

22.3 Termination upon avoidance

Under the law on the Danish Board of Appeal for public procurement, etc., the Danish Board of Appeal for public procurement may in certain cases of violation of procurement rules declare a concluded contract to be void and order the contracting authority to terminate the contract within a deadline set by the Board of Appeal.

Based on this, the following provisions are determined on the Customer's ability to terminate the Contract in such a case.

The Customer is entitled to terminate the Contract in whole or in part with a notice in accordance with the Danish Board of Appeal for public procurement or court injunctions. The Contract will terminate completely/partially upon annulment with effect in time as determined by the order.

If there are additional conditions or requirements in the order that is issued, the Customer is entitled to continue these conditions or requirements in the cancellation to the Supplier provided that this is justified by objective reasons and the Supplier must then comply with these.

Any claim for compensation or other forms of reimbursement by the Supplier as a result of the Contract being declared void, or for ordering the termination, including e.g. for costs of complying additional conditions and requirements that the Customer has pursued in the termination, must initially be settled

according to Danish law. However, the Parties have agreed that indirect losses cannot be compensated and that the compensation is maximised in accordance with clause 14.2.2.

If the Supplier at the time of concluding the contract had or should have had knowledge of the actual and/or legal circumstances that causes the Contract to be declared void, the Supplier may not claim damages or demand any other form of compensation as a result of the Contract being declared void, or for ordering the termination, including for costs of complying additional conditions and requirements that the Customer has pursued in the termination.

22.4 Termination upon annulment

Under the Public Procurement Act, the Danish Board of Appeal for public procurement or the general courts by final decision or judgement may cancel the award decision after which the contracting entity must terminate a contract that is concluded on the basis of the decision with adequate notice, unless special circumstances that justify the contract's renewal are applicable.

Based on this, the following provisions are determined on the Customer's ability to terminate the Contract in such a case.

The Customer is entitled to terminate the Contract in whole or in part with adequate notice. The Contract will therefore completely cease upon termination.

Any claim for compensation or other forms of reimbursement by the Supplier as a result of the termination of the Contract due to the annulment of the award decision must initially be settled according to Danish law. However, the Parties have agreed that indirect losses cannot be compensated and that the compensation is maximised in accordance with clause 14.2.2.

If the Supplier at the time of concluding the contract had or should have had knowledge of the actual and/or legal circumstances that cause the annulment of the award decision, the Supplier may not claim damages or demand any other form of compensation as a result of the annulment of the award decision.

23. OBLIGATIONS ON TERMINATION

The Supplier is in connection with the termination of the Contract for whatever reason obliged to assist the Customer to a reasonable extent in relation to facilitating the basis for a possible implementation of renewed offer of services that the Contract includes.

Furthermore, the Supplier is obliged to cooperate as necessary with any new supplier as to the transition of the task to the new supplier.

The Supplier will not receive additional remuneration for these tasks.

The termination of the Contract will not affect the validity of the contractual terms (on liability, confidentiality, etc.) that aims to apply even after the termination of the Contract.

24. CHANGES AND INTERPRETATION

Any provisions in the tender material, in the Supplier's tender or in previous correspondence etc. which are not included in the Contract cannot subsequently be relied upon as a basis for interpretation.

The same shall apply to any knowledge of services to be delivered under the Contract, the Customer's IT environment, etc., acquired by a Party in the cause of previous dealings. In that case, however, each of the Parties will be subject to an increased obligation to seek clarification of any matter giving rise to doubts on the basis of any such knowledge.

Any references to the Contract or to a provision thereof will also include the appendices to the Contract, or the appendices relevant to the provision in question, as the case may be. The provisions of the Contract will take precedence over the provisions of appendices; therefore, any provisions included in an appendix which are inconsistent with the provisions of the Contract will have no legal effect.

If at the time of the Contract an inconsistency exists in any appendix between a requirement specified by the Customer and the Supplier's requirements response, the Customer's requirement will prevail; however, this involves no restriction of the Supplier's duty to deliver any such additional services in relation to the Customer's requirements as may be included in the Supplier's requirements response at the time of the Contract.

24.1 Contract management following changes

The Parties shall carry out contract management on a joint basis, according to the following main principles:

- All changes and additions to the Contract must be available in writing in the form of updates of the Contract, to be signed by both Parties.
- All changes and additions to the appendices must be available in writing in the form of updates of the appendices and must subsequently be signed by both Parties.
- All changes and additions to the Contract and appendices must be capable of documentation with full traceability, e.g. by change markings, version history, etc.

25. DISPUTES

The legal conditions according to the Contract and its interpretation will be governed by Danish law.

If a dispute arises between the Parties in connection with the Contract, the Parties will seek a solution through negotiation.

If a solution is not reached through negotiations, the dispute will be settled by the courts.

26. SEPARATE AGREEMENT

The Parties agree that clause 22.3 of the Contract constitutes a separate agreement between the Parties that is applicable regardless of whether the Contract in general may be declared void.

27. SIGNATURES

The Contract is signed in two copies, of which one is kept by the Customer and one is kept by the Supplier.

Place:

Date:

For the Customer:

Place:

Date:

For the Supplier:

Appendix 1

GEUS's requirements concerning the Deliverable

Purchase of a new SEM with automated mineralogy analysis software

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Instructions for tenderers: The requirement specification consists of 5 minimum- and 21 competitive requirements. The minimum requirements are not to be answered by tenderer. Reservation to minimum requirements or essential elements in the procurement documents must not be included in the tender. Reservations to minimum requirements or essential elements in the procurement documents will cause the tender to be rejected. The competitive requirements must be answered concisely by tenderer (maximum 1 or 1.5 A4 pages per requirement including Figures) by submitting an attachment with clear reference to the specific requirement. Pages exceeding 27 A4 pages will not be taken into account.

1. DESCRIPTION OF THE DELIVERABLES

1.1 Background

The Geological Survey of Denmark and Greenland (GEUS) is an advisory research institution under the Danish Ministry of Energy, Utilities and Climate. Further, GEUS is a partner in Geocenter Denmark and associated to EuroGeoSurveys. A large part of GEUS's work, which is conducted in collaboration with national and international partner organizations, provides knowledge and data to some of today's most challenging issues including raw materials, energy supply, climate change, and clean water.

Laboratory work is an important and integrated part of many research and advisory projects performed at GEUS. GEUS has a large range of in-house laboratory facilities and Scanning Electron Microscopy plays a major role in research in raw materials and reservoir rocks, but is also used for investigations in other topics. GEUS is making use of the versatility of the instrument on a daily basis and SEM work is integrated with analyses on other instruments like e.g. optical microscopy, electron microprobe (at Copenhagen university), and LA-ICP-MS. Due to old age of the current 25-year-old SEM instrument GEUS seeks to replace its current instrument with a new one with the same life-expectancy.

1.2 Deliverable

GEUS wishes to buy a Field Emission Gun Scanning Electron Microscope (SEM) that is suitable for usage by a geological survey. This means that this instrument must be suitable to be used for oil and gas reservoir studies, mining, and general geosciences applications, including the flexibility required for diverse scientific research. The SEM must be easy to use for both experienced and inexperienced users.

GEUS has a strong focus on automated mineralogy analysis and this technique will therefore play a key-role in the new instrument as well. The automated mineralogy analysis software (or a combination of different software products) must work for loose particulate material mounted in epoxy as well as for the analysis of minerals surrounded by neighbouring grains in polished sections (mapping of minerals in a polished section). The included automated mineralogy software must be able to separate the individual mineral phases present in the sample and to assist in the identification of the mineralogy, to detect the degree of mineral liberation of crushed or particulate material, to find bright particles or other minerals after specification of their chemistry or grain size, and to give the 2D grain size and grain shape of the analysed phases.

GEUS wishes to have training, documentation, and a service and maintenance contract in connection with the Deliverable. GEUS has a large interest in collaboration to broaden the range of currently available analytical techniques.

1.3 Time schedule/Milestones

The new instrument is delivered at GEUS within 3 months after the signing of the contract. The instrument is installed within one month after delivery. Initial on-site Training takes place during the same first month after installation. Successful installation and initial Training are requirements for acceptance of the Deliverable.

Initial Training and advanced Training are specified in paragraph 4. All Training is completed within two years after installation.

The service contract is valid for 5 years after acceptance of the installed instrument.

2. MINIMUM- AND COMPETITIVE REQUIREMENTS

2.1 Minimum requirements

The following requirements list the conditions for participation in the tender.

Requirement 1: Basic specifications of the SEM instrument

The Field Emission Gun SEM instrument must be equipped with two energy dispersive spectrometry (EDS) detectors, one electron backscatter diffraction (EBSD) detector, a cathodoluminescence (CL) detector suitable for imaging, at least one backscattered electron (BSE) detector, and at least one secondary electron (SE) detector. The instrument must be able to work under high- and low vacuum conditions. The detectors mentioned above must be in a ready-to-use position for all SEM operations, apart from low-vacuum analysis and EBSD analyses, where the relevant detectors may be retracted. All detectors must fit inside the instrument simultaneously and without shadowing for each other. The SE, BSE, and EDS detectors must be operable at the same working distance.

The instrument must have at least one camera to look inside the sample chamber, where the camera is positioned such that all adjustments, including the tilting of the stage for EBSD analysis, inside the sample chamber can be made in full vision of the sample.

The instrument must be able to automatically correct for drifting of the area of interest during imaging and analyses. The instrument must have an acceleration voltage range of at least 2-25 kV and a probe current that can reach intensities of 100nA or more.

The instrument must give the possibility to view entire samples or load referenced images of those samples, and to navigate precisely (within 0.1 mm) to locations in the sample. The resolution of the images must be such that beam-sensitive samples like rocks can be imaged with an SE and BSE detector at 15000 times magnification (polaroid scale) or higher on coated rock samples; and at 3000 times magnification (polaroid scale) or higher for uncoated rock samples.

The instrument must be able to contain a sample holder with at least 7 polished thin sections of c.48mm times 27mm in size or 15 round polished blocks, each with a diameter of 25 mm. The sample stage must have full movement in X, Y, Z (at least 130 mm viewing range). The samples must be able to be viewed in a complete 360 degree rotational view and the stage must allow for a tilting of at least 70 degrees towards the EBSD detector.

The instrument must be able to reach operational high-vacuum pressure conditions within 6 minutes for rock samples. The instrument must be offered with sound-insulation for the noise of the pump or pumps, as these will be placed in the same room. The instrument must have some sort of stabilisation against vibrations such that images are stable at 15000 times magnification (polaroid scale).

The instrument must be provided with a CL detector without an external mirror. A preview of the CL image must be visible at scanning speed (less than 2 seconds per frame). The minimum range of detectable wavelengths for the CL images must exceed 400-800 nm.

The instrument must contain EDS detectors, with a Mn-peak width of 129eV full width at half maximum (FWHM) or narrower, a 30 mm² or larger window, and an adjustable pulse processor speed/throughput rate (at least between 50-500 kcps). The tenderer must offer an EDS detector that is able to detect the presence of the element Carbon in carbon-coated rock samples in concentrations above 5 wt% while analysing at 15 kV. The instrument must have an EBSD detector with a minimum speed of 600 indexed patterns per second on a well-polished geological sample, maintaining a reasonable precision. The EDS software (or EBSD software) must be able to combine the signal of one or both EDS detectors with the signal for the EBSD detector to give a combined interpretation of the results. The EBSD system must be delivered with a 70 degree pre-tilted sample-holder for thin sections.

The tenderer provides documentation for the instrument and all software installed to it.

The tenderer provides a short description of the SEM instrument that will be offered, including its electron source, chamber size, stage, low vacuum system, sample holders, SE and BSE detectors, camera(s), drift correction system, anti-vibration system, range of acceleration voltages, beam current intensity, noise reduction system for the pump or pumps, and its pumping speed, and a description of the optimal working distance for EDS, SE, BSE, CL and EBSD analyses, the positioning of the detectors, and which detectors can or must be retracted. This description will not be evaluated.

Requirement 2: Automated particle analysis software

The tenderer offers automated mineralogy software or EDS software that is able to analyse the major and minor element composition of at least 1200 representative grains in a polished section. The grains to be analysed are embedded in a matrix (epoxy), without touching each other. The results of the analysis given by the software must include the element or oxide concentrations in atom% or wt% with two decimals precision for at least 30 different elements. As a minimum the following elements must be measured: C, O, Na, Mg, Al, Si, P, S, Cl, K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Sr, Y, Zr, Nb, Ba, La, Ce, Au, Pb, U simultaneously. The grain size and grain shape parameters must at the very least include: size (length) in pixel or μm , perimeter, aspect ratio, circularity, area. The software must be able to store the particle coordinates within individual frames. The results need to be exportable in tabulated form in a single file of a format that is readable by other software (.csv, .xls, or .txt). Additionally, images and spectra of the analysed samples must be accessible with permission for copying for long-term storage.

The tenderer provides a short description of the automated particle analysis software that will be offered, including all features discussed above. This description will not be evaluated.

Requirement 3: Training

The tenderer offers at least 7 days of Training. Two of these days (initial teaching) are given within one month of the delivery of the instrument, preferentially though immediately following the installation of the instrument. Initial teaching (2 days) includes A) the basic operation of the instrument for technicians and scientists, including basic functions of the instrument, imaging, SE, BSE, EDS, CL, automated particle analysis, B) introduction into automated mineralogy software for geologists, C) introduction into EBSD for geologists.

Advanced teaching (5 days that can be divided over one to four periods) will be given during the first two years after installation of the instrument. Of these at least one day is dedicated to basic operations of

the instrument including imaging, SE, BSE, EDS, CL, automated particle analysis. At least one day is dedicated to the automated mineralogy software, and at least one day is dedicated to EBSD training.

All Training must be given on-site. Change of the Training site may only occur after previous written permission by GEUS. Up to six persons may be present for education at the same time. Travelling costs during the Training sessions are covered by the tenderer.

The tenderer provides a short description of the teaching plan that will be offered, including all features discussed above. This description will not be evaluated.

Requirement 4: Documentation

The new instrument must be delivered with a full documentation of all hardware and software present, such that in case of any unforeseen event or other reasons of whatever cause, the instrument may be serviced, maintained and updated by parties uninvolved in the production of the instrument's hardware and software.

The tenderer must ensure the set-up of test protocols to monitor the performance of the instrument and must write a report on instrument's performance to GEUS regarding the status on the acceptance day for the instrument.

The tenderer must supply GEUS with at least two copies of the user manuals for the instrument. If in relation to a software update new user manuals will become available, GEUS will receive new copies free of charge.

The tenderer provides a short description of the documentation that will be made available. This description will not be evaluated.

Requirement 5: Service and maintenance

The tenderer must offer GEUS a service and maintenance contract for the SEM instrument with all its detectors and all software dedicated to the instrument. This includes service and maintenance on parts that were acquired through third parties.

The service and maintenance contract must include the exchange of the Field Emission Gun free of charge, when necessary, following Best Industrial Practice to determine the correct time to do so.

The service and maintenance contract must include at least one yearly preventive maintenance visit, during which the instrument and its detectors and software are recalibrated and serviced. The visit must be scheduled including GEUS's preferences when determining the optimal time slot.

The service and maintenance contract must include at least 2 free emergency visits per year, where a delegated person from the tenderer will restore the instrument, or its detectors or software in case of a malfunctioning. The tenderer pays for labour, travelling and lodging costs. In case of emergency visits the maximum response time before arrival on-site of a dedicated technician is 48 hours.

The tenderer offers free telephone support during office hours.

GEUS must be supplied with unlimited free new software releases and free new version of all software for at least five years after signing the contract. The tenderer will assist in trouble shooting for bugs in software.

The tenderer must guarantee the availability of spare parts for at least 10 years after signing of the contract.

The tenderer must provide a price list for spare parts and consumables that might be necessary for GEUS to acquire within the life-time of the instrument. These items are an Optional part of the Contract.

The tenderer must provide a price indication for hourly rates for labour, for travelling and lodging costs in cases where more than 2 yearly emergency visits are necessary. Prices may not exceed the maximum prices set by the Danish State cf. *Cirkulære om Satsregulering pr. 1. januar 2017 for tjenesterejser*.

The tenderer provides a short description of the service contract that will be offered, including as a minimum all features discussed above. This description will not be evaluated.

2.2 Competitive requirements

Instructions for tenderers: The contracting authority will evaluate tenderers' answers to the competitive requirements listed below, and award points depending on how/to which degree the answers substantiate or provide proof of tenderers' ability to meet each individual requirement. For this reason it is important, that the tenderer concisely describes how/to which degree each requirement will be met.

BASIC REQUIREMENTS, RESOLUTION OF THE SEM INSTRUMENT AND STITCHING

Requirement 6:

The tenderer provides an SEM instrument that is able to make sharp images at high magnification on coated rock samples, e.g. calcium-carbonates or clay-bearing sandstones with both SE and BSE detectors.

Evaluation preference:

A positive evaluation will be given to instruments that are able to make sharp images at high magnification on coated samples, where a higher magnification gives more points. The tenderers are invited to document their instrument's ability on this point.

Requirement 7:

The tenderer provides an SEM instrument that is able to make sharp images at high magnification on uncoated rock samples, e.g. calcium-carbonates or clay-bearing sandstones with both SE and BSE detectors.

Evaluation preference:

A positive evaluation will be given to instruments that are able to make sharp images at high magnification on uncoated-samples, where a higher magnification gives more points. The tenderers are invited to document their instrument's ability on this point.

Requirement 8:

The tenderer provides an SEM instrument that allows for EDS analyses on uncoated rock samples.

Evaluation preference:

A positive evaluation will be given to instruments that allow for EDS analyses with at least 2500 counts in the highest peak on uncoated rock samples.

Requirement 9:

The tenderer provides an SEM instrument that has a fast and technically-easy implementation of the switch between low-vacuum and high-vacuum analysis conditions.

Evaluation preference:

The tenderers are invited to describe this switch in terms of time-consumption and necessary technical actions in- and outside the SEM instrument and its detectors. A more positive evaluation will be given to faster and technically-easier (from an operator point of view) ways of switching between low-vacuum and high-vacuum analysis conditions.

Requirement 10:

The tenderer provides an SEM instrument with a software that is able to stitch images near-perfectly without manual post-processing.

Evaluation preference:

A positive evaluation will be given to instruments or software packages that allow for a demonstrated near-perfect automatic image stitching function.

CATHODOLUMINESCENCE DETECTOR

Requirement 11:

The tenderer provides a CL detector, which is able to analyse carbonates, quartz and feldspars simultaneously, as well as to give excellent quality images for zircons.

Evaluation preference:

A positive evaluation will be given to CL detectors that are able to perform high-quality CL imaging of the minerals and mineral pairs (carbonate and quartz, or feldspar and quartz in the same sample) mentioned above. The tenderers are invited to document the performance of their CL detectors.

Requirement 12:

The tenderer provides a CL detector that can be used simultaneously with a BSE detector. The signals of both detectors can be viewed simultaneously in two windows on a monitor, or as a combined signal in one window. Furthermore, the tenderer provides a CL detector that is able to work at the same working distance as the SE, BSE, and EDS detectors.

Evaluation preference:

A positive evaluation will be given to CL detectors that have a documented ability to perform simultaneously BSE and CL imaging and that have a single working distance that can be used for SE, BSE, CL and EDS.

ENERGY DISPERSIVE SPECTROMETRY DETECTORS AND ELECTRON BACKSCATTER DIFFRACTION DETECTOR

Requirement 13:

The tenderer provides a short description of the EDS detectors that will be offered, including the width of the Mn-peak (in eV FWHM), the size of the windows (in mm²) and the range of the pulse processor speed/throughput rate. The tenderer provides EDS detectors, which are able to analyse with a combination of a high analytical speed and, at the same time, low detection limits. The detectors are expected to have a high accuracy and precision, yet they are also expected to be able to perform mapping at a high speed by combining the signal of the two EDS detectors.

Evaluation preferences:

- A) A positive evaluation will be given to EDS detector features that exceed the minimum requirements.

- B) A positive evaluation will be given to EDS detectors with a documented precision of 0.1 wt% for elements heavier than Ne. The tenderers are invited to describe for which settings (including throughput rates, acceleration voltages) these values can be reached for their offered EDS detectors.
- C) A positive evaluation will be given to EDS detectors that can produce automated mineral maps at a high speed. The tenderers are invited to describe how fast their detectors are for 15 and 25 kV settings (including dwell-time per spot, counts per spectrum, deadtime, throughput rate, precision).

Requirement 14:

The tenderer provides EDS detectors, which are able to analyse 5 wt% of Boron in silicate minerals.

Evaluation preference:

A positive evaluation will be given to EDS detectors that are able to measure 5 wt% of Boron in silicate minerals at 5 or 10 kV. The tenderers are invited to describe for which settings (including throughput rate, acceleration voltage) these amounts of Boron can be analysed with their offered EDS detectors, where a higher precision, a higher acceleration voltage, and a higher throughput rate are more favourable.

Requirement 15:

The tenderer provides an EBSD detector that is able to analyse with a combination of high analytical speed and, at the same time, reasonable precision. The EBSD detector can be operated at the same working distance as the SE, BSE, and EDS detectors.

Evaluation preference:

A positive evaluation will be given to EBSD detectors that are able to measure fast while maintaining a reasonable precision. The tenderers are invited to describe the amount of analysed patterns per second and the amount of patterns that could correctly be indexed at the same time. Furthermore, they are invited to document the working distance for their SE, BSE, EDS and EBSD detectors.

Requirement 16:

The tenderer provides EBSD software with a large, easily-accessible, and easily-extendable best-match mineral library.

Evaluation preference:

A positive evaluation will be given to EBSD software packages with a large and easily accessible best match mineral library, with a wide range of different minerals. The tenderers are invited to describe the amount of minerals in their library, their library building function, and their mineral determination setting (best-match versus first-match).

AUTOMATED MINERALOGY SOFTWARE

GEUS will put high value to a well-working automated mineralogy software.

Requirement 17:

The automated mineralogy software should be able to analyse the major and minor element composition of at least 1200 representative grains in a polished section. The grains to be analysed are part of a solid rock, or are mixed-mineral aggregates where the grains are touching their neighbours. The results of the analysis given by the software include the element or oxide concentrations in atom% or wt% with two decimals precision. The grain size and grain shape parameters should at the very least include: size (length) in pixel or μm , perimeter, aspect ratio, circularity, area. The results have to be exportable in tabulated form in a single file of a format that is readable by other software (.csv, .xls, or .txt). Addition-

ally, images and spectra of the analysed samples should be accessible with permission for copying for long-term storage.

Evaluation preference:

A positive evaluation will be given to tenderers that are able to provide quantitative major and minor element compositions in atom% or wt% with two decimals precision, grain size and grain shape for at least 1200 representative grains in a solid rock in a polished section, as described above. The tenderers are invited to document their software's ability very precisely.

Requirement 18:

The automated mineralogy software should be able to analyse a solid rock sample with a pixel-spacing or spot analysis spacing of less than 0.2µm.

Evaluation preference:

A positive evaluation will be given to automated mineralogy software that is able to scan the sample and plot the resulting mineral map with a spacing of less than 0.2 µm. The tenderers are invited to document their minimum pixel spacing.

Requirement 19:

The automated mineralogy software should be suitable for usage on a wide range of rock types, including reservoir rock and mining samples. The software should contain a large starting library, calibrated for 15kV and 25kV, which is easy to expand.

Evaluation preference:

A positive evaluation will be given to software packages with a large and easily accessible starting mineral library, with a wide range of different minerals, including clay minerals. The tenderers are invited to describe their mineral library system in terms of size of the starting library, how easy it is to expand the library (including the procedure for expanding), and for which acceleration voltages the minerals in the libraries can be used.

Requirement 20:

The automated mineralogy software should be suitable for usage on a wide range of rock types, including mudstone, sandstone and carbonate reservoir rocks and mining samples. The tenderer provides a software packages that allows for a grain-size-sensitive mineral classification.

Evaluation preference:

A positive evaluation will be given to software packages with a classification scheme that allows for grain-size as a mineral classification criterion. The tenderers are invited to describe this aspect of their mineral classification system.

Requirement 21:

The tenderer provides automated mineralogy software that is able to measure boron in silicates in concentrations down to 5wt%.

Evaluation preference:

A positive evaluation will be given to software packages that can be adjusted to settings where it is capable of detecting the presence of the element Boron in concentrations down to 5 wt% at higher analytical speed and acceleration voltages. The tenderers are invited to describe for which settings (including throughput rate, acceleration voltage) these values can be reached for their automated mineralogy system.

Requirement 22:

The tenderer provides automated mineralogy software that is able to measure carbon in rock samples in concentrations down to 5 wt%.

Evaluation preference:

A positive evaluation will be given to software packages that can be adjusted to settings where it is capable of detecting the presence of the element Carbon in concentrations down to 5 wt% at higher analytical speed and acceleration voltages, preferentially at 15 kV. The tenderers are invited to describe for which settings (including throughput rate, acceleration voltage) these values can be reached for their automated mineralogy system.

Requirement 23:

The automated mineralogy software must be able to export the data for reporting of batches of samples. The batch should contain at least 50 selected samples, including a representative image or mineral map of each analysed sample, data tables and a legend to the colours used for the mineral map.

Evaluation preference:

A positive evaluation will be given to automated mineralogy software that is able to export the results on analysed polished sections of rock samples in a batch-format as described above. The tenderers are invited to document their batch export functionality.

Requirement 24:

The tenderer provides automated mineralogy software that is able to do mineral mapping based on an other type of images than BSE images only. Examples can be CL, SE, binary images or other photographs of the samples (e.g. obtained from an optical microscope).

Evaluation preference:

A positive evaluation will be given to automated mineralogy software, which offers the possibility to use CL, SE, binary images or other photographs of the samples (e.g. obtained from an optical microscope) as a basis for the mineral mapping, instead of BSE images. The tenderers are invited to list the type of images that can be used as the basis for mineral mapping.

Requirement 25:

The automated mineralogy software or any other offered software should be able to combine different kind of images, apart from BSE images. Examples are CL, SE, binary images or other photographs of the samples (e.g. obtained previously with an optical microscope) simultaneously and integrated.

Evaluation preference:

A positive evaluation will be given to automated mineralogy software or any other offered software that has the ability to show combined images of the sample. This function is preferentially available on computers that are not the SEM-computers. The tenderers are invited to document their abilities with regard to this functionality.

Requirement 26:

The tenderer provides an automated mineralogy software that combines quantitative analysis of polished sections with separated grains and mineral mapping of neighbouring grains in one software solution.

Evaluation preference:

A positive evaluation will be given to tenders providing one integrated software solution for quantitative analysis of polished sections with separated grains and mineral mapping of neighbouring grains.

3. COLLABORATION CRITERION

Collaboration

If tenderer is able to provide a plan for further updates and development of the delivered software after the delivery, this should be described. Tenderer should also indicate whether it is possible to establish cooperation regarding customers' suggestions for changes of the software during the contract period, as well as inform of the conditions for such cooperation.

Evaluation preference:

The tenderer will be evaluated positively for an update and development plan for their delivered software, and for their openness to incorporate ideas from GEUS in their new software.

4. TENDERER'S PROPOSED SOLUTION

The tenderer provides a quote (in DKK) for the offered instrument, including a concise description of all detectors, software and other features mentioned in Requirement 1 and 2 and the total price for the instrument. This description and quote must be included in Appendix 5. Furthermore, the price for the service and maintenance contract must be given as well in Appendix 5.

To facilitate the tendering process, GEUS has prepared a template package: Appendix 2 and Appendix 4. Responses to the minimum and competitive requirements, the collaboration criterion, training and documentation, must be given by using the templates in Appendix 2, not exceeding the maximum number of pages per requirement. Total length of the tenderers proposed solution in these templates may not exceed 27 pages. Responses to the service and maintenance minimum requirement (requirement 5) must be given by using the template in Appendix 4. Care must be given to address all items mentioned under the requirements in this Appendix, when filling out the templates.

Appendix 2:

Tender for Purchase of a new SEM with automated mineralogy analysis software

The tenderers are requested to use this template only for their description of the offered instrument, collaboration, training and documentation according to the minimum requirements, the competitive requirements and the collaboration criterion given by GEUS (Appendix 1, paragraph 2.1, 2.2, 3, 4).

General information	The response of the tenderer
The name and the corporate form of the tenderer	[Fill out]
The address of the tenderer	[Fill out]
The contact person at the tenderer's organisation; name and email address	[Fill out]

Requirement 1

Description of the SEM instrument

Descriptive parameter, which will not be used for evaluation. The tenderer provides a short description of the SEM instrument that will be offered. Further documentation regarding the SEM instrument can be given here, cf. **Appendix 1, paragraph 2.1, Requirement 1**. Maximum length, including Figures: **1.5 A4 page**.

Description of the SEM instrument [enter documentation]

Requirement 2

Description of the automated particle analysis software

Descriptive parameter, which will not be used for evaluation. The tenderer provides a short description of the automated particle analysis software that will be offered. Further documentation regarding the automated particle analysis software can be given here, cf. **Appendix 1, paragraph 2.1, Requirement 2**. Maximum length, including Figures: **1 A4 page**.

Description of the automated particle analysis software [enter documentation]

Requirement 3

Training

Descriptive parameter, which will not be used for evaluation. The tenderer provides a short description of the Training that will be offered cf. **Appendix 1, paragraph 2.1, Requirement 3**. Maximum length, including Figures: **1 A4 page**.

Training [enter documentation]

Requirement 4

Dokumentation

Descriptive parameter, which will not be used for evaluation. The tenderer provides a short description of the Documentation that will be offered cf. **Appendix 1, paragraph 2.1, Requirement 4**. Maximum length, including Figures: **1 A4 page**.

Documentation [enter documentation]

Requirement 5

Requirement 5, Service and Maintenance, needs to be answered in Appendix 4.

Requirement 6

Imaging of coated samples at high magnification

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides an SEM instrument that is able to make sharp images at high magnification on coated rock samples. Further documentation regarding the imaging capabilities can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 6**. Maximum length, including Figures: **1 A4 page**.

Imaging of coated samples at high magnification [enter documentation]

Requirement 7

Imaging of uncoated samples at high magnification

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides an SEM instrument that is able to make sharp images at high magnification on uncoated rock samples. Further documentation regarding the imaging capabilities can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 7**. Maximum length, including Figures: **1 A4 page**.

Imaging of uncoated samples at high magnification [enter documentation]

Requirement 8

EDS on uncoated samples

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides an SEM instrument that allows for EDS analyses on uncoated rock samples. Further documentation regarding the EDS analyses on uncoated samples can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 8**. Maximum length, including Figures: **1 A4 page**.

EDS on uncoated samples [enter documentation]

Requirement 9

Fast and easy shift between high- and low vacuum

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides an SEM instrument that has a fast and technically-easy implementation of the switch between low-vacuum and high-vacuum analysis conditions. Further documentation regarding the switch between low- and high-vacuum analysis conditions can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 9**. Maximum length, including Figures: **1 A4 page**.

Fast and easy shift between high- and low vacuum [enter documentation]

Requirement 10

Automated stitching

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides an SEM instrument that is able to stitch images near-perfectly without manual post-processing. Further documentation regarding automated stitching software can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 10**. Maximum length, including Figures: **1 A4 page**.

Automated stitching [enter documentation]

Requirement 11

Quality of CL images

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides a CL detector, which is able to analyse carbonates, quartz and feldspars simultaneously, as well as give excellent quality images for zircons. Further documentation regarding the quality of the CL imaging can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 11**. Maximum length, including Figures: **1 A4 page**.

Quality of CL images [enter documentation]

Requirement 12

Simultaneous BSE & CL

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides a CL detector that can be used simultaneously with a BSE detector. The signals of both detectors can be viewed simultaneously in two windows on a monitor, or as a combined signal in one window. The CL detector can be used at the same working distance as the SE, BSE and EDS detectors. Further documentation regarding the simultaneous usage of the CL and BSE detectors can be given here, cf. **Appendix 1, paragraph 2.2, Requirement 12**. Maximum length, including Figures: **1 A4 page**.

Simultaneous BSE & CL [enter documentation]

Requirement 13

EDS detectors

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides a short description of the EDS detectors that will be offered, including the width of the Mn-peak (in eV FWHM), the size of the windows (in mm²) and the range of the pulse processor speed/throughput rate. The tenderer provides two EDS detectors, which are able to analyse with a combination of a high analytical speed and, at the same time, low detection limits. Further documentation regarding the EDS detectors can be given here, cf. **Appendix 1, paragraph 2.2, Requirement 13**. Maximum length, including Figures: **1.5 A4 pages**.

EDS detectors [enter documentation]

Requirement 14

Measurement of Boron with EDS

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides EDS detectors, which are able to analyse 5 wt% of Boron in silicate minerals. Further documentation regarding the measurement of Boron with EDS can be given here, cf. **Appendix 1, paragraph 2.2, Requirement 14**. Maximum length, including Figures: **1 A4 page**.

EDS Boron measurements [enter documentation]

Requirement 15

Fast and precise EBSD

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides an EBSD detector that is able to analyse with a combination of high analytical speed and, at the same time, reasonable precision. The EBSD detector can be operated at the same working distance as the SE, BSE, and EDS detectors. Further documentation regarding the EBSD detector can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 15**. Maximum length, including Figures: **1 A4 page**.

Fast and precise EBSD [enter documentation]

Requirement 16

EBSD Library

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides EBSD software with a large, easily-accessible, and easily-extendable best-match mineral library. Further documentation regarding the EBSD library can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 16**. Maximum length, including Figures: **1 A4 page**.

EBSD library [enter documentation]

Requirement 17

Quantitative analysis of 1200 touching grains in rock samples

Quality parameter used in the evaluation of tenderer's offer. The automated mineralogy software should be able to analyse the major and minor element composition of at least 1200 representative grains in a polished section. The grains to be analysed are part of a solid rock. Further documentation regarding the merits of the automated mineralogy software's ability for quantitative analyses on rock samples can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 17**. Maximum length, including Figures: **1.5 A4 page**.

Quantitative analysis of 1200 touching grains in rock samples [enter documentation]

Requirement 18

Pixel spacing of 0.2 µm

Quality parameter used in the evaluation of tenderer's offer. The automated mineralogy software should be able to analyse a solid rock sample with a pixel-spacing or spot analysis spacing of less than 0.2µm. Further documentation regarding the pixel-spacing during the automated analysis can be given here, cf. **Appendix 1, paragraph 2.2, Requirement 18**. Maximum length, including Figures: **1 A4 page**.

Pixel spacing of 0.2 µm [enter documentation]

Requirement 19

Mineral library

Quality parameter used in the evaluation of tenderer's offer. The automated mineralogy software should be suitable for usage on a wide range of rock types, including reservoir rocks and mining samples. The software should contain a large starting library, which is easy to expand. Further documentation regarding the mineral library can be given here, cf. **Appendix 1, paragraph 2.2, Requirement 19**. Maximum length, including Figures: **1 A4 page**.

Mineral library [enter documentation]

Requirement 20

Grain-size as a basis for classification

Quality parameter used in the evaluation of tenderer's offer. The automated mineralogy software should be suitable for usage on a wide range of rock types, including mudstone, sandstone and carbonate reservoir rocks and mining samples. The tenderer provides a software packages that allows for a grain-size-sensitive mineral classification. Further documentation regarding the usage of grain-size in mineral classifications can be given here, cf. **Appendix 1, paragraph 2.2, Requirement 20**. Maximum length, including Figures: **1 A4 page**.

Grain size as a basis for classification [enter documentation]

Requirement 21

Boron in mineral mapping

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides automated mineralogy software that is able to measure boron in silicates in concentrations down to 5wt%. Further documentation regarding the detection of boron under automated mineralogy analyses can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 21**. Maximum length, including Figures: **1 A4 page**.

Boron in mineral mapping [enter documentation]

Requirement 22

Carbon in mineral mapping

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides automated mineralogy software that is able to measure carbon in rock samples in concentrations down to 5wt%. Further documentation regarding the mineral library can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 22**. Maximum length, including Figures: **1 A4 page**.

Carbon in mineral mapping [enter documentation]

Requirement 23

Batch reporting with figures

Quality parameter used in the evaluation of tenderer's offer. The automated mineralogy software must be able to export the data for batches of samples. Further documentation regarding the exporting of batches of samples can be given here, **cf. Appendix 1, paragraph 2.2, Requirement 23**. Maximum length, including Figures: **1 A4 page**.

Batch reporting with figures [enter documentation]

Requirement 24

Automated mineralogy based on optical or CL images

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides automated mineralogy software that is able to do mineral mapping from other images as a basis than BSE images. Further documentation regarding the use of other types of images for mineral mapping can be given here, cf. **Appendix 1, paragraph 2.2, Requirement 24**. Maximum length, including Figures: **1 A4 page**.

Automated mineralogy based on optical or CL images [enter documentation]

Requirement 25

Integrated images: BSE, optical, CL

Quality parameter used in the evaluation of tenderer's offer. The automated mineralogy software or any other offered software should be able to combine different kind of images. Further documentation regarding the combination of different types of images for mineral mapping can be given here, cf. **Appendix 1, paragraph 2.2, Requirement 25**. Maximum length, including Figures: **1 A4 page**.

Integrated images: BSE, optical, CL [enter documentation]

Requirement 26

Integrated software solution

Quality parameter used in the evaluation of tenderer's offer. The tenderer provides an automated mineralogy software that combines quantitative analysis of polished sections with separated grains and mineral mapping of neighbouring grains in one program. Further documentation regarding the integration of quantitative analyses on loose grains and touching grains can be given here, cf. **Appendix 1, paragraph 2.2, Requirement 26**. Maximum length, including Figures: **1 A4 page**.

Integrated software solution [enter documentation]

Collaboration criterion

Parameter used in the evaluation of tenderer's offer. If tenderer is able to provide a plan for further updates and development of the delivered software after the delivery, this should be described. Tenderer should also indicate whether it is possible to establish cooperation regarding customers' suggestions for changes of the software during the contract period, as well as inform of the conditions for such cooperation. Further documentation regarding the proposed collaboration can be given here, **cf. Appendix 1, paragraph 3**. Maximum length, including Figures: **1 A4 page**.

Integrated software solution [enter documentation]

Appendix 3

Corporate Social Responsibility (CSR)

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1. ILO CONVENTION NO. 94

The Supplier shall ensure that workers employed by the Supplier and any Subcontractors who contribute to the performance of the Contract are secured pay, including special allowances, hours of work and other working conditions which are not less favourable than those established for work of the same character under a collective agreement entered into by the most representative organizations of workers and employers in Denmark in the trade or industry concerned being in force throughout the territory of Denmark. The Supplier and any Subcontractors shall ensure that the workers are informed of the provisions of the labour clause.

"Contribute to the performance of the Contract", see the labour clause above, shall mean work performed in Denmark for the performance of the Contract.

The Supplier shall ensure that workers employed by the Supplier and any Subcontractors who contribute to the performance of the Contract outside of Denmark are secured pay, including special allowances, hours of work and other working conditions in accordance with applicable national regulations and legislation including international obligations for work performed in that country.

GEUS is entitled at any time to request relevant documentation of compliance with the conditions of pay and work for the workers as stipulated in the labour clause. GEUS may thus require that the Supplier, after written notice to that effect, within 10 (ten) Working Days provides relevant documentation, such as pay-slips, time sheets, payroll accounts and employment contracts in respect of both its own workers and those of its Subcontractors, if any, and the basis for calculating the payments made for both the Supplier's workers and for workers that are employed by a Subcontractor.

The Supplier shall in all cases redact any strictly personal information such as information concerning racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, or data concerning health or sex life from the supplied information in order to comply with the Act on Processing of Personal Data; *in Danish: Persondataloven*. If the Supplier does not provide the requested documentation within 10 (ten) Working Days GEUS is entitled to withhold amounts from its payments to the Supplier until the Supplier has provided the required documentation.

For its assessment of whether the Supplier or Subcontractors have complied with the labour clause, GEUS may seek advice from relevant employer organizations and/ or labour organizations.

If the Supplier fails to comply with its obligations pursuant to the labour clause, and if such non-compliance results in a justified claim for further pay from the workers, GEUS is entitled to withhold amounts covering such additional payments from its payments to the Supplier in order to ensure that the mentioned labour conditions are met.

A penalty may furthermore be imposed on the Supplier corresponding to twice the amount payable in additional wages to the workers.

Reference is made to the provisions of the Contract regarding termination.

Clause 1 of this Annex does not apply to contracts concerning the purchase of Deliverables that are part of the Supplier's ordinary production or stocks; *off-the-shelf goods*, unless the product is manufactured in a custom-made production for GEUS.

2. Contract CSR Requirements

2.1 General requirements

GEUS wishes that the Contract will be performed while observing the principles of the UN Global Compact initiative.

The principles of the UN Global Compact are as follows:

Human rights

Businesses should support and respect the protection of internationally proclaimed human rights and ensure that they are not complicit in human rights abuses.

Labour standards

Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; support the elimination of all forms of forced and compulsory labour; support the effective abolition of child labour and the elimination of discrimination in respect of employment and occupation.

The environment

Businesses should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility and encourage the development and diffusion of environmentally friendly technologies.

Anti-corruption

Businesses should work against corruption in all its forms, including extortion and bribery.

In the performance of the Contract, the Supplier shall assume social responsibility as set out in the conventions on which the above principles are based. The Supplier assumes social responsibility by committing to observe the requirements set out below in the performance of the Contract.

2.2 Human rights

In the performance of the Contract, the Supplier undertakes to comply at all times with applicable law aiming to prohibit discrimination on the basis of race, color, religion or faith, political beliefs, sexual orientation, age, handicap, or national, social or ethnic origin, or aiming to ensure ethnic equal treatment.

In the performance of the Contract, the Supplier thus commits to comply with the basic human rights as set out in the principles stated above of the UN Global Compact.

2.3 Labour standards

In the performance of the Contract, the Supplier shall ensure that basic labour standards are complied with, including:

- that the products / services supplied, in whole or in part, are not produced in contravention of the general ban on forced and compulsory labour as set out, inter alia, in ILO Convention nos. 29 and 105,
- that the products / services supplied, in whole or in part, are not produced in contravention of the general ban on the use of child labour as set out, inter alia, in ILO Convention nos. 138 and 182,
- that the products / services are produced, in whole or in part, in conditions where the general principle regarding the freedom of association and the effective recognition of the right to collective bargaining as set out, inter alia, in ILO Convention nos. 87, 98, and 135 are upheld,
- that the products / services supplied are produced, in whole or in part, in conditions where the general principle on the right to fair pay as set out, inter alia, in ILO Convention nos. 26 and 131 and Article 23 (3) of the UN Universal Declaration of Human Rights is upheld,
- that the products / services supplied are produced, in whole or in part, in conditions where the general principle on the right to fair hours of work as set out, inter alia, in ILO Convention nos. 1 and 30 and Article 24 of the UN Universal Declaration of Human Rights is observed,
- that the products / services supplied are produced, in whole or in part, in conditions where the general principle on the right to occupational safety and health as set out, inter alia, in ILO Convention no. 155 is observed.

In the performance of the Contract, the Supplier shall thus comply with basic labour rights, including the ban on child labour and forced or compulsory labour as set out in the principles stated above of the UN Global Compact.

2.4 The environment

In the performance of the Contract, the Supplier shall promote the protection of natural resources and the environment in order to promote a sustainable development of the conditions of human beings and the preservation of animal and plant life.

In the production and supply of the products / services under the Contract, the Supplier shall particularly to the best of its ability strive to:

- prevent and fight pollution of air, water, soil and subsoil and any vibration and noise nuisance,
- use hygienic processes for the protection of the environment and human beings,
- reduce use and waste of raw materials and other resources,
- promote the use of cleaner technology, and
- promote recycling and reduce problems of disposal of waste.

In this respect, emphasis is placed on what is obtainable when using the best technology available, including less polluting raw materials, processes and facilities and the best possible anti-pollution measures.

In the performance of the Contract, the Supplier shall thus contribute to the preservation of natural resources and the environment as set out in the principles stated above of the UN Global Compact.

In this Contract, the principles are implemented by the Supplier's compliance with specific requirements with respect to the quality of the Deliverables and minimum requirements of environmental protection and energy efficiency.

2.5 Anti-corruption

A final judgment for corruption during the term of Contract, including active bribery as defined in Article 3 of the Council Act of 26 May 1997 and Article 3(1) of Council Joint Action 98/742/RIA, respectively, shall be considered material breach, cf. the provisions of the Contract regarding termination and section 5 in this Appendix.

In addition, any other incident of abuse of entrusted power for private gain shall be deemed to constitute corruption, such as:

- Passive corruption
- Embezzlement
- Fraud
- Criminal breach of trust
- Misconduct

GEUS may choose not to terminate the Contract if, in GEUS's opinion, a termination is disproportionate to the actions of the Supplier. In this respect, GEUS will consider the measures taken by the Supplier to avoid repetition and the extent to which the Supplier's procedures have been adequate at the time of the breach.

2.6 The Supplier's obligations

As set out above, the Supplier's obligations under the Contract only extend to compliance with the mentioned requirements in the performance of the Contract. The Supplier's obligations thus only concern what is delivered under the Contract.

When assessing whether the Supplier in its performance of the Contract is liable for any non-compliance of the requirements mentioned, the Supplier's own production processes and methods shall be taken into account as well as whether the Supplier's conduct otherwise in the performance of the Contract may have had an impact, including the Supplier's choice of Subcontractors or choice of components for the Deliverables.

3. Documentation

3.1 General documentation

Except as set out specifically in the Contract, GEUS will not in general request documentation that the Supplier in the performance of the Contract complies with the above requirements regarding production processes and methods.

It is a condition, however, that the Supplier no later than 30 (thirty) Days from GEUS's written request complies with the following documentation requirements:

1. Statement from the Supplier's management and other documentation

In this statement, the Supplier shall make representation ensuring, on a continuous basis, the compliance of the above requirements regarding human rights, cf. section 2.2, labour standards, cf. section 2.3, the environment in the performance of the Contract, cf. section 2.4 and anti-corruption, cf. section 2.5.

2. Reporting of practical measures

In this document, the Supplier shall describe the practical measures taken to ensure the compliance of the requirements mentioned. The document may include a description of obligations undertaken, systems implemented and other measures initiated.

3. Reporting of results

In this document, the Supplier shall describe the method according to which the initiatives taken are measured. In this respect, standards such as Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines may be used.

The documentation requirements shall be deemed to be complied with when the Supplier has drafted a so-called "Communication on progress" (COP) published on UN Global Compact's webpage. GEUS also accepts other types of documentation as long as they fulfil the documentation requirements stipulated.

As a general rule, GEUS will not request the documentation mentioned above unless prompted by special circumstances, such as a suspicion based on concrete observations. If GEUS has doubts as to

whether the Supplier complies with the requirements set out above regarding human rights, cf. section 2.2, labour standards, cf. section 2.3 and the environment, cf. section 2.4. GEUS will as a rule initiate a close dialogue with the Supplier in order to clarify matters of dispute.

The procedure set forth in this clause shall not affect the labour clause or the documentation that can be required according to the labour clause, cf. section 1.

3.2 Procedure in case of suspicion based on concrete observations of non-compliance of requirements regarding human rights, labour standards or environmental protection

In case of suspicion based on concrete observations regarding non-compliance of the requirements concerning human rights, cf. section 2.2, labour standards, cf. section 2.3, environmental protection, cf. section 2.4 and / or anti-corruption, cf. section 2.5 in the manufacture of any Deliverables, or part thereof, the Supplier shall promptly, at GEUS's request, submit a written statement and documentation of the production processes and / or methods according to which the Deliverables included in the performance of the Contract have been manufactured and / or otherwise delivered and submit any necessary documentation of the materials used in the Deliverables.

The Supplier shall inform whether its own actions in connection with the performance of the Contract have an impact on the compliance of the above requirements regarding human rights, labour standards and environmental protection and / or anticorruption including its choice of Subcontractors or components.

The statement and the supporting documentation shall include any certificates and / or other relevant required documentation to substantiate the production processes and / or methods used as well as the materials used in the Deliverables.

On the basis of the written statement and documentation, etc., and taking all relevant circumstances into consideration, GEUS will make a concrete assessment of the individual incident.

4. DEFECTS

A Defect shall be deemed to exist if any Deliverables supplied, in whole or in part, including components of the Deliverables, have been manufactured according to manufacturing processes or is otherwise delivered under methods where the requirements set out in this Annex regarding human rights, labour standards, environmental protection, and / or anti-corruption have not been observed.

In case of suspicion, based on concrete and strong indications of failure to observe any requirements regarding human rights, cf. section 2.2, labour standards, cf. section 2.3, environmental protection, cf. section 2.4 and / or anti-corruption, cf. section 2.5 during the performance of the Contract, in whole or in part, the procedure set out in this Appendix shall be followed. This procedure includes, at GEUS's request, a prompt written statement and documentation, etc., from the Supplier, whereupon GEUS will make a concrete assessment of the individual incident.

Suspicion based on concrete and strong indications may be deemed to exist, inter alia, if proceedings are brought against the Supplier for violation of human rights, cf. section 2.2, labour standards, cf. section 2.3, environmental requirements, cf. section 2.4, and / or anti-corruption, cf.

section 2.5 connected to the performance of the Contract in whichever country the proceedings may be brought. If the Supplier becomes aware of having violated the aforementioned requirements, or if proceedings are brought against the Supplier for such violations, the Supplier must immediately, on its own initiative, inform GEUS.

Failure to deliver the documentation required in section 3.1 of this Annex within 30 (thirty) Days, failure to deliver the statement and the documentation required promptly in clause 3.2 and / or failure to inform GEUS on its own initiative in case of a violation or proceedings brought against the Supplier, shall furthermore be construed as a failure to comply.

When assessing whether the Supplier is liable for any performance of the Contract in contravention of this Appendix, the Supplier's own production processes and methods shall be taken into account as well as whether the Supplier's conduct otherwise in the performance of the Contract may have had an impact, including the Supplier's choice of Subcontractors or choice of components for the items supplied.

In the event of a Defect due to violation of human rights, cf. section 2.2, labour standards, cf. section 2.3, the environmental requirements, cf. section 2.4 and / or anti-corruption, cf. section 2.5 set out in this Appendix, GEUS shall be entitled to demand:

- that* the Supplier promptly remedies the Defect upon GEUS's request to this effect,
- that* the Supplier, henceforth, in the performance of the Contract, comply with the requirements set out in this Annex regarding human rights, cf. section 2.2, labour standards, cf. section 2.3, environmental protection, cf. section 2.4 and anti-corruption, cf. section 2.5, *and*
- that* the Supplier compensates in full any damage caused, including payment of adequate compensation. The assessment of whether any damage caused in the performance of the Contract has been compensated in full shall not be affected by the provisions of any national rules on tort, governing the incident in question, only providing for partial indemnification, *and*
- that* the Supplier pays GEUS a penalty calculated as 2 (two) % of the total price of the Contract Price.

5. BREACH

Reference is made to the provisions of the Contract regarding termination.

Appendix 4: Maintenance and support

Tender for Purchase of a new SEM with automated mineralogy analysis software:

The tenderers are requested to use this template only for the description of the service and maintenance plan on the offered instrument, according to minimum requirement nr. 5 given by GEUS (Appendix 1, paragraph 2.1).

General information	The response of the tenderer
The name and the corporate form of the tenderer	[Fill out]
The address of the tenderer	[Fill out]
The contact person at the tenderer's organisation; name and email address	[Fill out]

The tenderers are asked below to describe their Service and Maintenance Plan, according to the minimum requirements listed in Appendix 1, paragraph 2.1, requirement 5.

The price indicated for the Service and Maintenance in Appendix 5 must fulfil the minimum requirements listed in Appendix 1 and represent the Services described here (Appendix 4). This price (Appendix 5) is also the price that will be used for the price-subcriterion during the evaluation of the tender (Appendix A).

Requirement 5

Description of the Service and Maintenance plan

Price parameter used in the evaluation of tenderer's offer. The tenderer provides a short description of the Service and Maintenance plan that will be offered, cf. **Appendix 1, paragraph 2.1, Requirement 5.**

1. DESCRIPTION OF THE SERVICE AND MAINTENANCE PLAN

[ENTER DOCUMENTATION; PLEASE INCLUDE

*which instrument and detectors will be serviced and maintained

*which spare parts and consumables will be included in the service and maintenance plan and their availability at a longer time scale (>10 years)

*the number of yearly preventive maintenance visits and the services provided here

*the number of yearly emergency visits that are included in the price and the services that are included here

*the response time for emergency visits

*the quality of the telephone support

*the software update plan

*other items included in the service contract]

2. PRICE LIST FOR SPARE PARTS AND CONSUMABLES

The tenderer is invited to give a price list for spare parts and consumables that might be necessary for GEUS to acquire within the life-time of the instrument. These items are an Optional part of the Contract.

[Please give the price list here]

3. COSTS OF LABOUR, TRAVELLING AND LODGING

The tenderer is invited to give a price indication for hourly rates for labour, for travelling and lodging costs in cases where more than 2 yearly emergency visits to GEUS are necessary. These costs are an Optional part of the Contract. Prices may not exceed the maximum prices set by the Danish State cf. *Cirkulære om Satsregulering pr. 1. januar 2017 for tjenesterejser*.

[Please give a breakdown of the costs for labour, travel and lodging here]

4. MAINTENANCE AND SUPPORT

Maintenance and support include all items described in clause 1 of this Appendix. The maintenance and support must be given to the SEM instrument with all its detectors and all software dedicated to the instrument. This includes service and maintenance on parts that were acquired through third parties.

The maintenance and support must include the exchange of the Field Emission Gun free of charge, when necessary, following Best Industrial Practice to determine the correct time to do so. Other spare parts and consumables will be bought for prices indicated in the list in clause 2. The Customer has the right to buy spare parts and consumables elsewhere.

The Supplier undertakes to provide maintenance and support in respect of the Delivery as from the Acceptance Date. The Customer will pay fees for maintenance and support prior to the Acceptance Date.

This Contract for maintenance and support will be valid for 5 years with the possibility for extension.

Maintenance of Software and major changes to the Scanning electron microscope instrument and/or its detectors invariably includes an update of the associated Documentation, cf. clause 3.2 of the main Contract. A renewed full documentation of the software or hardware must be provided, such that in case of any unforeseen event or other reasons of whatever cause, the instrument may be serviced, maintained and updated by parties uninvolved in the production of the instrument's hardware and software.

The Supplier must provide GEUS with at least two new copies of the relevant user manuals after a software update, conf. Appendix 1, paragraph 2.1, requirement 3.

In case of Deployment of an approved Partial Delivery before the Acceptance Date, the Supplier must provide maintenance and support in respect of the Partial Delivery.

GEUS must be supplied with unlimited free new software releases and free new version of all software for at least five years after signing the contract. The tenderer will assist in trouble shooting for bugs in software. In case of major changes in the software the Supplier offers additional training free of charge.

The Customer is not obligated to make updates by way of new Versions. The Customer may be 3 update Versions of the software in arrears without giving the Supplier the right to restrict their achievement of the service goals. In case of a further arrear the Customer may make an software update condition to further software support. Any update by way of new Versions gives Supplier the duty to take corrective action in pursuance of the maintenance plan, cf. clause 4.1.

Maintenance must be provided in accordance with Best IT Practice and Best Industry Practice by qualified personnel with knowledge of the Delivery. When providing maintenance and support, the Supplier must achieve the maturity level stated by the Supplier, cf. Appendix 2. The Supplier must guarantee the availability of spare parts for at least 10 years after signing of the contract. The supplier provides a list of all potentially relevant spare parts (Appendix 4, paragraph 2). This list may serve as a base level for price-indexation in the course of the contract period.

4.1 Maintenance plan time limits

In case of a Fault the time limit for Supplier's commencement of corrective action is 48 hours. A corrective action is completed upon signing of a repair acceptance form after remediation of the Fault by the Customer.

The Supplier includes at least 2 free remediation visits per year, where a delegated from the Supplier will restore the instrument, or its detectors or software in case of a malfunctioning. The tenderer pays for labour, travelling and lodging costs during these visits. The costs for additional remediation visits are billed to GEUS following the prices in clause 3.

The classification of a Fault depends, in particular, upon whether the Fault is critical to the performance of the Customer's tasks, and whether the Fault may be worked around. Work-around means, e.g., use of other and/or additional entries or functions and the Customer's use of changed work processes.

Faults are classified jointly by the Parties in connection with the Customer's report on the Fault. In case of disagreement as to classification of the Fault, the provisions of clause 14.3 of the main Contract will apply. Pending a resolution of the disagreement as to the reported Fault, the Supplier must remedy the Fault in relation to the Customer's classification.

The time limits for commenced and completed corrective action start to run on the date when the Supplier has received the Customer's exhaustive complaint, until the date when the Supplier has commenced corrective action or has remedied the Fault and has notified the Customer accordingly. If the Supplier uses remote diagnosis by agreement with the Customer, any corrective action will be deemed to have been commenced at the date when the Supplier has established or attempted to establish the agreed connection.

The Supplier offers free telephone support during office hours.

4.2 Performance

The Supplier schedules at least one yearly preventive maintenance visit, during which the instrument and its detectors and software are recalibrated and serviced. Corrective action and other maintenance work must be planned and performed so as to cause the least possible inconvenience to the Customer.

In case of maintenance work carried out at the Supplier's instance, and where it has not been determined in advance when the Supplier is to carry out maintenance, the Customer must, if possible, be given not less than 10 Working Days' prior notice thereof. However, the visit must be scheduled including GEUS preferences when determining the optimal time slot.

The Customer may demand that maintenance work be carried out outside the Customer's business hours. In that case, the Customer will pay an additional charge in accordance with Appendix 5, irrespective of the cause of the maintenance work.

If maintenance work requires the Customer's use to be interrupted in full or in part, the Supplier must obtain prior permission from the Customer to do so. If the Customer refuses to grant such permission immediately following the Supplier's request, this shall be deemed to constitute a postponement of the maintenance work in question at the Customer's request. If the postponed maintenance gives rise to a failure to achieve service level goals, or any other requirements, the Supplier will not be liable therefor during the postponement of the maintenance.

In the course of corrective action, the Supplier must keep the Customer informed of the progress thereof on a daily basis.

Appendix 5: Contract Prices

Tender for Purchase of a new SEM with automated mineralogy analysis software.

The tenderers are requested to use this template only to give their prices for remuneration of maintenance and support (service and maintenance plan) and for the offered instrument including all detectors and software, according to the requirements by GEUS (Appendix 1).

General information	The response of the tenderer
The name and the corporate form of the tenderer	[Fill out]
The address of the tenderer	[Fill out]
The contact person at the tenderer's organisation; name and email address	[Fill out]

Short description of the entire Scanning Electron Microscope

The tenderer provides a concise description of all detectors, software and other features mentioned in Requirement 1 and 2, cf. **Appendix 1, paragraph 4**. Maximum length, including Figures: **3 A4 pages**. This is a descriptive parameter, which will not be used for evaluation.

Description of the Scanning Electron Microscope: [enter documentation]

Price structure of the Scanning Electron Microscope and for Maintenance and Support

Item [ranking during evaluation of the price]	The price proposed by the tenderer (DKK)
Scanning Electron Microscope with all detectors. Documentation, Training, Collaboration. Including all fees, expenditure, licenses, hardware, software, transport, and installation. (Appendix 2) [80%]	[Fill out]
Maintenance and Support (Appendix 4) [20%]	[Fill out]

The price for the instrument should be based on the description in Appendix 2, including all minimum requirements in Appendix 1, paragraph 2.1, requirements 1-4 and taking into account the competitive requirements (Appendix 1, paragraph 2.2) and the collaboration criterion (Appendix 1, paragraph 3). The price indicated for Maintenance and Support should be based on the minimum requirements listed in Appendix 1, paragraph 2.1, requirement 5 and described in Appendix 4. The combined price will be ranked with 15% during the evaluation of the tender (Appendix A).