

INVITATION TO TENDER

Acquisition of refraction seismic (shots only) and acquisition and processing of multichannel seismic data off the Faroe Islands and optionally acquisition and processing of multichannel seismic data off West Greenland

(Open procedure)

1. Introduction

The Geological Survey of Denmark and Greenland (GEUS) intends to acquire a combined refraction and multichannel reflection seismic line and to process multichannel seismic data off the Faroe Islands. Additionally GEUS intends acquire and process multichannel reflection seismic data in West Greenland. Service providers are invited to submit tenders to this work.

Bids are invited for a) acquisition of the Faroe Island refraction (shots only) and multichannel reflection seismic data, possibly extended with acquisition of multichannel reflection seismic data off West Greenland; b) processing of the multichannel reflection seismic; and c) acquisition of the Faroese refraction data (shots only), acquisition and processing of the Faroese multichannel reflection seismic data, possibly extended with acquisition and processing of the West Greenland multichannel seismic reflection data.

Bids shall be submitted in a sealed envelope, (1 original and 2 copies), prior to 12.00 hrs GMT-1, on 02.02.2004.

2. Services to be provided

2.1 Acquisition and processing of multichannel seismic data

As part of activities in relation to the United Nations Convention on the Law of the Sea (UNCLOS) §76 GEUS intends to acquire data off the Faroe Islands. The minimum survey will consist of an 700 - 800 km line (no line change) in the area south of the Faroe Islands, to be acquired twice; once with only a large refraction gun array and no streamer, and once for acquisition of multichannel reflection seismic data. The order of acquisition will be 400 + 100 km overlap (total 500 km) of refraction acquisition, then reconfigure to reflection seismic gun array and acquire the 700 - 800 km line, reconfigure to refraction gun array and acquire the last 300 - 400 km + 100 overlap (total 400 - 500 km) refraction data with no streamer. GEUS might acquire an additional 2-300 km of refraction data as well as up to 800 km of additional of multichannel reflection seismic data in the same area. Map of the survey area is shown in Appendix 1, fig 1. A detailed description of technical requirements for seismic acquisition is found in appendix 1 and a detailed description of technical requirements for seismic processing is found in Appendix 2.

As an additional option GEUS on behalf of the Greenland Home-rule intends to acquire a minimum of 1000 km and a maximum of 2000 km of reflection seismic data offshore West Greenland. For the Greenland acquisition GEUS is potentially interested in discussing possibilities for non-exclusive acquisition. This data is to be acquired following the refraction and reflection acquisition off the

Faroe Islands. Map of the survey area is shown in appendix 1, fig 2. A detailed description of technical requirements for seismic acquisition is found in Appendix 1 and a detailed description of technical requirements for seismic processing is found in Appendix 2.

2.2 Time schedule

The work off the Faroe Islands is to be co-ordinated with another vessel doing OBS deployment and recovery. Timing is thus important for us and the survey must be initiated with mobilisation complete for refraction shooting on 01 June 2004. The optional Greenland survey should follow immediately after and be completed before mid October 2004. Processing shall be performed in succession with the acquisition and start as soon as data is available. Final processed data must be delivered to GEUS no later than 31 December 2004.

3. Minimum information requirements

3.1 Qualifications

The tender documents will specify the requirements the service provider shall fulfil when tendering. The following outlines and lists the subjects which will be specified further in the tender documents:

- The service provider shall have extensive experience and proven competence in executing 2D data acquisition and/or processing work in similar areas.
- The documentation to be submitted with the tender for the contract shall include:
 - organisation and resources including specialists;
 - qualifications of allocated personnel;
 - references from similar work undertaken as main contractor during the past 3 years, stating clients, locations, types of work, equipment and techniques employed and contract values. Provide for 3 of the listed contracts the names and addresses of the client and contact names, who may be approached for references;
 - personnel safety statistics for the past 3 years;
 - provide evidence/documentation of an implemented quality system according to ISO 9001, or equivalent;
 - provide evidence/documentation for an implemented environmental system according to ISO14001, or equivalent;
 - provide evidence/documentation for an implemented health and safety system;
 - audited annual accounts for the past 3 years and information about turnover of services performed relating to seismic acquisition and/or processing.
 - declaration that the company does not have unpaid, due debts towards the Danish government or national governments in the country in which the company is situated
 - GEUS will exclude from the short-listing procedures any person or company who has unfulfilled obligations relating to the payment of taxes in excess of DKK 100,000. Reference is made to the Danish act on restrictions on debtors' eligibility

to participate in public tender procedures (Act No. 1093 of 21 December 1984).
The prospective tenderer shall provide documentary evidence of his fulfilment of this eligibility criterion.

3.2 Proposal for scope of services and technical specifications

The scope of services is outlined in Appendix 1 and 2 and the proposal shall include a description of project organisation including project management, co-ordination and communication, QC and safety management.

3.3 Compensations (Economical offers in DKK) The economical compensation includes:

- a financial proposal for both seismic acquisition and processing
- or a financial proposal for seismic acquisition
The tenderer shall use the format in app. 1 (13. Price quotation) to give a price quotation for the seismic acquisition, based on the scope of services given in app. 1. Bids not complying with this format may be rejected.
- or a financial proposal for seismic processing

3.4 Language, format, number of copies

The bid shall be submitted in English or in Danish in a sealed envelope as outlined in section 5.2 and 6.

4. Contract

Draft contracts are included.

5. Deadline of tender

5.1 Deadline for supplementary information/questions

Any additional questions, request for supplementary information regarding the Tender Documents, and any reservations against the terms of agreement shall be addressed to the

Geological Survey of Denmark and Greenland (GEUS)
Øster Voldgade 10
DK-1350 Copenhagen K,
Denmark
Att.: Steen Lomholt

by mail or by fax no. + 45 38 14 20 50 - being marked "URGENT - GEUS j.nr 0572-006" or e-mail slo@geus.dk and received by GEUS prior to 12.00 hrs GMT-1 on 01.01.2004.

No later than 15.01.2004 GEUS will answer the requests/questions in writing. Requests/questions and answers will be forwarded to all tenderers in an anonymised form together with any necessary clarifications or amendments to the Tender Documents caused by the requests/questions. Within the same time limit GEUS will decide to what extent any submitted reservations against the terms of agreement etc. can be accepted as general amendments to the Tender Documents.

It is assumed that adjustments to the Tender Documents based on the questions and opinions of the tenderers will not be to such an extent that it implies a new tender announcement in the EU.

5.2 Deadline for receipt of tenders

The tender shall be sent by registered mail or courier in a sealed envelope (1 original and 2 copies) and shall be received by the Geological Survey of Denmark and Greenland prior to 12.00 hrs GMT-1 on 02.02.2004.

Tenders received later than the above-mentioned deadline will be rejected and returned unopened.

5.3 Duration of tender

Tenders may lapse after: 3 months

6. Tender submission

The tender shall be marked: “Confidential, §76, Seismic tender, GEUS J.nr. 0572-006 “ and addressed to:

Geological Survey of Denmark and Greenland (GEUS)
Øster Voldgade 10
DK-1350 Copenhagen K,
Denmark
Att.: Steen Lomholt

Tenders shall be submitted in 3 (three) copies. The language shall be English or Danish.

Attention is drawn to the fact that mail might be opened in the administration of GEUS, if the envelope is not marked as stated above. Tenders submitted by telex, fax or e-mail are not accepted.

7. Opening of tenders

Tenders will be opened in private and will take place immediately after time limit.

8. Tender evaluation

8.1 Criteria

The criteria for award of contract will be the economically most advantageous tender taking into account criteria listed in the tender documents.

Evaluation of tenders will be based on six groups:

- Seismic acquisition based on a fixed price pr. km for both refraction and reflection work
- Seismic acquisition based on a day rate for both refraction and reflection work
- Seismic acquisition based on a day rate for refraction and fixed price/km for reflection work
- Seismic acquisition based on a day rate for reflection and fixed price/km for refraction work
- Seismic acquisition and processing combined;

- Seismic acquisition and processing separately.

8.2 Seismic acquisition

A two-step approach to the evaluation will be used:

The first step concerns the general qualifications of the tenderer. At least 4.0 points should be obtained in order to qualify for the second part of the evaluation.

Criteria I Seismic	Weight %
Extensive experience and proven competence in executing 2D data seismic acquisition in similar areas	40
Experience in acquisition of refraction seismic data	10
Organisation, management and resources including specialists	20
Qualifications of allocated personnel incl. Key personnel CV	15
QC, health and safety	15

The second step concerns an evaluation of the offer and the overall criteria: the economical most advantage tender.

Criteria II Seismic	Weight %
Seismic equipment	30
Cost	30
Additional seismic	15
Capacity	15
Mobilisation/Demobilisation	10

8.3 Seismic processing

A two-step approach to the evaluation will be used:

The first step concerns the general qualifications of the tenderer. At least 4.0 points should be obtained in order to qualify for the second part of the evaluation.

Criteria I Processing	Weight %
Extensive experience and proven competence in executing 2D data seismic acquisition	40
Organisation, management and resources including specialists	20
Qualifications of allocated personnel incl. Key personnel CV	20
QC	20

The second step concerns an evaluation of the offer and the overall criteria: the economical most advantage tender.

Criteria II Processing	Weight %
Seismic processing (quality and time)	40
Cost	40
Capacity	20

8.4 Points

Points are given according to the scale below

Best possible	8 points
Very satisfactory	6 points
Satisfactory	4 points
Unsatisfactory	2 points
Evaluation not possible	0 point

Odd number points can be given. In the evaluation of the costs, the lowest bid is given 8 points. Higher bids are awarded points inversely proportional to the lowest bid (using two decimal points).

Points = $8 \times ((\text{lowest bid}) \text{ divided (by actual bid)})$

Example:

Lowest bid: 20 DKK

Actual bid: 22 DKK

Points = $8 \times (20:22) = 7,27$ points

GEUS will be free to accept offers on only one part of the service i.e. seismic acquisition or to reject all offers.

9. Award criteria

The final contract will, subject to GEUS' evaluation and decision, be awarded to the economically most advantageous tender representing value for money (highest number of points). GEUS reserves the right to choose freely between tenders differing less than 10 %.

10. Cancellation

GEUS reserves the right to cancel the tender.

10.1 Changes before deadline

GEUS will be free to change the offer in the period for tender and possibility to extend the tender period.

11. Expenditure

Participation in the tender is at the company's own risk and expense. GEUS accepts no liability whatsoever arising from participation in this tender.

12. Supplementary material:

Appendix 1 Acquisition of refraction seismic data (shots only) and multichannel reflection seismic data off the Faroe Islands and optionally West Greenland: Technical requirements

Appendix 2 Processing of multichannel seismic data off the Faroe Islands and optionally West Greenland: Technical requirements