

ADVANCE CONTRACT AWARD NOTICE (ACAN)

1. Advance Contract Award Notice (ACAN)

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

2. Definition of Requirements

The department of Natural Resources Canada (NRCan) has a requirement to examine the contribution of groundwater within Southern Ontario to the Great Lakes water budget. The Geological Survey of Canada uses a physically based groundwater – surface-water modelling platform for the region that can support the analysis of groundwater fluxes to the Great Lakes within southern Ontario. Using that platform, the groundwater base-flow contribution will be calculated under both steady state and seasonally transient groundwater – surface-water flow conditions using a model that incorporates the full hydrostratigraphy and groundwater flow to streams and lake bodies via shoreline and bottom discharge. To support understanding of model performance and the limitations inherent in different models the analysis will be completed using:

- i. Frey, S.K., Khader, O., Taylor, A., Eler, A.R., Lapen, D.R., Sudicky, E.A., Berg, S.J., and Russell, H.A.J. 2019. A fully integrated groundwater – surface-water model for southern Ontario: Proof-of-Concept; Geological Survey of Canada, Open File 8369, 1 .zip file.
<https://doi.org/10.4095/321042>
- ii. The contractor will provide an acceptable watershed-scale model 3000 to 8000 km sq. in area.
- iii. All modelling will be based on the same hydrostratigraphic model.
- iv. The groundwater discharge estimates provided as part of the project deliverable will be suitable to support the Great Lakes Water Quality Agreement (GLWQA) Annex 8
<https://binational.net/glwqa-aqeg/>
- v. The model analysis must be written for publication as a GSC Open File report.

3. Criteria for Assessment of the Statement of Capabilities

Any interested supplier must demonstrate by way of a statement of capabilities that it meets the following requirements:

- Experience
 - 2 years within the last 5 years experience in constructing large regional (>50,000 km²) integrated transient groundwater – surface water (GW-SW) models in Hydrogeosphere.
 - 2 years within 5 of years experience building coupled GW-SW models and climate models run in Weather Research and Forecasting Model (WRF)
 - 2 years within 5 of years experience with HydroGeoSphere (HGS) modelling software or comparable software with a full physical based coupling of groundwater – surface-water and documentation in peer review literature
- Knowledge and understanding of
 - groundwater flow modelling
 - physical hydrogeology – hydrology
 - integrated groundwater – surface-water modelling

- southern Ontario groundwater, climatology and climatological data analysis
- Academic qualifications
 - research authority for the contractor must have a PhD in hydrogeology
 - demonstrated record (journal publications) of model construction and analysis of large-scale (1.5 million nodes) regional groundwater – surface-water model
 - contractor team must have PhD level qualification in climatology simulations
 - demonstrated record (journal publications) of climatological data analysis
- Professional designation, accreditation, and/or certification
 - contractor project team should include a professional engineer or geoscientist with experience evaluating groundwater – surface water interactions with numerical tools

4. Trade Agreements

This procurement is subject to the following trade agreement:

Canadian Free Trade Agreement (CFTA);

5. Justification for the Pre-Identified Supplier

The supplier mentioned in section 11 below is the only known supplier that meets the mandatory criteria set out in section 3 above.

Should Canada receive a statement of capabilities from a supplier that contains sufficient information to indicate that it meets the requirements set forth in this ACAN, a competitive process will be triggered with a technical and financial evaluation methodology of the bids proposed by the potential bidders

6. Exception to the Government Contracts Regulations

The following exception(s) to the Government Contracts Regulations is (are) invoked for this procurement under subsection: 6(d) – “only one person is capable of performing the work).

The identified provider, Aquanty, is the only one able to meet all of the criteria identified in paragraph 3 above.

7. Exclusions and/or Limited Tendering Reasons

The following exclusion(s) and/or limited tendering reasons are invoked under the:

Canadian Free Trade Agreement (CFTA), *Article 513 b*

8. Ownership of Intellectual Property

Canada intends to retain ownership of any Foreground Intellectual Property arising out of the proposed contract on the basis that the main purpose of the contract is to generate knowledge and information for public dissemination.

9. Contract Period

The contract period will be from date of award to March 31, 2020.

10. Estimated Cost

The estimated maximum value of the contract is \$70,000.00 CAD inclusive.

11. Name and Address of the Proposed Contractor

Dr. Steven Frey
Aquanty
564 Weber Street North, Unit 2
Waterloo, ON, N2L 5C6
Ph: (519) 279-1080

12. Suppliers' right to submit a statement of capabilities

Suppliers who consider themselves fully qualified and available to provide the services/goods described herein, may submit a Statement of Capabilities in writing, preferably by e-mail, to the contact person identified in this Notice on or before the closing date and time of this Notice. The Statement of Capabilities must clearly demonstrate how the supplier meets the advertised requirements.

13. Closing Date

The closing date for a submission of a Statement of Capabilities is December 17, 2019 at 14:00 EST.

14. Contract Authority

Julia Pace
1 Challenger Drive
Dartmouth, NS B2Y 4A2

Telephone: 902-426-7279
email: Julia.pace@canada.ca