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Request for Proposal (RFP)
AMENDMENT

Demande de proposition (DDP)
MODIFICATION

Proposal To: Natural Resources Canada
We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

Proposition à: Ressources Naturelles Canada
Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments – Commentaires

Issuing Office – Bureau de distribution

Finance and Procurement Management Branch
Natural Resources Canada
580 Booth Street
Ottawa, Ontario
K1A 0E4

Title – Sujet

National Bedrock Geology Mosaic

Solicitation No. – No de l'invitation	**Date**
NRCan-5000069682	November 1, 2022
Requisition Reference No. - N° de la demande	Amendment No. – Modification No.
173610	**001**

Solicitation Closes – L'invitation prend fin
at – à 02:00 PM (EST)
on – le 21 November 2022

Address Enquiries to: - Adresse toutes questions à:

andrea.bethelet@nrcan-rncan.gc.ca

Telephone No. – No de telephone

343-543-7092

Destination – of Goods and Services:
Destination – des biens et services:

Natural Resources Canada
601 Booth Street
Ottawa, ON
K1A 0E8

Security – Sécurité

There are no security requirements associated with this requirement.

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Telephone No.:- No. de téléphone:
Email – Courriel :

Name and Title of person authorized to sign on behalf of Vendor/Firm (type or print)
Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie)

Signature **Date**

This Amendment **001** of **RFP NRCan-5000069682** is issued to respond to questions, therefore amend the RFP as follows:

Question1:
Is the expectation that the bidder will be expected to correct each map within the database? If so, which scale(s) and how many maps are there? The RFP is not clear and this is key to costing the time and effort for the proposal.

Response 1:
The bidder is expected to correct all remaining geometry errors for the polygons and all remaining spelling errors for the text attributes. Both types of errors are rare. These maps are already published as open access and have already gone through rigorous review, sometimes over many years. There are 22 maps in total. The best available estimate for the total number of polygons involved is 400,000, although it is possible that this number could be slightly lower or higher depending on the polygon processing method used. The map scales are variable, but the project is mostly based on provincial and territorial datasets and other large-area map compilations.

Question 2:
Regarding Milestone 1(1), can you provide the source data links for each Province and Territory so that as a bidder, we can evaluate the source data for the effort required within the RFP.

Response 2:
Please find the full references for the 22 geological maps databases are below.

St-Onge, M.R., Ford, A., Henderson, I., 2007. Digital geoscience atlas of Baffin Island (south of 70°N and east of 80°W), Nunavut. Geological Survey of Canada, Open File 5116, 200

de Kemp, E.A., Scott, D.J., 1998. Geoscience compilation of northern Baffin Island and northern Melville Peninsula, Northwest Territories. Geological Survey of Canada, Open File 3636, 2 CD-ROMs

Harrison, J.C., Lynds, T., Ford, A., and Rainbird, R.H., 2016. Geology, simplified tectonic assemblage map of the Canadian Arctic Islands, Northwest Territories - Nunavut. Geological Survey of Canada, Canadian Geoscience Map 80, 1 sheet

Harrison, J.C., St-Onge, M.R., Petrov, O.V., Strelnikov, S.I., Lopatin, B.G., Wilson, F.H., Tella, S., Paul, D., Lynds, T., Shokalsky, S.P., Hults, C.K., Bergman, S., Jepsen, H.F., Solli, A., 2011. Geological map of the Arctic / Carte géologique de l'Arctique. Geological Survey of Canada, "A" Series Map 2159A, 9 sheets, 1 DVD

Tella, S., Paul, D., Berman, R.G., Davis, W.J., Peterson, T.D., Pehrsson, S.J., Kerswill, J.A., 2007. Bedrock geology compilation and regional synthesis of parts of Hearne and Rae domains, western Churchill Province, Nunavut - Manitoba. Geological Survey of Canada, Open File 5441, 3 sheets, 1 CD-ROM

Sanborn-Barrie, M., Chakungal, J., James, D.T., Rayner, N., Whalen, J.B., 2014. Precambrian bedrock geology, Southampton Island, Nunavut. Geological Survey of Canada, Canadian Geoscience Map 132, 1 sheet

Pehrsson, S.J., Currie, M., Ashton, K.E., Harper, C.T., Paul, D., Pana, D., Berman, R.G., Bostock, H., Corkery, T., Jefferson, C.W., Tella, S., 2014. Bedrock geology compilation and regional synthesis of south Rae and parts of Hearne domains, Churchill Province, Northwest Territories, Saskatchewan, Nunavut, Manitoba and Alberta. Geological Survey of Canada, Open File 5744, 2 sheets

Okulitch, A. V., and Irwin, D., 2017. Geological Compilation of the Western Mainland and Arctic Islands of the Northwest Territories. Northwest Territories Geological Survey, NWT Open File 2016-09, ESRI® digital files and PDF files

Skulski, T., Paul, D., Sandeman, H., Berman, R.G., Chorlton, L., Pehrsson, S.J., Rainbird, R.H., Davis, W.J., Sanborn-Barrie, M., 2018. Bedrock geology, central Rae Craton and eastern Queen Maud Block, western Churchill Province, Nunavut. Geological Survey of Canada, Canadian Geoscience Map 307, 1 sheet

Stubley, M.P., and Irwin, D., 2019. Bedrock Geology of the Slave Craton, Northwest Territories and Nunavut. Northwest Territories Geological Survey, NWT Open File 2019-01, ESRI® and Adobe® digital files

Cui, Y., Miller, D., Schiarizza, P., and Diakow, L.J., 2017. British Columbia digital geology. British Columbia Ministry of Energy, Mines and Petroleum Resources, British Columbia Geological Survey Open File 2017-8, 9 p., Data version 2019-12-19

Yukon Geological Survey, 2022. Yukon digital bedrock geology. Yukon Geological Survey, https://data.geology.gov.yk.ca

Saskatchewan Geological Survey, 2019. 1:1 Million scale bedrock geology for the province of Saskatchewan. Saskatchewan Ministry of Energy and Resources, https://geohub.saskatchewan.ca

Prior, G.J., Hathway, B., Glombick, P.M., Pana, D.I., Banks, C.J., Hay, D.C., Schneider, C.L., Grobe, M., Elgr, R. and Weiss, J.A., 2013. Bedrock geology of Alberta; Alberta Energy Regulator, AER/AGS Map 600

Manitoba Geological Survey, 2013. Manitoba Mineral Resources 2013 Bedrock geology, Manitoba, 2007-2011, https://rdmaps.gov.mb.ca

Ontario Geological Survey, 2011. 1:250 000 scale bedrock geology of Ontario. Ontario Geological Survey, Miscellaneous Release–Data 126, Revision 1

SIGEOM, 2022. Geologie du socle. Système d'information géominière of Québec. https://sigeom.mines.gouv.qc.ca/

New Brunswick Department of Energy and Mines, 2015. New Brunswick bedrock geology. Department of Energy and Resource Development, http://www.snb.ca

Fisher, B.E., Poole, J.C., 2006. Geological Map of the Province of Nova Scotia, Scale 1:500 000. Digital Version of Nova Scotia Department of Natural Resources Map ME 2000-1, DP ME 43, Version 2

PEI Department of Environment, Energy & Forestry, Forests, Fish & Wildlife Division, 2002, 1973 Surficial Geology. www.gov.pe.ca/gis

Newfoundland and Labrador Geological Survey, 2013. Detailed Bedrock Geology. Newfoundland and Labrador GeoScience Atlas OnLine, https://geoatlas.gov.nl.ca

Wheeler, J.O., Hoffman, P.F., Card, K.D., Davidson, A., Sanford, B.V., Okulitch, A.V., and Roest, W.R., 1996. Geological map of Canada / Carte géologique du Canada. Geological Survey of Canada, "A" Series Map 1860A, 1996, 3 sheets; 1 CD-ROM

Question 3
For Milestone 1 (4), how many lakes or areas of missing data need to be corrected within the entire database? Further, what percentage of the database coverage is missing geologically information with respect to the Provincial boundaries?

Answer 3:
Areas with missing data are rare and are to be filled with the national geology map of Wheeler et al. 1996 where required. A small subset of maps in Nunavut and Quebec have missing geological information linked to tables that will also be provided. Most of the lakes are very small (n = 100s) and occur in the Labrador and Newfoundland dataset, which can be filled manually using geophysics that NRCan can provide as a guide or using an automated solution (e.g., polygon dissolve). The bidder is not expected to find their own sources of information to fill missing data.

Question 4:
For Milestone 1(4), is it the intent of NRCan to have the bidder review and correct every single geological map for errors, reinterpretation, and realignment of geometry as part of this RFP? If no, what are the limits of the scope of the deliverables.

Answer 4:
All polygons will require a reinterpretation to a generalized rock type. NRCan will provide the classification system, with a clear definition and example lithologies for each of the 37 generalized rock types. NRCan will also provide a suggested generalized rock type for each polygon to be used as a guide. NRCan will work with the bidder on this task. All geometry errors are also expected to be fixed, although these are known to be rare and there are automated solutions available. The vast majority of the required work is related to reformatting the map attributes to a common standard that NRCan will provide.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.