

Questions and Answers Posted July 7, 2020.

Request for Proposals Paleogeography-to-Petroleum Systems: Research Innovations for Offshore Nova Scotia (PaGeo2)

RFP issued May 21, 2020; Proposals due August 28, 2020

Note: “contractor” means any individual or group respondent to the RFP.

Q1) An IODP proposal is mentioned in the PaGeo2 proposal. Are the location and aim of this IODP proposal already defined? If yes, is it possible to have more information about it to properly focus the project?

A1) The purpose of mentioning an IODP proposal is to indicate Nova Scotia’s interest in supporting fundamental research questions using the conjugate Nova Scotia-Morocco margins (and along-strike neighbors) as a natural laboratory. Because PaGeo2 addresses a fundamental relook at the conjugate Nova Scotia-Morocco evolution, admittedly with a focus on petroleum systems and potential during PaGeo2, it is expected that research projects undertaken under PaGeo2 could expose critical uncertainties in basic science that could best be addressed as part of a new IODP proposal to be developed and proposed starting 2-3 years from now. Thus, it is a value add if PaGeo2 projects can describe how PaGeo2 might set up and prepare for the justifications required in a future IODP proposal. Note, that no planning has been undertaken and no locations have been defined for the contemplated IODP program; it is hoped that PaGeo2 project results can help to identify and provide the justification for exactly these kind of details. As noted in the RFP, proponents are asked to describe in a general way how their projects might contribute to an eventual IODP program, and in particular, how outstanding questions associated with their proposal might be addressed in an IODP application.

Q2) Is it possible to propose a project, which covers different themes (e.g. crustal architecture and deformable plate model?).

A2) Yes. A project can cover different themes provided objectives, workflow and outcomes are clearly defined and evidently achievable within proposed timelines.

Q3) If interactions are already identified with another proposal, should we mention it already?

A3) Yes, the reviewers would appreciate any information that clarifies or illustrates the proposed work and identifies synergies or overlaps.

Q4) Are the seismic data accessible through the CNSOPB?

A4) Seismic data accessible through the CNSOPB can be assessed via the CNSOPB’s Data Management Center (DMC). However, as a general comment, such data access does not typically extend to SEG Y data (only images or paper is generally available). However, for the purposes of PaGeo2 projects, Nova Scotia via the Department of Energy and Mines and the OERA can facilitate access to SEG Y data for successful proponents with the understanding that required confidentiality agreements or terms will need to be signed by successful proponents as necessary. Note that, in

general, SEG Y seismic data is limited to specific vintages submitted to the regulatory board as part of normal reporting requirements. Note further, however, that Nova Scotia and the OERA have obtained the possibility to work with field data and all processing steps for select 3D survey(s) from the offshore, again with the proviso that necessary confidentiality terms or agreements are required. Please consider inquiring ahead of a proposal submission what specific seismic data and in what vintage may be required for a given proposal.

Q5) It is suggested in the proposal to include the conjugate Moroccan margin to provide an integrated study. (Should we) have contacts in the ONHYM company enabling access to the west Moroccan seismic data, (would) such an interaction (be) in agreement with the policy of the proposal?

A5) On a general level, yes this is in agreement with the proposal although a certain degree of caution is strongly advised. NSDEM and OERA have a long-established collaborative relationship with ONHYM and we hope to engage them in PaGeo2 projects. Given the value and sensitivity of this relationship, we caution against direct outreach to ONHYM at this stage of the process (although we cannot prevent this if you feel your existing relationship would permit such discussions). Proponents are instead advised to describe their intentions with respect to ONHYM and their data in the proposal, describe any possible limitations to this collaboration (e.g., data confidentiality), and outline any potential impacts to project workflow and timing.

Questions and Answers Posted June 3, 2020.

Q1) Re section 2.1: New controlled source refraction seismic line acquisitions for basic crustal and upper mantle calibration

Will the contractor be required to perform this acquisition or will this data be supplied? The timing and budget of this project would make this acquisition very difficult.

A1) The budget and timelines for this RFP are admittedly a poor fit for new controlled source reference seismic line acquisitions. Contractor response on this topic may benefit from the following guidance. At least two types of proposals appear possible and would be considered.

First, a synthesis project to assemble a whole margin summary of crustal and upper mantle calibration offshore Nova Scotia (and/or Morocco) from existing refraction and related data would be valuable. This could support a goal of identifying new margin formation insights and/or areas to target for future new data acquisition expeditions in the future.

Second, if a contractor is able to justify and schedule a new data acquisition expedition between 2020-2022 followed by data processing and analysis in subsequent years then an acquisition proposal would be considered very seriously due to the high value of adding to the offshore database. However, such a new data acquisition program could not be funded through the PaGeo2 program (since PaGeo2 projects must end by June 2023). Given this, we recommend the proponent discuss such projects with OERA after the RFP closes.

Q2) Re section 2.5: Source-to-sink studies for offshore Nova Scotia; Study of hinterland uplift using thermochronometry

Will this be required to be done from scratch or from pre-existing data? As above, the timing and funds for this type of studies may be difficult to fit in this RFP.

A2) Similar to Q1 and A1, at least two types of proposals appear possible.

First, one response to this RFP are proposals that focus on pre-existing databases to develop regional syntheses of the source-to-sink and hinterland uplift constraints (or, perhaps, targeted studies of particular geographic systems or processes, if value of targeted studies can be shown). Also, syntheses of pre-existing databases could be used to identify gaps and opportunities where new data acquisition could be constructively supported in future funded programs.

Second, acquisition of new data to support these topics could be targeted directly in a PaGeo2 proposal either as a full new program or to supplement the existing database in a targeted way.

As noted in the question, the value of new data would need to be balanced against the pressures to turn around the data and analysis under PaGeo2 timelines. Ideally, the PaGeo2 evaluation committee would be looking for projects that could collect, process, and report on new data within PaGeo2 timelines. Accommodation for reasonable delays on the public release of data and interpretations beyond PaGeo2 timelines would count against a proposal but perhaps not fatally.

Alternatively, contractors interested in such acquisition proposals, but certain that PaGeo2 funds and timelines remain awkward, are requested to discuss such projects with OERA after the RFP closes.

Q3) Re section 5.5: Approximately one half of the funding will be Canadian-weighted while one half will be unweighted with respect to Canadian content.

Can you clarify this statement? The respondents are required to be Canadian or have a Canadian partner in order to apply to more than 50% of the funding?

A3) We don't expect any one respondent to apply for more than half the funding. As noted in the RFP, OERA is targeting projects the require funding between \$75,000 and \$250,000 each (i.e., 3-10 projects are targeted for support depending on the total value of each). Respondents are not required to have a Canadian partner in order to apply. Approximately one half of the total funding (\$850,000) will be Canadian-weighted. To be clear, for the evaluation of \$425,000 of funding (1/2 total), all proposals will be evaluated equally, using only technical criteria, with no preference to proposals with a Canadian partner. For the other \$425,000 of funding (1/2 total), proposals with a Canadian partner will be scored higher and, assuming they are competitive on technical grounds, supported ahead of comparable proposals without a Canadian partner.

Q4) Will the funds only be delivered at the end of the project or during? For academic institutions and small enterprises monthly or quarterly transfers would be preferable.

A4) OERA will negotiate acceptable contracting terms on a project-by-project basis. Initial 'kickoff' payments, milestone payments, quarterly payments etc. will be considered at the contracting stage. OERA is familiar with academic and SME funding necessities.

Q5) The RFP states that single respondents or teams may consider proposing projects which know about one another and which would benefit from mutual funding and an advance integration plan. Does that collaborative spirit extend to allowing one individual to be formally involved with more than one project

proposal? I have been approached to participate in two separate project proposals with different research goals. I just want to make sure that if I decide to participate in both, I won't ultimately condemn both of the projects to failure due to violation of the rules. Can you provide some guidance on my situation?

A5) It is perfectly acceptable for an individual person or team to participate in multiple proposals. This will not affect the technical evaluation of competing proposals. Note, however, that reviewers will consider whether project participants seem 'over committed'. Because this could affect project scheduling or deliverable quality, persons or teams involved in multiple proposals should indicate for each submitted proposal how much time and effort their contributions are expected to consume and their capacity to deliver on their contributions.