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SOLICITATION AMENDMENT **MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

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Science Procurement Directorate/Direction de l'acquisition de travaux scientifiques Terrasses de la Chaudière, 4th Flo 10 Wellington Street Gatineau Ouebec K1A 0S5

Title - Sujet LEAP Science Instruments					
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at - à 02:00 PM	Eastern Daylight Savi				
on - le 2021-09-30	Heure Avancée de l'Es	st HA	E		
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Abbasi, Sameer Ali			048st		
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Nom et titre de la personne autorisée à si de l'entrepreneur (taper ou écrire en cara	-				
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 $\begin{array}{l} \mbox{Solicitation No. - N^{\circ} de l'invitation} \\ \mbox{9F052-200589/A} \\ \mbox{Client Ref. No. - N^{\circ} de réf. du client} \\ \mbox{9F052-200589} \end{array}$

Amd. No. - N° de la modif. 002File No. - N° du dossier 048st.9F052-200589 Buyer ID - Id de l'acheteur 048st CCC No./N° CCC - FMS No./N° VME

This amendment is raised to address the following:

- For administrative purposes only.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME



Letter of Interest (LOI)

LUNAR EXPLORATION ACCELERATOR PROGRAM (LEAP) SCIENCE INSTRUMENT

1. Purpose and Nature of the Letter of Interest (LOI)

Public Works and Government Services Canada (PWGSC), on behalf of the Canadian Space Agency (CSA), is releasing this Letter of Interest (LOI) to inform Canadian industry and academia of upcoming procurement activities related to the Lunar Exploration Accelerator Program (LEAP).

The CSA would like to inform industry and academia that it has elected to participate in National Aeronautics and Space Administration (NASA)'s Payloads and Research Investigations on the Surface of the Moon (PRISM) ROSES-2021 F.10 PRISM call for potential lunar surface investigations in support of the science instrument project element of the LEAP portfolio. For more information on this program element, industry and academia can refer to the draft text posted on the NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES) page for <u>ROSES-2021 F.10 PRISM</u>¹.

In support of this participation, and although the procurement process remains subject to change or cancellation, PWGSC anticipates that the procurement process will be conducted in a multi-phase procurement approach as follows:

1) Phase 1 - Invitation to Qualify (ITQ)

The purpose of this phase will be to invite interested Canadian parties to submit a response indicating their interest in, and qualifications for, the requirement. The ITQ is being planned for release by PWGSC in conjunction with NASA's PRISM call in Q3 of 2021 in time for interested Canadian parties to partner with a U.S. organization as part of their proposal on NASA's PRISM call. This ITQ will apply specifically to this PRISM call. Any future NASA PRISM calls or similar NASA call processes, if applicable, will have a separate ITQ process associated with them. Interested Canadian parties that wish to be considered for future opportunities, if applicable, will be required to submit a response for each specific ITQ and call in accordance with the processes identified therein.

The ITQ will identify technical, financial and policy evaluation requirements, as well as the set terms and conditions for any potential future contract(s) for Phases A through F of the LEAP Science Instrument project.

Examples of evaluation requirements that may be used to qualify respondents based on their response submitted to this ITQ could be as follows:

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 $^{1\} https://nspires.nasaprs.com/external/solicitations/summary.do?solId=\%7bAD1DEAD1-7060-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do?solId=\%7bAD1DEAD1-7060-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD1DEAD1-7060-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD1DEAD1-7060-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD1DEAD1-7060-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD1DEAD1-7060-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD1DEAD1-7060-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD1DEAD1-7060-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-2C93-8CD1-780AF8FC9D54\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-7804\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-7804\%7d&path=&method=initiations/summary.do%solId=\%7bAD10-7804\%7d&path=&method=initiati$



- Science merit and alignment on science priorities
- Technology/Science Readiness
- Team Capability
- Feasibility (technical and schedule)
- Mission Cost
- Canadian content
- Security requirements

Those respondents who meet all of the requirements of the ITQ through a formal evaluation conducted by Canada during the ITQ process will be referred to as "Qualified Respondents" and will be provided with a conditional letter of support from CSA confirming available funding for the proposed work in support of their response to this NASA PRISM call. Participation in this ITQ and obtaining a letter of support from CSA will be a condition and prerequisite to participate in the subsequent phase of the procurement process should the partnered U.S. team proposal be selected.

2) Phase 2 - Request for Proposal (RFP)

If a U.S. team proposal with a Canadian Qualified Respondent is selected as part of the PRISM call selection process for one delivery location, PWGSC will invite only the Qualified Respondent to participate in the RFP for Phases A through F of the project in order to solicit a formal technical and financial bid from the Qualified Respondent based on the final Statement of Work (SOW) that would be developed subsequent to the ITQ and take into account any NASA PRISM call requirements. As the set terms and conditions of any potential future contract will be established through the ITQ process, this RFP will establish the final technical requirement and any outstanding contractual elements, such as the term of the contract, work authorization points and the basis of payment for each phase of the project. The RFP is anticipated for release by PWGSC in Spring of 2022 and the resulting contract, if any, for the LEAP Science Instrument (LSI) for Phases A through F is anticipated for award in Spring/Summer 2022.

Should U.S. team proposals with Canadian Qualified Respondents be selected as part of the PRISM call selection process for both delivery locations, PWGSC will proceed as described above but will invite both Qualified Respondents to participate in the corresponding RFP for Phases A through F of the project with the aim of awarding a contract for each delivery location.

PWGSC is not requesting any specific comments or feedback from industry as part of this LOI.

This LOI is neither a call for tender nor an RFP. No agreement or contract will be entered into based on this LOI. The issuance of this LOI is not to be considered in any way a commitment by the Government of Canada, nor as authority to potential respondents to undertake any work that could be charged to Canada. This LOI is not to be considered as a commitment to issue a subsequent solicitation or award contract(s) for the work described herein.



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There will be no short-listing of potential suppliers for the purposes of undertaking any future work as a result of this LOI.

2. Background Information:

On February 28, 2019 the Government of Canada announced a new Lunar Exploration Accelerator Program, or LEAP, with an investment of \$150M over five years. LEAP will support space technology development and in-space demonstration, as well as science missions. Its aim is to expand and prepare Canada's space sector, particularly small and medium sized enterprises, for future exploration missions by offering technology development, science and mission opportunities in lunar orbit, on the Moon's surface, or further into deep space.

Further details on the LEAP program are available at the following link: <u>https://www.asc-csa.gc.ca/eng/funding-programs/programs/leap/about.asp</u>.

Though a Phase 0 contract is not a prerequisite to participate in the Phase 1 ITQ as described above, the following provides some background on Phase 0 studies that have already been issued related to LSI:

On May 7, 2020, PWGSC, on behalf of the CSA, <u>released a LOI²</u> to inform industry that an RFP for the Phase 0 activities portfolio was being planned for release by PWGSC in support of the science instrument project element of the LEAP portfolio.

On June 26, 2020, PWGSC <u>released an RFP³</u> on behalf of the CSA to acquire services to conduct Phase 0 studies for the development of scientific instrument as part of LEAP.

On September 21, 2020, the CSA presented an update of LEAP at an event held by the Satellite Canada Innovation Network. The presentation focused on ongoing elements of the LEAP Science & Technology Portfolio, including lunar science/technology payloads that are planned to be flown in collaboration with NASA's <u>CLPS</u>⁴ program. Further details on this event and the LEAP update are available at the following link: <u>https://www.satellitecanada.org/satcan-events.</u>

On November 26 and November 27, 2020, PWGSC, on behalf of the CSA, <u>awarded six contracts⁵</u> to acquire services to conduct Phase 0 studies for the development of scientific instrument as part of LEAP.

On March 15, 2021, <u>the initial release of this LOI</u>⁶ was issued to inform industry that a RFP was being planned for release by PWGSC in the Fall of 2021 and to provide industry with the anticipated budget for

5 https://buyandsell.gc.ca/procurement-data/tender-notice/PW-ST-048-38063

6 https://buyandsell.gc.ca/procurement-data/tender-notice/PW-ST-048-39153



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 $^{2\} https://buyandsell.gc.ca/cds/public/2020/05/07/35fcb31d123044181dbca1f9ea5a0b7a/ABES.PROD.PW_ST.B005.E37772.EBSU000.PDF$

³ https://buyandsell.gc.ca/procurement-data/tender-notice/PW-ST-048-38063

⁴ https://www.nasa.gov/content/commercial-lunar-payload-services



the science instrument project element of the LEAP portfolio. Further to the initial release of this LOI, Canada has elected to participate in the PRISM call for proposals as described above as the science return is expected to be greater given that the science instrument will be part of a mission. As such, the scope, objective and budget of the requirement have been updated accordingly in this amendment.

Background on PRISM

PRISM is NASA's primary mechanism for identifying payloads to be delivered through the CLPS program. As such, the NASA PRISM program element referenced herein will solicit proposals for investigations that include development and flight of science-driven suites of instruments payloads that will be delivered to the lunar surface by the CLPS⁷ program. Though now closed, the 1st PRISM solicitation call⁸ was issued by NASA on February 14 2020 for science investigations that will be delivered to the lunar surface in late Calendar Year (CY) 2023 and early CY2024 to predetermined lunar landing sites.

The 2nd PRISM solicitation call, pertaining to this LOI, is expected to be issued by NASA in Q3 2021 for launches in late 2024 and early 2025. Under this PRISM solicitation call, NASA intends to select science instrument suites for two <u>CLPS</u>⁹ deliveries, one expected to be at a south polar location in Q4 2024, and the other at the Gruithuisen Domes, a nearside silicic volcanic construct, in Q2 2025. Mobility capabilities are expected to be available for Gruithuisen Domes.

For more information on this program element, industry and academia can refer to the draft text posted on the NSPIRES page for ROSES-2021 F.10 PRISM¹⁰.

The planned schedule for the solicitation of F.10 PRISM is as follows:

st 2021 (target)
ays after final ROSES release
ays after ROSES release
onths post proposal due date

No further information is available to share with industry and academia at this time and any questions relating to Canada's ITQ process must only be submitted through PWGSC if and when an ITQ released.

3. Potential Work Scope and Constraints:

The scope of work will include Phases A through F for a typical space mission relevant to PRISM. The objective of the Phase A work will be to demonstrate and confirm the feasibility, value and benefits of the



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⁷ https://www.nasa.gov/content/commercial-lunar-payload-services

⁸ https://nspires.nasaprs.com/external/solicitations/summary.do?solld=%7b03464E24-4AFA-781E-200C-956EE283CD8A%7d&path=&method=init

⁹ https://www.nasa.gov/content/commercial-lunar-pavload-services

¹⁰ https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7bAD1DEAD1-7060-2C93-8CD1-780AF8FC9D54%7d&path=&method=init



instrument for a space mission to the Moon, and to demonstrate the validity of the mission requirements as well as the development of the system requirements. Phases B, C, and D will be the preliminary, detailed and implementation phases respectively of the instrument project, whereas Phase E will be the operations phase and Phase F the closeout phase.

If a U.S. team proposal with a Canadian Qualified Respondent is selected as part of the PRISM call selection process for only one delivery location, the CSA plans to support one Canadian science instrument up to the full allowed 1/3rd international contribution of the total investigation cost for either of the above mentioned locations in Section 2. This cost requirements include a 20% cost reserve, as per the PRISM call, that will be held at the CSA and included in the overall budget.

Should U.S. team proposals with Canadian Qualified Respondents be selected as part of the PRISM call selection process for both delivery locations, the CSA plans to support both Canadian science instruments up to the full allowed 1/3rd international contribution unless the total cost for both missions exceeds this amount.

In such a case, the maximum funding available for both missions is \$16.9M Canadian Dollars (CAD), Applicable Taxes extra, with \$5.6M CAD, Applicable Taxes extra, for the south pole mission and \$11.3M CAD, Applicable Taxes extra, for the Gruithuisen Domes mission. These cost requirements would include a 20% cost reserve, as per the PRISM call, that will be held at the CSA and included in the overall budget.

This LOI may be amended periodically as new information becomes available.

The Canadian Content Policy¹¹ will apply to this requirement.

4. Schedule:

The following schedule should be utilized as an anticipated baseline:

- Letter of Interest (LOI) closing on:
- ITQ posting:
- RFP(s) issued to the Canadian selected Qualified Respondent(s):
- Contract Award:
- Flight opportunities:

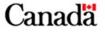
The above schedule is provided for planning purposes only and is subject to change or cancellation by Canada at any time.

5. Important Notes to Respondents:

11 https://buyandsell.gc.ca/policy-and-guidelines/supply-manual/section/3/130

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Any questions related to this LOI must only be directed to the PWGSC Contracting Authority, identified below, via email:

Sameer Ali Abbasi Contracting Specialist Public Works and Government Services Canada Acquisitions Branch Space Programs and Procurement Directorate Address: 10 Wellington Street Gatineau, Quebec K1A 0S5

Telephone: 873-354-4921 E-mail: <u>sameerali.abbasi@tpsgc-pwgsc.gc.ca</u>

Changes to this LOI may occur and will be advertised on the Government Electronic Tendering System. It is advised that interested parties visit Buyandsell.gc.ca regularly to check for changes, if any.

