Advance Contract Award Notice Communications Research Centre a division of Innovation, Science and Economic Development Canada (ISED)

Path Loss Measurements

Advanced 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.

Definition of the requirement

The Communications Research Centre (CRC) an agency of the Department of Innovation, Science and Economic Development Canada (ISED) has a requirement to obtain measurements of path loss propagation data from across Canada. Path loss is the weakening of radio signals as they travel over distance and encounter obstacles like buildings and trees.

CRC is seeking to establish a contract to augment the amount and geographical coverage of path loss measurements collected using professionally grade equipment, to enhance CRC's capability to develop models that predict path loss and received power.

Statement of Requirements

The main requirement in this contract can be summarized as follows: 25 low-band and mid-band path loss measurement data sets, within the frequency range 500 MHz – 6 GHz. in several geographical regions across Canada. Optionally, millimeter wave (mmWave) frequencies path loss measurements, ranging from 25-50 GHz, will be considered for the procurement. These data sets must include measurements from at least 5 different provinces across Canada with at least:

- A least two data sets from a Maritimes province (New-Brunswick, Nova Scotia, Prince Edward Island, or Newfoundland and Labrador)
- one data set in Quebec
- one data set in Ontario
- at least one data set in the Prairies (Alberta, Saskatchewan, or Manitoba).

A minimum of 10,000 individual measurements per data sets is required. A data set can be collected using a drive test method. The measurement data must be collected in the last 5 years.

Each data set must be measured in one of the following environmental scenarios:

- (1) Rural Open Areas: A sparsely populated area characterized by large open fields with sparse vegetation and cropland, typically located far from urban centers.
- (2) Rural Forested Areas: A sparsely populated area characterized by extensive woodlands and natural vegetation, typically located far from urban centers.

- (3) Suburban/Urban Areas: A densely populated area with residential, commercial, and industrial development, with some vegetation. The building heights should not exceed two or three floors.
- (4) High Rise Dense Urban Areas: A densely commercial and residential area with high-rise towers and street canyons. A downtown area should have multiple buildings with at least ten floors (e.g., Toronto, Montreal, or Vancouver downtown cores).

The minimum number of datasets required by environmental scenario is described in the table below. This accounts for 21 of the 25 requested data sets. The remaining (4) data sets can be for any environmental scenario, frequency - including mmWave - and transmitter height.

Environmental Scenario	Frequency	Transmitter Height (m)	Minimum Number of Data Sets Required
Rural Open Areas	500 MHz – 6 GHz	5 - 100	2
Rural Forested Areas	500 MHz – 1 GHz	10 - 100	2
	1 GHz – 3GHz		2
	3 GHz – 6 GHz		2
Suburban/Urban Areas	500 MHz – 1 GHz	10 - 100	3
	1 GHz – 3GHz		3
	3 GHz – 6 GHz		3
High Rise Dense Urban Areas	500 MHz – 6 GHz	< 10	2
		10 - 100	2

A company that has commercially available off-the-shelf solutions is desired. The data acquisition is needed as soon as possible to sustain the ongoing research and development activities by CRC projects.

Timing and Deliverables:

The contractor will provide

1. 25 path loss measurements datasets within 3 weeks of the contract award, in a machine-readable format (such as CSV) via the internet.

Justification for the Pre-Identified Supplier

CRC has conducted an extensive search of possible suppliers of this type of data. There is a very limited supplier market. Four have been contacted and only the pre-selected supplier has responded with sample data and pricing.

Government Contracts Regulations Exception(s)

Government Contracts Regulations Exception(s) 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 supplier, **Netscout**, is the only one able to meet all the criteria identified above.

Ownership of Intellectual Property

The standard acquisition clauses and conditions in 4006 (2010-08-16) Contractor to Own Intellectual Property Rights in Foreground Information apply to and form part of the Contract, subject to the following amendments:

The definition of "Intellectual Property" is replaced with "Intellectual Property means the data sets that are the deliverables described in this document, that are non-public, confidential, and proprietary in nature."

Section 1 of 4006 04 (2008-05-12):

As Canada has contributed to the cost of developing the Foreground Information, the Contractor grants to Canada a license to exercise all Intellectual Property Rights in the Foreground Information for Canada's activities. Subject to any exception described in the Contract, this license allows Canada to do anything that it would be able to do if it were the owner of the Foreground Information, including full rights to use, copy, transform or make derivatives of the Foreground Information. Canada may publish any results, insights or reports but may not publish the Foreground Information or disclose or commercially exploit that information. The Contractor also grants to Canada a license to use the Background Information to the extent that it is reasonably necessary for Canada to exercise fully all its rights in the deliverables and in the Foreground Information but does not include a right to publish, disclose or commercially exploit the Background Information. "

Period of the proposed Contract

The proposed contract will be from contract award to March 28, 2024.

Cost estimate of the proposed Contract

The estimated value of the contract, including option(s), is \$130,000 including GST/HST.

Proposed Contractor

NetScout 310 Littleton Road Westford, MA, United States

You are hereby notified that the government intends to solicit a bid and negotiate with one firm only as identified above.

Suppliers' right to submit a statement of capabilities

Suppliers who consider themselves fully qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

Responses received on or before the closing date will be considered solely for the purpose of deciding whether or not to conduct a competitive procurement. Information provided will be used by the Crown for technical evaluation purposes only and will not be construed as a proposal. The submitted written response must provide sufficient evidence (e.g. specifications, technical data, drawings or any other proof) that clearly demonstrates that the proposed product is capable of fulfilling this requirement. Suppliers that have submitted a response will be notified in writing of ISED's decision whether to continue with the aforementioned procurement or to compete the requirement.

Inquiries and statements of capabilities are to be directed to:

Procurement Authority: Samantha Amadio

Address: 3701 Carling Avenue, Ottawa, ON, K2H 8S2

E-mail: samantha.amadio@ised-isde.gc.ca

Innovation, Sciences et Développement économique Canada

All responses or inquiries are to be submitted to the Procurement officer identified above. The ISED file number, the procurement officer's name and the closing date of the ACAN must appear on the outside of the envelope in block letters or, in the case of a facsimile transmission, on the covering page.

The Crown retains the right to negotiate with suppliers on any procurement. Documents may be submitted in either official language of Canada.

Closing date for a submission of a statement of capabilities

The closing date and time for accepting statements of capabilities is: Thursday February 15, 2024, at 2:00 PM Eastern Standard Time.