ACAN 14-22039

Advance Contract Award Notice: Professional services for instrumentation and control for development of a rotating microfluidic platform

An Advance Contract Award Notice (ACAN) allows departments and agencies to post a notice, for no less than fifteen calendar days, indicating to the supplier community that it intends to award a good, service or construction contract to a pre-identified contractor. If no other supplier submits, on or before the closing date, a statement of capabilities that meets the requirements set out in the ACAN, the competitive requirements of the government's contracting policy have been met. Following notification to suppliers not successful in demonstrating that their statement of capabilities meets the requirements set out in the ACAN, the contract may then be awarded using the Treasury Board's electronic bidding authorities.

If other potential suppliers submit statements of capabilities during the fifteen calendar day posting period, and meet the requirements set out in the ACAN, the department or agency must proceed to a full tendering process on either the government's electronic tendering service or through traditional means, in order to award the contract.

Suppliers who consider themselves fully qualified and available to provide the services/goods described herein, 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.

Closing date: 2:00 pm Eastern Standard Time, Friday July 25, 2014

Please submit a statement of capabilities to:

Melody Ellis
Procurement Officer
1200 Montreal Road, M-22 Room 100
Phone: (613) 993-4461 Fax: (613) 993-6867
Melody.Ellis@nrc-cnrc.gc.ca

1. **Definition of requirements and expected results**

The project requires the development of the hardware as well as the control software (to be integrated in an existent platform) for managing valves, temperature control, rotation, camera imaging and provide a user-interface for the execution of pre-programmed recipes including rotational speed, acceleration, and deceleration times, activation of valves, temperature, etc.

It also requires to build on our existing electronic and Labview-based software control platform for the control of existing devices to improve the level of control and dynamic feedback. It should add the following capabilities to the existing platform: advanced electronic control on many independent electrodes, design of a custom enclosure and contacting system to connect electrically the chip, electronic real-time capacitive feedback on the droplet position, software-based verification of the success or failure of multiple droplet displacements, and real-time software-based control of the amplitude and frequency of the voltage.

2. **Time Frame:** upon contract award to March 31, 2016 (fiscal year 15/16 is an option year)

3. **Estimated contract value:**

   $21,000.00 plus HST for fiscal year 14/15
   $21,000.00 plus HST for fiscal year 15/16 (option year)

4. **Name and address of the proposed contractor:**

   DESIM
   40, rue Taillon Est
   St-Basile-le-Grand, QC
   J3N 1H9

5. **Rationale for Contract Award:**

   Pursuant to the *Government Contracts Regulations* of the *Financial Administration Act*, the contract is being awarded because it has been determined that only one person is capable of performing the contract.

Desim (owned by Francois Normandin) has been identified as sole supplier because the development work rely on prior knowledge of proprietary software and electronic, fluidic and mechanical components. These technological platforms have been internally developed and assembled by the NRC, in which Francois Normandin had a significant technical contribution as a former NRC employee. The required work will improve the prior development in order to implement new microfluidic concepts. The work will include additional software and electronic components that will be integrated into existent platform developed by Francois Normandin. We believe that the choice of a supplier familiar with the systems under development creates a leveraging that provide

significant cost reduction. Finally, as the technology is still confidential, we cannot publish or disclose detailed information about the proposed platform without potentially causing considerable harm to NRC Intellectual Property strategy.