

GLS Communication Study Request for Proposals (RFP)

I. Introduction

The St. Lawrence Seaway System (Seaway) is a marine transportation trade route comprising a series of connecting channels, canals, lakes, and locks extending from Montreal to Lake Ontario which are managed jointly by the Great Lakes St. Lawrence Seaway Development Corporation (GLS or Corporation) and the St. Lawrence Seaway Management Corporation (SLSMC) of Canada. The GLS is a wholly-owned government corporation within the U. S. Department of Transportation which is authorized to operate and maintain that portion of the Seaway within the territorial limits of the United States. To support this mission, the GLS owns and operates two locks, a maintenance base, an administration building, several remote RF stations, and marine and mobile equipment. The GLS is seeking cost and technical proposals for a comprehensive Communication Study, including all existing equipment, and recommendations for system enhancement for marine, maintenance and administrative facilities and functions associated with the operation and maintenance requirements of GLS.

II. Background Information

1. *General:* The main GLS Facilities are comprised of 34 major operation, administrative, maintenance and storage buildings with connecting roadways and associated grounds at four separate physical locations in the Massena, New York. The buildings were constructed at various dates from the late 1950's to the 2010's and most have been altered from their originally constructed configuration as needs have changed over the years. The predominant type of building construction is low-rise steel framed masonry for the lock operations, office and facility maintenance shop buildings, and steel for the storage and vehicle/heavy equipment shops.
2. *Specific Facility Structures:*
 - a) Eisenhower and Snell Locks: Upstream and downstream control houses, Hands-Free Mooring (HFM) buildings, center buildings, the Eisenhower Lock Vessel Traffic Control (VTC) building, compressor buildings, Visitors' Center building, miscellaneous small outbuildings, associated roadways and parking areas, highway tunnel under Eisenhower Lock, concrete lock structures, steel hydraulic structures and associated operating machinery (lock gates, valves, etc.) and utilities.
 - b) Marine Base/Maintenance Facility: All buildings, structures and grounds, including those comprising the spare gate facility (Snug Harbor) and the marine floating plant.
 - c) Administration Building: Located in the Village of Massena, New York.
 - d) Remote RF Stations: Located in various locations adjacent to the St. Lawrence River in New York State.
3. *Facility Activities:* The activities carried out at the GLS facilities include:
 - a) Operational communication and control of designated traffic sectors within the Seaway system to include all commercial, military and private marine vessels within those sectors.
 - b) Operational communication and coordination with the SLSMC.
 - c) Maintenance and repair of civil, mechanical, electrical and electronic equipment at the maintenance base and the locks.
 - d) Maintenance of the locks, buildings and grounds and the associated physical infrastructure.
 - e) Maintenance and repair of motor vehicles and heavy equipment.
 - f) Maintenance and repair of floating plant (tugs, barges, navigation buoys, and small craft).
 - g) Maintenance and repair of remote RF stations.
 - h) Administrative functions.

III. Statement of Work

A. Communications Study. The objective of this work is to complete a Communications Study at all GLS locations to assure continuing safety, reliability and conformance to the requirements of ANSI, TIA, IEEE, FCC, P25 and OSHA standards. The Contractor shall conduct and deliver a comprehensive Communications Study to include but not necessarily be limited to:

1. Needs Assessment
2. Identify Current Infrastructure and Performance
3. Frequency Band Analysis
4. RF Coverage Analysis
5. Recommendations Report

Completing the Communications Study includes coordinating with the Contracting Officer's Representative (COR) to access facilities and complete interviews with GLS communication equipment users in order to gain an in-depth knowledge of current and future needs. The reference drawings given are representative and not all inclusive. They illustrate components and the systems they are a part of. The Consultant shall be responsible for gathering, verifying, updating, modifying and creating all drawings necessary to properly accomplish and complete the scope requirements of this section. The drawings shall be furnished to GLS in electronic format in AutoCAD 2017 and PDF version. They shall include all appropriate data and information gathered such as: equipment and devices, manufacturer, type, model, part numbers, sizes, existing and recommended settings, hardware and software versions, etc. This will provide ready access to the information without having to reference other documents and will serve as a permanent record so it will not have to be gathered again. The drawings shall be adequate to perform future engineering and analysis and verify system compliance with standards, laws and regulations.

The statement of work shall apply to all GLS locations and designated GLS operational sectors of traffic control and are organized accordingly:

1. GLS Operational Sectors of Traffic Control, including weather station communications
2. Eisenhower Lock
3. Snell Lock
4. Maintenance Base
5. GLS Marine Equipment
6. GLS Mobile Equipment
7. Administration Building

B. Inspection Procedures and Criteria: Inspection procedures and criteria shall conform to the NFPA 70E - 2018 Standard for Electrical Safety in the Workplace, 2017 NFPA 70 National Electrical Code, 2016 NFPA 70B Recommended Practice for Electrical Equipment Maintenance, and OSHA 29 CFR 1910. The Contractor shall choose and execute specific test and examination methods to accomplish the objective. All services required to accomplish this objective are the responsibility of the Contractor. Such services shall include, but are not necessarily limited to, opening panels and enclosures, examining wires, switching and testing.

C. Corrective Work: The Contractor shall provide guidance to correct any deficiencies uncovered during inspections and information gathering relative to the standards listed in the paragraph above. Any nonconforming equipment shall either be corrected/adjusted or be designated with appropriate tags, markings, locks, etc.

D. Personnel Qualifications: Personnel performing and overseeing the inspection and any corrective activities shall be properly qualified, experienced, and equipped according to NFPA 70E, ANSI, TIA, and IEEE. These qualifications shall apply to subcontractor personnel as well as the Contractor's own personnel. A journeyman level (or higher) electrician or Electrical Engineer shall perform or supervise the field work that requires interaction with electrical equipment at all times. Personnel required to perform site work in Canada shall be able to freely enter Canada per current international laws and regulations.

E. Communications Study Report Deliverable: The Contractor shall issue a detailed report which list all items inspected and tested, the inspection methods and coverage, person(s) doing the inspection or test, the results of the inspection, deficiencies found and their type and location. The report shall also include records of any corrective action taken.

The report shall include at a minimum:

1. Needs Assessment
2. Identify Current Infrastructure and Performance
 - i. Estimated useful life
 - ii. Identify all technical configurations
 - iii. Equipment models
 - iv. Interconnection features
3. Frequency Band Analysis
4. RF Coverage Analysis
 - i. Coverage survey utilizing guidance from TIA-TSB-88
 - ii. Drive test measurements
 - iii. Shipboard test measurements
 - iv. Coverage modeling
 - v. Free Space Loss
 - vi. Terrain Loss and Digital Terrain Databases
 - vii. Clutter Loss
5. Recommendations Report
 - i. Development of conceptual system alternatives.
 - ii. Changes in current maintenance/procedures.
 - iii. Major capital work needed with budgetary estimates.
 - iv. Changes to enhance or improve radio communications systems reliability and performance where there are deficiencies/gaps.

The GLS shall have unlimited rights to use, disclose, reproduce, and distribute all data collected, calculations made, databases and reports generated, labels, drawings, documents, etc. developed as part of this project. They shall be delivered to the GLS in acceptable digital formats agreed upon by the COR. They shall be workable digital files that are useable and editable by GLS. They shall not be password protected or otherwise prohibited from manipulation. Any copies of reports bearing signatures and/or the stamp of the Engineer of Record (EOR) may be in a non-workable PDF format. However workable files shall still be submitted that are unsigned or unstamped.

F. Health and Safety. The Contractor shall complete work in compliance with all Occupational Safety and Health (OSHA), all applicable GLS site-specific safety requirements and any other Federal and State health and safety requirements. This includes ensuring all personnel have site specific personal protective equipment (PPE) and comply with all health requirements that are the result of the disease commonly referred to as COVID-19.

G. GLS Support: The GLS will facilitate access to documentation or equipment and areas for inspection. Standard GLS work hours to provide access for the Contractor will be Monday through Friday, 6:30 AM to 4:00 PM, with alternate Fridays off, to accommodate GLS work schedules. The Contractor shall advise the GLS at least 48 hours in advance of the time services will be needed. Location access and equipment availability will be coordinated around shipping schedules, maintenance and operational requirements.

H. Miscellaneous: The Contractor shall also be responsible for other activities as required to restore all components and systems that were disassembled for the inspection or studies, and to return all equipment to a fully operational state. The Contractor shall also clean up the work area to GLS's satisfaction and properly dispose of all waste generated by the Contractor.

IV. Attachments

Reference drawings are provided in a separate file for this solicitation. These are a selection intended to give a general overview of the GLS facilities. Additional drawings will be made available on request to the firm selected for the project. See the attachment titled "Contract and Reference Drawings."

V. Site Visits

It is required that those interested in submitting a proposal attend a site visit to become familiar with the GLS facilities. Arrangements must be made through the Offices of Engineering and Maintenance at (315) 764-3265 at least three business days in advance in order to make preparations for access to GLS property. Any expenses involved in site visits shall be borne by the attendees.

VI. Schedule

The following is the required project schedule:

- | | |
|---------------------------------------|---|
| • Release RFP | May 7, 2021 |
| • Site Visits | May 27 and June 2, 2021 at 10:00am (ET) |
| • Technical and Cost Proposals Due | June 15, 2021 |
| • Award | June 23, 2021 (on or about) |
| • Draft Report | September 27, 2021 |
| • Final Report and Project Completion | October 29, 2021 |

VII. Completion of Technical and Cost Proposals

Each offeror is required to complete and return electronic copies of a Technical and Cost Proposal as outlined below.

A. Technical Proposals Requirements:

Technical Proposals shall include sufficient information so that a proper evaluation can be made with respect to the requirements outlined in the Statement of Work. As a minimum, Technical Proposals shall include the following:

- 1) Discussion of the understanding of the Statement of Work and how their proposal will meet the requirements of the Statement of Work in this RFP.

- 2) Discussion of project approach which shall include:
 - a) Assumptions of existing conditions (e.g. equipment and facilities, topographic, etc.) that will be used as the basis of planning.
 - b) Schedule with time frames and approximate dates for project milestones. This includes sequencing of key activities.
 - c) Outline of measurement, test methods, software to be used, calculations, etc.
 - d) Project approach and steps to be taken to accomplish the work.
 - e) Staffing plan.
 - f) Detailed description of deliverables and content.
 - g) List of subcontractors and applicable services not being performed by the Contractor's own employees.
 - h) Organization of all key personnel anticipated for the completion of work.
- 3) Resumes describing the qualifications and experience all key personnel to be assigned to complete this Statement of Work.

B. Cost Proposals Requirements:

Cost Proposals shall include any and all costs to complete the Statement of Work. GLS intends to award a Time and Materials, not to exceed contract for this solicitation. The GLS intends to evaluate offers and award a contract without discussions with offerors. Therefore, the offeror's initial offer should contain the offeror's best terms from a cost and technical perspective. However, the GLS reserves the right to conduct discussions with offerors if deemed necessary by the Contracting Officer. The Cost Proposal shall be formatted to show a unit fee schedule for personnel that will be working on the project including subcontractors. Fixed hourly rates shall include wages, overhead, general and administrative expenses, and profit for each category of labor to be performed by the offeror and each subcontractor. any travel required to GLS locations, travel charges shall include all airfare, vehicle rentals, mileage costs, per diem, hourly rate for personnel when travelling, and all other expenses associated with the round-trip travel. Reimbursable travel expenses shall be in accordance with Federal Travel Regulations. The offeror shall also include other direct allocable costs such as reproduction of plans and specifications. Cost Proposals shall provide an estimated price for the each of the requirements/locations below to include the anticipated number of hours that the personnel included in the Technical Proposal will work on the project; hourly rates; travel costs, and other items as discussed in this paragraph. The Contractor is expected to furnish the equipment necessary to accomplish the requirements of the Statement of Work. Any equipment or software purchased by the Contractor for which the Contractor is entitled to be reimbursed as a direct item of cost under this contract, shall become the property of the GLS upon delivery.

VIII. Evaluation of Proposals

The GLS will make award to the responsible offeror whose offer conforms to the requirements and on the weighted evaluation factors listed below:

- **Technical Proposals (50%):**
The Technical Proposals shall address the requirements specified under the Technical Proposal Requirements above.
- **Past Performance (25%):**
The offeror and subcontractor(s) shall have completed at least two (2) projects of similar scope and complexity within the past ten (10) years. References shall be provided. Each reference shall include

the name and address of the client, a brief but detailed description of the work performed and a contact person with valid contact information (phone number and email).

- **Price (25%):**
Pricing as specified under the Cost Proposal Requirements above.

IX. Instructions to Offerors

Offerors are responsible for submitting proposals to reach the Contracting Officer by no later than **June 15, 2021 by 2:00 PM local time**. Offers may be sent by e-mail to jason.brockway@dot.gov and katie.maloney@dot.gov. Any offer or revision of an offer received after the time specified for receipt of offers, shall be considered “late” and will not be considered.

GLS will not provide any use of Corporation facilities, utilities, or equipment unless otherwise specifically indicated in this request of proposal.

X. Clarifications

Offerors shall submit any requests for clarification to the Contracting Officer no later than **June 7, 2021 by 1:00 PM local time**. Requests may be sent by e-mail to jason.brockway@dot.gov and katie.maloney@dot.gov. Any information given to a prospective offeror concerning a solicitation will be furnished promptly to all other prospective offerors as an amendment to the solicitation, if that information is necessary in submitting quotations.

Reference Drawings

(provided as a separate attachment)

<u>TITLE</u>	<u>DRAWING NUMBER</u>
Topographic Survey Plan US Department of Transportation & Saint Lawrence Seaway Development Corporation Administration Building	20-18-144, Sheet 1 of 1
Saint Lawrence Seaway Development Corporation Marine Base/Maintenance Facility Building Nomenclature Site Plan	SLS-340-77
Saint Lawrence Seaway Development Corporation Maintenance Facility/Marine Base and Spare Gate Area General Topographic Site Plan	SLS-340-86
Saint Lawrence Seaway Development Corporation Eisenhower Lock Building Nomenclature Site Plan	SLS-326-296
Saint Lawrence Seaway Development Corporation Eisenhower Lock General Topographic Site Plan	SLS-326-297
Saint Lawrence Seaway Development Corporation Snell Lock and Snug Harbor Building Nomenclature Site Plan	SLS-327-152/2

Notes:

1. The reference drawings show existing construction for informational purposes. The reference drawings have been prepared from scanned images, thus should not be scaled. The reference drawings are in "PDF" file format.
2. Snell Lock is referred to as Grass River Lock in the U.S. Army Corps of Engineer Drawings.
3. Eisenhower Lock is referred to as Robinson Bay Lock in the U.S. Army Corps of Engineer Drawings.