



PART 1 - GENERAL INFORMATION

1.1 Introduction

The Request for Standing Offers (RFSO) is divided into seven parts plus attachments and annexes, as follows:

- | | |
|--------|---|
| Part 1 | General Information: provides a general description of the requirement; |
| Part 2 | Offeror Instructions: provides the instructions applicable to the clauses and conditions of the RFSO; |
| Part 3 | Offer Preparation Instructions: provides offerors with instructions on how to prepare their offer to address the evaluation criteria specified; |
| Part 4 | Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria which must be addressed in the offer, and the basis of selection; |
| Part 5 | Certifications and Additional Information: includes the certifications and additional information to be provided; |
| Part 6 | 6A, Standing Offer, and 6B, Resulting Contract Clauses:
6A, includes the Standing Offer containing the offer from the Offeror and the applicable clauses and conditions;
6B, includes the clauses and conditions which will apply to any contract resulting from a call-up made pursuant to the Standing Offer. |

The Annexes include the Statement of Work and related material.

1.2 Summary

National Individual Standing Offer (NISO) - Self-Contained Omnidirectional LED Lanterns

The Standing Offer(s) is/are for a period of one (1) year from date of issuance, plus the right to extend the period of Standing Offer by one (1) additional period of one (1) year.

The Canadian Coast Guard (CCG) is a Special Operating Agency of Fisheries and Oceans Canada. Both the Oceans Act and the Canada Shipping Act empower the CCG to provide Aids to Navigation (AtoN) services to ensure safe and effective vessel transit in Canadian waters.

The CCG requires self-contained, omnidirectional, light emitting diode (LED) lanterns to support its AtoN Program. These lanterns employ red, green, yellow, and white flash signals to demarcate traffic lane boundaries and indicate obstacles to navigation.

The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and the Canadian Free Trade Agreement (CFTA).

The Request for Standing Offers (RFSO) is to establish National Individual Standing offers for the requirement detailed in the RFSO, to the Identified User across Canada, excluding locations subject to Comprehensive Land Claims Agreements (CLCAs).

The Federal Contractors Program (FCP) for employment equity applies to this procurement; refer to Part 5 – Certifications and Additional Information, Part 6A -Standing Offer, and Part 6B - Resulting Contract Clauses and the annex titled Federal Contractors Program for Employment Equity - Certification."

This RFSO allows offerors to use the epost Connect service provided by Canada Post Corporation to transmit their offers electronically. Offerors must refer to Part 2 of the RFSO entitled Offeror Instructions and Part 3 of the RFSO entitled Offer Preparation Instructions, for further information on using this method.

This Offer is being submitted for the following lantern categories:

LANTERN CATEGORY AND TYPE	Insert a checkmark
Category 1A: 1.5 NM range, Type A	
Category 1B: 1.5 NM range, Type B	
Category 2A: 2 NM range, Type A	
Category 2B: 2 NM range, Type B	
Category 3A: 3 NM range, Type A	
Category 3B: 3 NM range, Type B	
Category 4A: 4 NM range, Type A	
Category 4B: 4 NM range, Type B	
Category 5A: 5 NM range, Type A	
Category 5B: 5 NM range, Type B	
Category 6A: 6 NM range, Type A	
Category 6B: 6 NM range, Type B	

1.3 Security Requirements

There are no security requirements associated with the Request for Standing Offers.

1.4 Debriefings

Offerors may request a debriefing on the results of the request for standing offers process. Offerors should make the request to the Standing Offer Authority within 15 working days of receipt of the results of the request for standing offers process. The debriefing may be in writing, by telephone or in person.

1.5 Anticipated migration to an e-Procurement Solution (EPS)

Canada is currently developing an online EPS for faster and more convenient ordering of goods and services. In support of the anticipated transition to this system and how it may impact any resulting Standing Offer that is issued under this solicitation, refer to 7.15 Transition to an e-Procurement Solution (EPS).

The Government of Canada's [press release](#) provides additional information.

PART 2 - OFFEROR INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the Request for Standing Offers (RFSO) by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Offerors who submit an offer agree to be bound by the instructions, clauses and conditions of the RFSO and accept the clauses and conditions of the Standing Offer and resulting contract(s).

The [2006](#) (2019-03-04) Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the RFSO.

Subsection 5.4 of [2006](#), Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 90 days

2.2 Submission of Offers

Offers must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated in the RFSO.

Note: For offerors choosing to submit using epost Connect for offers closing at the Bid Receiving Unit in the National Capital Region (NCR) the email address is:

tpsgc.dgareceptiondessoumissions-abbidreceiving.pwgsc@tpsgc-pwgsc.gc.ca

Note: Offers will not be accepted if emailed directly to this email address. This email address is to be used to open an epost Connect conversation, as detailed in Standard Instructions [2006](#), or to send offers through an epost Connect message if the bidder is using its own licensing agreement for epost Connect.

2.3 Enquiries - Request for Standing Offers

All enquiries must be submitted in writing to the Standing Offer Authority no later than 15 calendar days before the Request for Standing Offers (RFSO) closing date. Enquiries received after that time may not be answered.

Offerors should reference as accurately as possible the numbered item of the RFSO to which the enquiry relates. Care should be taken by offerors to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that offerors do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all offerors. Enquiries not submitted in a form that can be distributed to all offerors may not be answered by Canada.

2.4 Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario. Offerors may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without

affecting the validity of their offer, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the offerors.

PART 3 - OFFER PREPARATION INSTRUCTIONS

3.1 Offer Preparation Instructions

- If the Offeror chooses to submit its offer electronically, Canada requests that the Offeror submits its offer in accordance with section 08 of the 2006 standard instructions. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation. The offer must be gathered per section and separated as follows:

Section I: Technical Offer

Section II: Financial Offer, Certifications and Additional Information

- If the Offeror chooses to submit its offer in hard copies, Canada requests that the Offeror provides its offer in separately bound sections as follows:

Section I: Technical Offer (2 hard copies and 2 soft copies on USB Key);

Section II: Financial Offer, Certifications and Additional Information (1 hard copy and 1 soft copy on USB Key);

If there is a discrepancy between the wording of the soft copy on electronic media and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

- If the Offeror is simultaneously providing copies of its offer using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy provided through epost Connect service, the wording of the electronic copy provided through epost Connect service will have priority over the wording of the other copies.

Prices must appear in the financial offer only. No prices must be indicated in any other section of the offer.

Canada requests that offerors follow the format instructions described below in the preparation of hard copy of their offer:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the RFSO.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573) (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). To assist Canada in reaching its objectives, Offerors should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Offer

In their technical offer, offerors must explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Offer

Offerors must submit their financial offer in accordance with pricing requirements presented herein and at Annex "D". Offerors must submit the certifications and additional information required under Part 5.

3.1.1 Electronic Payment of Invoices - Offer

If you are willing to accept payment of invoices by Electronic Payment Instruments, please identify which ones are accepted.

The Offeror accepts to be paid by any of the following Electronic Payment Instrument(s):

- ☐ VISA Acquisition Card;
- ☐ MasterCard Acquisition Card;
- ☐ Direct Deposit (Domestic and International);
- ☐ Electronic Data Interchange (EDI);
- ☐ Wire Transfer (International Only).

If this section is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.2 Exchange Rate Fluctuation

The requirement does not provide for exchange rate fluctuation protection. Any request for exchange rate fluctuation protection will not be considered and will render the bid non-responsive.

Certifications:

Offerors must submit the certifications and additional information required under Part 5.

Additional Information:**Offeror Contacts**

Name and telephone number of the person responsible for:

Call-ups:

Name: _____

Telephone No. _____

Facsimile No. _____

E-mail address: _____

Solicitation No. - N° de l'invitation
F7047-190031/A
Client Ref. No. - N° de réf. du client
F7047-190031/A

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
hn329
CCC No./N° CCC - FMS No./N° VME

Delivery follow-up:

Name: _____

Telephone No. _____

Facsimile No. _____

E-mail address: _____

Quarterly usage reports to PSPC(PWGSC) Standing Offer Authority:

Name: _____

Telephone No. _____

Facsimile No. _____

E-mail address: _____

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

Supplier may submit an offer on one or more of the following 12 lantern categories:

Category 1A: 1.5 NM range, Type A;
Category 1B: 1.5 NM range, Type B;

Category 2A: 2 NM range, Type A;
Category 2B: 2 NM range, Type B;

Category 3A: 3 NM range, Type A;
Category 3B: 3 NM range, Type B;

Category 4A: 4 NM range, Type A;
Category 4B: 4 NM range, Type B;

Category 5A: 5 NM range, Type A;
Category 5B: 5 NM range, Type B;

Category 6A: 6 NM range, Type A;
Category 6B: 6 NM range, Type B.

Technical and Financial evaluations will be on a per-category basis (category 1A, category 1B, category 2A, etc.).

For each category, the two (2) lowest priced compliant offers will be awarded standing offers.

4.1 Technical Evaluation

Offers received will be assessed in accordance with the entire requirement of this Request for Standing Offer including the technical and financial evaluation criteria specified herein.

All offers must be completed in full and provide all of the information requested in the RFSO document to enable full and complete evaluation.

4.1.1 Mandatory Technical Criteria

Technical compliance to all requirements presented herein;
Technical compliance to the Statement of Work at Annex A;
Technical compliance to the Technical Specifications at Annex B;
Technical compliance to the Evaluation Matrix at Annex C.

Evaluation Sample:

If necessary, as part of the technical evaluation to confirm an offeror's capability of meeting the technical requirements, a sample (or samples) may be required upon written notification from the Contracting Authority (production unit, no prototype will be accepted). The offeror shall deliver the evaluation sample(s) at no charge to Canada and shall ensure that the sample(s) is received within the timeframe as directed by the Contracting Authority. Failure to submit the sample(s) within the specified time frame, or non-conformance of the sample(s) to the technical requirements, will result in the offer being declared non-responsive. The sample(s) provided can be returned to offeror upon request, and will not be part of any subsequent order.

4.2 Financial Evaluation

Compliance with the pricing requirements presented herein;
Compliance and completion of Annex D, Pricing Schedule.

4.2.1 Pricing Basis

Firm unit prices in Canadian dollars, FCA Free Carrier (Supplier's Facility), with all applicable Custom duties and Excise taxes not included. Freight and shipping charges not included. Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) not included.

4.3 Basis of Selection

An Offer must comply with all requirements of the solicitation and meet all technical and financial evaluation criteria to be declared responsive.

Technical and Financial evaluations will be on a per-category basis (category 1A, category 1B, category 2A, etc.).

For each category, the two (2) lowest priced compliant offers will be awarded standing offers.

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Offerors must provide the required certifications and additional information to be issued a standing offer.

The certifications provided by offerors to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare an offer non-responsive, will have the right to set-aside a standing offer, or will declare a contractor in default if any certification made by the Offeror is found to be untrue whether made knowingly or unknowingly during the offer evaluation period, during the Standing Offer period, or during the contract period.

The Standing Offer Authority will have the right to ask for additional information to verify the Offeror's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Standing Offer Authority will render the offer non-responsive, result in the setting aside of the Standing Offer or constitute a default under the Contract.

5.1 Certifications Required with the Offer

Offerors must submit the following duly completed certifications as part of their offer.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all offerors must provide with their offer, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.1.2 Additional Certifications Required with the Offer

Commercial, Off-the-Shelf (COTS) Certification:

Any equipment bid to meet this requirement must be commercial, off-the-shelf (COTS). Each item of equipment must be an existing product line, with a field-proven, operational history. If any of the equipment bid is a fully compatible extension of a field-proven, product line, it must have been publicly announced on or before the bid closing date. By submitting a bid, the Bidder is certifying that the entire equipment bid is COTS.

5.2 Certifications Precedent to the Issuance of a Standing Offer

The certifications and additional information listed below should be submitted with the offer, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Standing Offer Authority will inform the Offeror of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the offer non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Offeror must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Federal Contractors Program for Employment Equity - Standing Offer Certification (SUBMIT ANNEX E)

By submitting an offer, the Offeror certifies that the Offeror, and any of the Offeror's members if the Offeror is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list) available at the bottom of the page of the [Employment and Social Development Canada-Labour's](https://www.canada.ca/en/employment-social-development/canada-labour/s) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#s4>).

Canada will have the right to declare an offer non-responsive, or to set-aside a Standing Offer, if the Offeror, or any member of the Offeror if the Offeror is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of issuing of a Standing Offer or during the period of the Standing Offer.

Canada will also have the right to terminate the Call-up for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Offeror must provide the Standing Offer Authority with a completed annex titled Federal Contractors Program for Employment Equity - Certification, before the issuance of a Standing Offer. If the Offeror is a Joint Venture, the Offeror must provide the Standing Offer Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

5.2.3 Original Equipment Manufacturer (OEM) Authorization (SUBMIT ANNEX F)

Any Bidder that is not the Original Equipment Manufacturer (OEM) for every item of equipment proposed in its bid must submit OEM approval authorizing the Bidder to supply and maintain the equipment. This certification must be signed by an authorized signatory of the OEM (and not the Bidder).

No Standing Offer Agreement (SOA) will be awarded to a Bidder that is not the OEM of the equipment it proposes to supply to Canada without OEM approval. Bidders are requested to use the provided, OEM Authorized Distributor Form. Although the contents of the OEM Authorized Distributor Form are required, use of the form itself is not mandatory. For Bidders and OEMs who use an alternate form, Canada will determine whether all of the required information has been provided. Alterations to the statements provided in the OEM Authorized Distributor Form may result in the bid being declared non-responsive.

If the equipment proposed by the Bidder originates from multiple OEMs, a separate OEM approval is required from each respective OEM. For the purposes of this bid solicitation, OEM means the manufacturer of the equipment, as evidenced by the name appearing on the equipment and all accompanying documentation.

5.2.4 General Environmental Criteria Certification

The Bidder must select and complete one of the following two certification statements.

- A) The Bidder certifies that the Bidder is registered or meets ISO 14001.

Bidders' Authorized Representative Signature

Date

Or

- B) The Bidder certifies that the Bidder meets and will continue to meet throughout the duration of the contract, a minimum of four (4) out of six (6) criteria identified in the table below.

Solicitation No. - N° de l'invitation
F7047-190031/A
Client Ref. No. - N° de réf. du client
F7047-190031/A

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
hn329
CCC No./N° CCC - FMS No./N° VME

The Bidder must indicate which four (4) criteria, as a minimum, are met.

Green Practices within the Bidders' organization	Insert a checkmark for each criterion that is met
Promotes a paperless environment through directives, procedures and/or programs	
All documents are printed double sided and in black and white for day to day business activity unless otherwise specified by your client	
Paper used for day to day business activity has a minimum of 30% recycled content and has a sustainable forestry management certification	
Utilizes environmentally preferable inks and purchase remanufactured ink cartridges or ink cartridges that can be returned to the manufacturer for reuse and recycling for day to day business activity.	
Recycling bins for paper, newsprint, plastic and aluminum containers available and emptied regularly in accordance with local recycling program.	
A minimum of 50% of office equipment has an energy efficient certification.	

Bidders' Authorized Representative Signature

Date

PART 6 - STANDING OFFER AND RESULTING CONTRACT CLAUSES

A. STANDING OFFER

1. Offer

- 1.1 The Offeror offers to fulfill the requirement in accordance with the Statement of Work and related specifications as presented at Solicitation F7047-190031/A.

Available lantern categories:
(will be inserted at issuance of standing offer)

2. Standard Clauses and Conditions

All clauses and conditions identified in the Standing Offer and resulting contract(s) by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

2.1 General Conditions

2005 (2017-06-21) General Conditions - Standing Offers - Goods or Services, apply to and form part of the Standing Offer.

2.2 Standing Offers Reporting

The Offeror must compile and maintain records on its provision of goods, services or both to the federal government under contracts resulting from the Standing Offer. This data must include all purchases, including those paid for by a Government of Canada Acquisition Card.

The Offeror must provide this data in accordance with the reporting requirements detailed herein. If some data is not available, the reason must be indicated. If no goods or services are provided during a given period, the Offeror must still provide a "nil" report. The data must be submitted on a quarterly basis to the Standing Offer Authority.

The quarterly reporting periods are defined as follows:

1st quarter: April 1 to June 30;
2nd quarter: July 1 to September 30;
3rd quarter: October 1 to December 31;
4th quarter: January 1 to March 31.

The data must be submitted to the Standing Offer Authority no later than 30 days calendar days after the end of the reporting period.

3. Term of Standing Offer

3.1 Period of the Standing Offer

The period for making call-ups against the Standing Offer is for one (1) year, hence from ___ to ___ inclusively.

3.2 Extension of Standing Offer

If the Standing Offer is authorized for use beyond the initial period, the Offeror offers to extend its offer for an additional one (1) year period, from ___ to ___ under the same conditions and prices specified in the Standing Offer.

The Offeror will be advised of the decision to authorize the use of the Standing Offer for an extended period by the Standing Offer Authority before the expiry date of the Standing Offer. A revision to the Standing Offer will be issued by the Standing Offer Authority.

4. Authorities

4.1 Standing Offer Authority

Steve Dumaresq
Public Works and Government Services Canada - Acquisitions Branch
Logistics, Electrical, Fuel and Transportation Directorate - "HN" Division
L'Esplanade Laurier (LEL), 140 O'Connor Street, East Tower
Telephone: (613) 296-1704
E-mail address: steve.dumaresq@pwgsc-tpsgc.gc.ca

The Standing Offer Authority is responsible for the establishment of the Standing Offer, its administration and its revision, if applicable. Upon the making of a call-up, as Standing Offer Authority, he is responsible for any contractual issues relating to individual call-ups made against the Standing Offer by any Identified User.

4.2 Technical Authority

Name:
Telephone: (xxx) xxx-xxxx Facsimile: (xxx) xxx-xxxx
E-mail:

The Technical Authority is the representative of the department or agency for whom the Work will be carried out pursuant to a call-up against the Standing Offer and is responsible for all the technical content of the Work under the resulting Contract.

4.3 Offeror's Representative

(will be inserted at issuance of standing offer)

Call-ups:

Name:
Telephone: (xxx) xxx-xxxx Facsimile: (xxx) xxx-xxxx
E-mail:

Delivery follow-up

Name:
Telephone: (xxx) xxx-xxxx Facsimile: (xxx) xxx-xxxx
E-mail:

5. Identified Users

The Identified User authorized to make call-ups against the Standing Offer is Fisheries and Oceans Canada (Canadian Coast Guard).

6. Call-up Procedures

Upon having a requirement for lanterns, the work will be authorized or confirmed by the Identified Users using form PWGSC-TPSGC 942, Call-up against a Standing Offer.

6.1 Call-up Instrument

Form PWGSC-TPSGC 942, Call-up against a Standing Offer.

7. Limitation of Call-ups

Individual call-ups against the Standing Offer must not exceed \$ 100,000 (applicable taxes included).

8. Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- a) the call up against the Standing Offer, including any annexes;
- b) the articles of the Standing Offer;
- c) the general conditions 2005 (2017-06-21), General Conditions - Standing Offers - Goods or Services
- d) the general conditions 2030 (2018-06-21) General Conditions - Higher Complexity - Goods;
- e) technical requirement as presented at solicitation F7047-190031/A;
- f) annex D, Pricing Schedule;
- g) the Offeror's offer dated ____.

9. Certifications - Compliance

Compliance with the certifications and related documentation provided by the Offeror is a condition of authorization of the Standing Offer and subject to verification by Canada during the term of the Standing Offer and of any resulting contract that would continue beyond the period of the Standing Offer. In the event that the Offeror does not comply with any certification, provide the related documentation or if it is determined that any certification made by the Offeror in its offer is untrue, whether made knowingly or unknowingly, Canada has the right to terminate any resulting contract for default and set aside the Standing Offer.

10. Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario (*or insert the name of the province or territory as specified by the Offeror in its offer, if applicable*).

11. Transition to an e-Procurement Solution (EPS)

During the period of the Standing Offer, Canada may transition to an EPS for more efficient processing and management of individual call-ups for any or all of the SO's applicable goods and services. Canada reserves the right, at its sole discretion, to make the use of the new e-procurement solution mandatory.

Canada agrees to provide the Offeror with at least a three-month notice to allow for any measures necessary for the integration of the Offer into the EPS. The notice will include a detailed information package indicating the requirements, as well as any applicable guidance and support.

If the Offeror chooses not to offer their goods or services through the e-procurement solution, the Standing Offer may be set aside by Canada.

B. RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from a call-up against the Standing Offer.

1. Statement of Work

The Contractor must provide the items detailed in the call-up against the Standing Offer.

2. Standard Clauses and Conditions

2.1 General Conditions

2030 (2018-06-21) General Conditions - Higher Complexity – Goods, apply to and form part of the Contract.

Section 18, Payment Period, of 2030 General Conditions does not apply to payments made by credit cards at point of sale.

Section 19, Interest on Overdue Accounts, of 2030 General Conditions does not apply to payments made by credit cards at point of sale.

2.2 SACC Manual Clauses

SACC Reference	Section	Date
B1501C	Electrical Equipment	2018-06-21
B7500C	Excess Goods	2006-06-16

3. Term of Contract

3.1 Delivery Date

Delivery must be completed in accordance with the call-up against the Standing Offer.

3.2 Delivery Points

Delivery must be completed in accordance with the call-up against the Standing Offer.

4. Payment

4.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the firm prices specified in the Contract. Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

4.2 Single Payment

SACC Manual clause H1000C (2008-05-12) Single Payment

4.3 Electronic Payment of Invoices *(to be deleted if not applicable)*

The Offeror accepts to be paid by any of the following Electronic Payment Instrument(s):

- VISA Acquisition Card;
- MasterCard Acquisition Card;
- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);
- Wire Transfer (International Only).

5. Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
 - a) as per the detailed instructions in the standing offer; or
 - b) the address shown in the "ship to block" on the Call-up Against a Standing Offer form; or
 - c) as indicated in the "special instructions" block on the Call-up Against a Standing Offer form.

6. Insurance

SACC Manual clause G1005C (2016-01-28) Insurance

7. SACC Manual Clauses (Delivery)

SACC Reference	Section	Date
D9002C	Incomplete Assemblies	2007-11-30

ANNEX D PRICING SCHEDULE

Firm unit prices in Canadian dollars, FCA Free Carrier (Contractor's Facility), with all applicable Custom duties and Excise taxes not included. Freight and shipping charges not included. Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) not included.

Final destinations may include, but are not limited to: Victoria, BC; Prince Rupert, BC; Hay River, NWT; Parry Sound, ON; Prescott, ON; Sorel, QC; Québec City, QC; Saint John, NB; Dartmouth, NS; Charlottetown, PE; and St. John's, NL.

Category 1A: 1.5 nm, Type A (estimated 25 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$_____ per unit

2. Extension Year (option): \$_____ per unit

Total Evaluated Offer Value for Category 1A (all line items) = \$_____ total

Category 1B: 1.5 nm, Type B (estimated 25 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$_____ per unit

2. Extension Year (option): \$_____ per unit

Total Evaluated Offer Value for Category 1B (all line items) = \$_____ total

Category 2A: 2 nm, Type A (estimated 450 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$_____ per unit

2. Extension Year (option): \$_____ per unit

Total Evaluated Offer Value for Category 2A (all line items) = \$_____ total

Category 2B: 2 nm, Type B (estimated 450 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$_____ per unit

2. Extension Year (option): \$_____ per unit

Total Evaluated Offer Value for Category 2B (all line items) = \$_____ total

Solicitation No. - N° de l'invitation
F7047-190031/A
Client Ref. No. - N° de réf. du client
F7047-190031/A

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
hn329
CCC No./N° CCC - FMS No./N° VME

Category 3A: 3 nm, Type A (estimated 100 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$ _____ per unit

2. Extension Year (option): \$ _____ per unit

Total Evaluated Offer Value for Category 3A (all line items) = \$ _____ **total**

Category 3B: 3 nm, Type B (estimated 100 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$ _____ per unit

2. Extension Year (option): \$ _____ per unit

Total Evaluated Offer Value for Category 3B (all line items) = \$ _____ **total**

Category 4A: 4 nm, Type A (estimated 350 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$ _____ per unit

2. Extension Year (option): \$ _____ per unit

Total Evaluated Offer Value for Category 4A (all line items) = \$ _____ **total**

Category 4B: 4 nm, Type B (estimated 350 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$ _____ per unit

2. Extension Year (option): \$ _____ per unit

Total Evaluated Offer Value for Category 4B (all line items) = \$ _____ **total**

Solicitation No. - N° de l'invitation
F7047-190031/A
Client Ref. No. - N° de réf. du client
F7047-190031/A

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
hn329
CCC No./N° CCC - FMS No./N° VME

Category 5A: 5 nm, Type A (estimated 200 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$_____ per unit

2. Extension Year (option): \$_____ per unit

Total Evaluated Offer Value for Category 5A (all line items) = \$_____ **total**

Category 5B: 5 nm, Type B (estimated 200 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$_____ per unit

2. Extension Year (option): \$_____ per unit

Total Evaluated Offer Value for Category 5B (all line items) = \$_____ **total**

Category 6A: 6 nm, Type A (estimated 20 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$_____ per unit

2. Extension Year (option): \$_____ per unit

Total Evaluated Offer Value for Category 6A (all line items) = \$_____ **total**

Category 6B: 6 nm, Type B (estimated 20 units per year)

Manufacturer/Model/Type proposed: _____

1. Initial Year \$_____ per unit

2. Extension Year (option): \$_____ per unit

Total Evaluated Offer Value for Category 6B (all line items) = \$_____ **total**

ANNEX "E" to PART 5 OF THE REQUEST FOR STANDING OFFERS

FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION

I, the Offeror, by submitting the present information to the Standing Offer Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare an offer non-responsive, or may set-aside a Standing Offer, or will declare a contractor in default, if a certification is found to be untrue, whether during the offer evaluation period, during the Standing Offer period, or during the contract period. Canada will have the right to ask for additional information to verify the Offeror's certifications. Failure to comply with any request or requirement imposed by Canada may render the Offer non-responsive, may result in the Standing Offer set-aside or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\) – Labour's](#) website.

Date: _____ (YYYY/MM/DD) (If left blank, the date will be deemed to be the RFSO closing date.)

Complete both A and B.

A. Check only one of the following:

- ☐ A1. The Offeror certifies having no work force in Canada.
- ☐ A2. The Offeror certifies being a public sector employer.
- ☐ A3. The Offeror certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- ☐ A4. The Offeror certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Offeror has a combined workforce in Canada of 100 or more employees; and

- ☐ A5.1 The Offeror certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.
- OR
- ☐ A5.2. The Offeror certifies having submitted the [Agreement to Implement Employment Equity](#) (LAB1168) to ESDC-Labour. As this is a condition to issuance of a standing offer, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- ☐ B1. The Offeror is not a Joint Venture.

OR

- ☐ B2. The Offeror is a Joint venture and each member of the Joint Venture must provide the Standing Offer Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

ANNEX “F”

ORIGINAL EQUIPMENT MANUFACTURER (OEM) AUTHORIZED DISTRIBUTOR

This form confirms that the original equipment manufacturer (OEM), identified hereinafter, has authorized the Bidder to provide and maintain its products under any call-up resulting from the bid solicitation.

Name of OEM:	
Make(s) and model(s) of bid product(s):	
Name of OEM authorized signatory:	
Title of OEM authorized signatory:	
Address of OEM authorized signatory:	
Telephone number of OEM authorized signatory:	
Email address of OEM authorized signatory:	
Signature of OEM authorized signatory:	
Name of Bidder:	
Solicitation number:	
Date signed:	



Fisheries and Oceans
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EKME 928047

Canadian
Coast Guard

Garde côtière
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Integrated Technical Services



Safety First, Service Always



Self-Contained, Omnidirectional, LED Lanterns

ANNEX A

Statement of Work

1 INTRODUCTION

1.1 PURPOSE

The Canadian Coast Guard (CCG) is a Special Operating Agency of Fisheries and Oceans Canada. Both the Oceans Act and the Canada Shipping Act empower the CCG to provide Aids to Navigation (AtoN) services to ensure safe and effective vessel transit in Canadian waters.

The CCG requires self-contained, omnidirectional, light emitting diode (LED) lanterns to support its AtoN Program. These lanterns employ red, green, yellow, and white flash signals to demarcate traffic lane boundaries and indicate obstacles to navigation.

1.2 SCOPE

This Statement of Work defines the supply and delivery of commercial off-the-shelf (COTS), self-contained, omnidirectional, LED lanterns (hereinafter referred as “SCOLL”) and associated documentation.

Annex B defines the functional- and performance-based requirements for each SCOLL. Additional information pertaining to the estimated quantities and delivery locations is included in Annex D.

2 DOCUMENTATION

2.1 GENERAL CONSIDERATIONS

Unless otherwise specified by Canada, all documentation must be in English and French.

Prior to the departure of each shipment, all required documentation must be provided electronically to Canada. All electronic copies must be in searchable, portable document format (PDF). Documents existing only in hardcopy form must be scanned into high resolution, digital format, incorporating a full search capability with bookmarking. Hardcopies of all documentation must also be included with each shipment.

2.2 RECOMMENDED SPARE PARTS LIST

Unless otherwise specified by Canada, the Contractor must provide a Recommended Spare Parts List (RSPL) with each call-up. This document must identify all requisite items to maintain the SCOLL for its initial, 10,000 hours of operation.

At a minimum, the RSPL must contain the following information for each identified item:

- a) Item name;
- b) Manufacturer model and part number;
- c) Quantity recommended to support a single, SCOLL over its first, 5 year service period;
- d) Unit price; and
- e) Lead time when ordering.

Canada may, at its discretion, later exercise the option(s) to obtain items identified in the RSPL.

All items supplied by the Contractor must be kitted and packaged. Each package must be clearly marked with the item name, manufacturer part number, and year of manufacture.

2.3 OPERATIONAL MANUAL

Unless otherwise specified by Canada, the Contractor must provide an Operational Manual with each call-up. At a minimum, the Operational Manual must contain the following information:

- a) Procedure(s) to initialize and install the SCOLL;
- b) Procedure(s) to program the functionality of the SCOLL; and
- c) Procedure(s) to safely handle and store the SCOLL when not in service.

2.4 MAINTENANCE MANUAL

Unless otherwise specified, the Contractor must provide a Maintenance Manual with each call-up. The Contractor may opt to combine the Maintenance Manual with the Operational Manual. The Contractor must define all requisite inspection, servicing, and adjustment information for the SCOLL. This information will ensure that the SCOLL maintains its original level of operational capability. Canada reserves the right to review and revise the Maintenance Manual provided by the Contractor.

At a minimum, the Maintenance Manual must contain the following information:

- a) Routine maintenance intervals and the associated tasks required to comply with warranty obligations. The Contractor must identify all parts, consumables, and tools required to perform the maintenance activity; the Contractor must also define the sequential steps to perform the activity, as well as the subsequent effort(s) required to verify the activity was properly executed.
- b) Troubleshooting instructions and the subsequent effort(s) required to verify the SCOLL is returned to an operational state. The Contractor must also identify all repairable items that comprise the SCOLL.

2.5 DISPOSAL PLAN

Unless otherwise specified by Canada, the Contractor must provide a Disposal Plan with each call-up. At a minimum, the Disposal Plan must contain guidance on how to segregate, recycle, and properly dispose of the SCOLL at the end of its envisioned service life.

3 MANAGEMENT OF THE WORK

3.1 QUALITY ASSURANCE

The original equipment manufacturer (OEM) must implement a quality system appropriate to the scope of Work. It is recommended that the quality system be based on the requirements of International Organization of Standardization (ISO) 9001:2015, Quality Management Systems.

At a minimum, the OEM quality system must have defined processes or procedures in place to realize the following requirements:

- a) Certification of materials against customer requirements;
- b) Testing and inspection of finished goods;
- c) Equipment calibration;
- d) Non-conformity identification and corrective action; and
- e) Risk mitigation.

The Contractor must ensure that all tests and inspections required to substantiate a SCOLL against the requirements of the Work are performed prior to shipment.

Each SCOLL is subject to final verification and acceptance by Canada at destination. Final verification is not intended to limit or replace the testing and inspections required by the Contractor to ensure product quality.

3.2 PROBLEM REPORTING

The Contractor must notify Canada upon identifying or being informed of any issue that may impact the successful execution of the Work. The Contractor must document this issue in writing within 2 business days of identification, and provide this discourse to Canada electronically. This written discourse must also establish the appropriate measure(s) that the Contractor will use to mitigate the overall risk to the Work.

3.3 LANTERN SELECTION TOOL

Prior to the first call-up, the Contractor must provide Canada with a tool to facilitate the selection of a SCOLL for any geographic region in Canada. This tool may take the form of a Microsoft Excel 2013 (or later) spreadsheet, or be made available through the OEM website. The purpose of this tool is to provide the end user(s) with one or more recommended SCOLLs that will operate indefinitely under a specific colour, flash rhythm, and effective intensity.

3.4 PACKAGING AND MARKING

Each SCOLL must be individually preserved and packaged in such a way as to ensure complete delivery at destination, without damage or deterioration from shipping, handling, or storage hazards.

At a minimum, all packaging must be marked with the following information:

- a) Name and address of both the consignee and the Contractor;
- b) Solicitation and call-up number(s);
- c) Model number and descriptor;
- d) Colour; and
- e) Year of manufacture and serial number.

Each shipment must be packaged to facilitate safe unloading at destination.



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Canada

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Canadian
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Safety First, Service Always



Self-Contained, Omnidirectional, LED Lanterns

ANNEX B

Technical Specification of Requirements

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Section 1 INTRODUCTION

1.1 PURPOSE

This document is used for the purchase of commercial off-the-shelf (COTS) self-contained LED lanterns (SCOLL) for the use as marine aids to navigation by the Canadian Coast Guard (CCG). The CCG makes use of red, green, yellow, and white lanterns of common aid to navigation light flash characteristics.

The CCG considers a self-contained lantern to be an single integrated and environmentally protected unit that contains all components necessary to power and control the lantern over extended periods of time. The lanterns are deployed in a marine environment and will be exposed to a wide variety of temperatures, humidity, wind speeds, sea spray, and ice loads. These lanterns will be left unattended for up to five years at a time.

1.2 DOCUMENT CONVENTION

The following convention applies to the Technical Specification of Requirements (TSOR):

- a) The term **MUST** is used to identify mandatory requirements that are to be satisfied by the Contractor and approved by Canada.
- b) The term **SHOULD** is used to identify a requirement that is not mandatory; however, the fulfillment of such a requirement will augment the overall fit, form, function, quality, and all combinations thereof of the SCOLL.
- c) The term **MAY** is used to identify a permission.
- d) Notes are used to indicate supplementary information to a requirement.

1.3 DEFINITIONS

The following convention applies to the TSOR:

CCG	Canadian Coast Guard
cd	Candelas
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IP	Ingress Protection
kg	kilograms
LED	Light Emitting Diode
lx	Lux
m	metres
nm	Nautical Miles
NOTMAR	Notice to Mariners
SCOLL	Self-Contained LED Lantern

Section 2 APPLICABLE DOCUMENTS

2.1 REFERENCED PUBLICATIONS, SPECIFICATIONS, AND STANDARDS

- 2.1.1 IEC 60529:1989+AMD1:1999+AMD2:2013 and CSV/COR2:2015 *Degrees of protection provided by enclosures (IP Code)*.
- 2.1.2 MIL-STD-202H, *Department of Defense Test Method Standard: Electronic and Electrical Component Parts*.
- 2.1.3 MIL-STD-810G, *Environmental Engineering Considerations and Laboratory Tests*.

2.2 OTHER REFERENCED DOCUMENTS

- 2.2.1 IALA (International Association of Marine Aids to Navigation and Lighthouse Authorities) Recommendation E-200 – Marine Signal Lights Edition 1 December 2008
- 2.2.2 Canadian Coast Guard, Notice to Mariners (NOTMAR) List of Lights, Buoys and Fog Signals (4 Volumes) – <https://www.notmar.gc.ca/list-livre-en.php>

2.3 ORDER OF PRECEDENCE

- 2.3.1 In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been made.

Section 3 PERFORMANCE SPECIFICATIONS

3.1 GENERAL

3.1.1 Fundamental Design

3.1.1.1 The SCOLL must use LED(s) as a light source.

3.1.2 Material

3.1.2.1 The SCOLL must be made of materials which will not be subject to damage due to corrosion or rust during the life expectancy of the SCOLL.

3.1.2.2 The SCOLL must not contain any toxic or radioactive materials.

3.1.3 Finish

3.1.3.1 External components must have a smooth finish and be uniform in colour and appearance.

3.1.3.2 The lens must not affect the transmission of IALA colours for no less than the service life of the SCOLL outlined in 3.5.1.

3.1.3.3 Ultraviolet exposure must cause minimal material breakdown of the housing so the unit maintain structural integrity for no less than the service life of the SCOLL outlined in 3.5.1.

3.1.3.4 All components of the SCOLL must be free of cracks, burrs, sharp edges, and other defects and blemishes that could affect their life, appearance, and serviceability.

3.1.4 Protection from Birds

3.1.4.1 The SCOLL must have a means of restricting the ability of birds to roost on it.

3.1.5 Physical Characteristics

3.1.5.1 The SCOLL must not exceed the dimensions and weight in Table 1.

Table 1 - Physical Characteristics

Category	Nominal Range (nm)	Maximum Diameter (mm)	Maximum Height (mm) – excluding bird deterrents	Maximum Weight (kg) – complete assembled unit
1	1.5	250	300	3
2	2	250	300	3
3	3	700	590	20
4	4	700	590	23
5	5	700	590	23
6	6	700	590	23

3.1.6 Mounting Provisions

- 3.1.6.1 The bottom of the SCOLL base must be parallel to the light's focal plane.
- 3.1.6.2 Any part of the SCOLL that overhangs the mounting holes shall be no less than 72.5mm above the mounting foot. Refer to Figure 1.

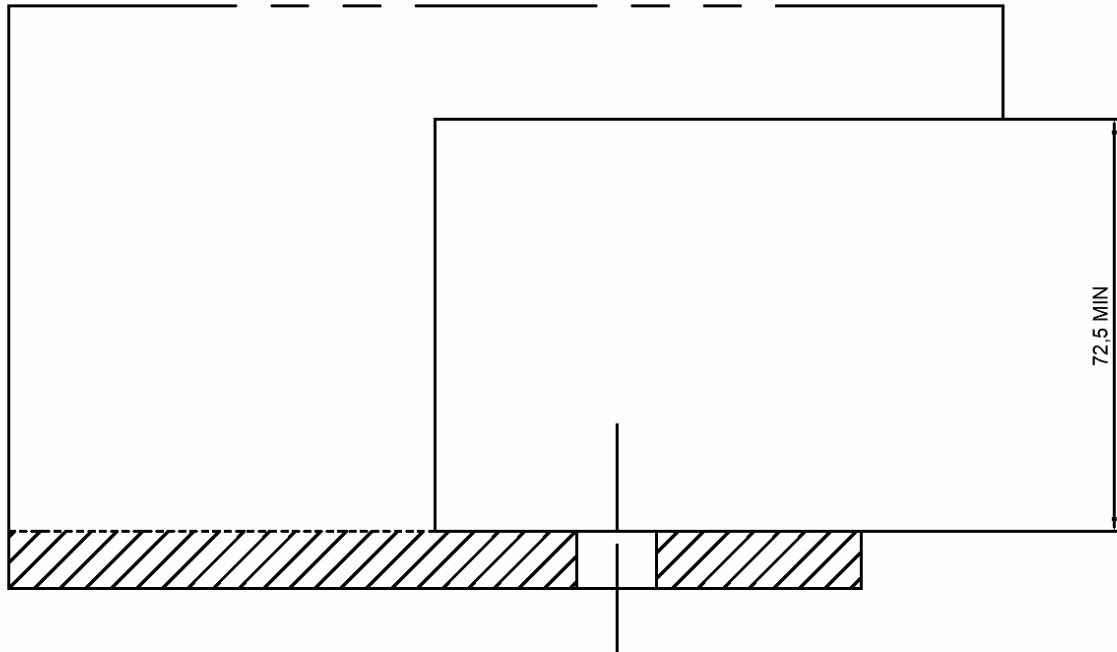


Figure 1 - Mounting Hole Clearance Requirement

- 3.1.6.3 The mounting baseplate of the 1.5 nm, and 2 nm SCOLL must be in accordance with the 150 mm bolt circle in Figure 2.
- 3.1.6.4 The mounting baseplate for the 3 nm, 4 nm, 5 nm, and 6 nm SCOLL must be in accordance with the 200 mm bolt circle in Figure 2.

SELF-CONTAINED, OMNDIRECTIONAL, LED LANTERNS: TECHNICAL SPECIFICATION OF REQUIREMENTS

Performance Specifications

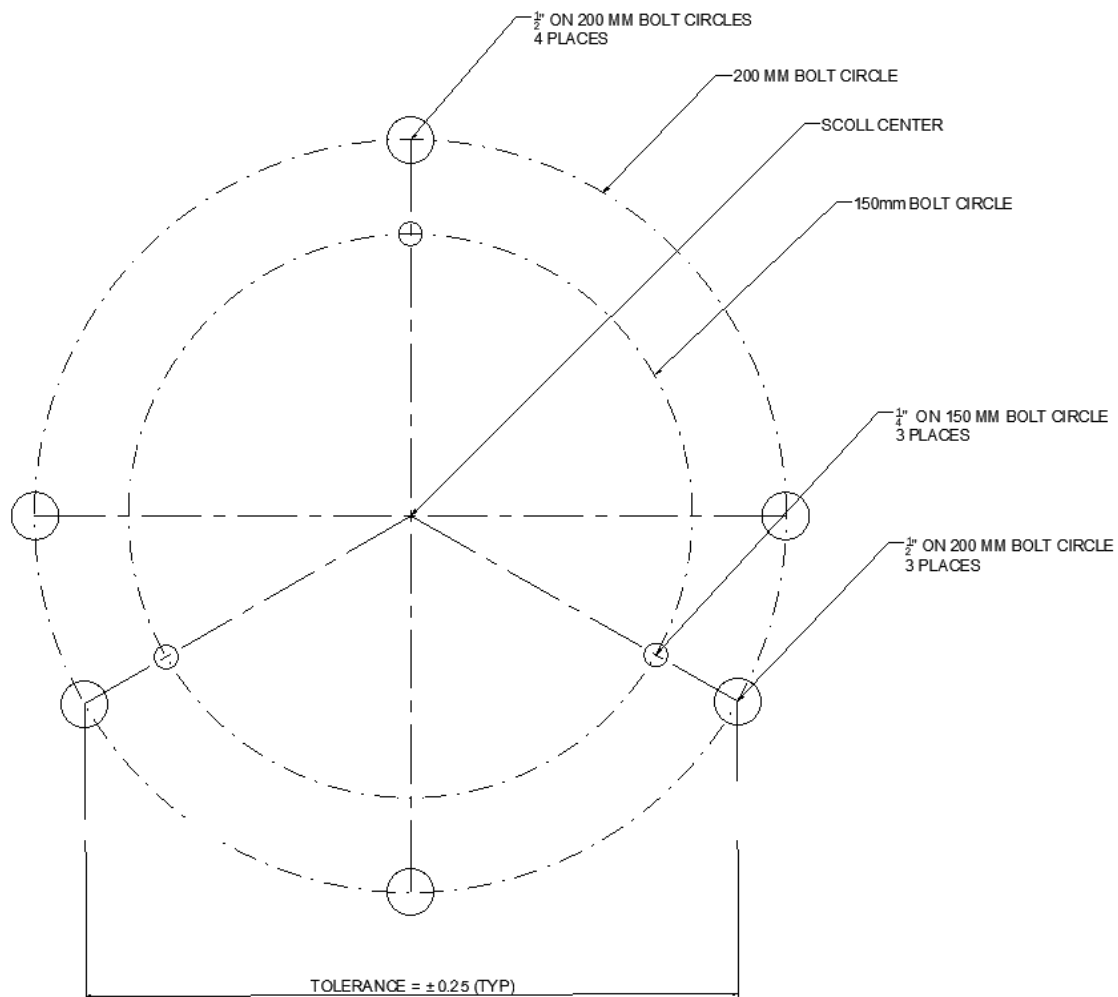


Figure 2 - CCG Mounting Hole Pattern

3.1.7 Identification Nameplate

3.1.7.1 The SCOLL must have an identification nameplate with the following information:

- a) Name of manufacturer;
- b) Model number;
- c) Serial Number; and
- d) Date of Manufacture (YYYY-MM-DD).

3.1.7.2 The identification nameplate must be indelible.

3.1.7.3 The identification nameplate must be located on the exterior of the unit.

Performance Specifications**3.2 OPTICAL PERFORMANCE****3.2.1 General Considerations**

- 3.2.1.1 All SCOLL using rapidly pulsed LEDs must operate at frequencies no less than 100 Hz.
- 3.2.1.2 The SCOLL must meet the optical characteristics outlined in Table 2. Luminous intensity must be calculated using the Schmidt-Clausen method with an atmospheric transmissivity coefficient of 0.741.

Table 2 – Optical Performance Requirements

Category	Nominal Range (nm)	Minimum Effective Minimal Intensity (cd)	Minimum Vertical Divergence
1	1.5	2.5	3.5° (above) 3.5° (below)
2	2	5	3.5° (above) 3.5° (below)
3	3	15	3.5° (above) 3.5° (below)
4	4	36	3.5° (above) 3.5° (below)
5	5	75	2.5° (above) 2.5° (below)
6	6	150	2.5° (above) 2.5° (below)

Note, the vertical divergence is measured from the point where the peak intensity falls below 50%.

3.2.2 Flash Characteristics

- 3.2.2.1 The SCOLL must be capable of producing the common flashing (FI) as listed in the Canadian Coast Guard List of Lights, Buoys and Fog Signals.

3.2.3 Signal Colours

- 3.2.3.1 The light signal provided by green, red, white, and yellow SCOLL must fall within the boundaries of the optimum regions and satisfy the chromacity requirements of IALA E-200 (reference 2.2.1).

3.3 ELECTRICAL REQUIREMENTS**3.3.1 Solar**

- 3.3.1.1 For typical solar insolation, values for St. Anthony, NL (51.36° N 55.60° W) must be used as the basis for power calculations.

Performance Specifications

- 3.3.1.2 For limited solar insolation's, values for Prince Rupert, BC (54.31° N 130.32° W) must be used as the basis for power calculations.
- 3.3.1.3 Annual use lanterns must have their autonomy calculated for the month of December using a 12.5% duty cycle.
- 3.3.1.4 Seasonal use lanterns must have their autonomy calculated with the dates of March 21st and November 21st and using a 30% duty cycle.
- 3.3.1.5 Type A lanterns are considered typical solar insolation (3.3.1.1), annual use (3.3.1.3).
- 3.3.1.6 Type B lanterns are considered limited solar insolation (3.3.1.2), seasonal use (3.3.1.4).
- 3.3.1.7 Calculated autonomy values must be provided, showing autonomy meeting or exceeding requirement 3.3.2.2.

3.3.2 Battery

- 3.3.2.1 The SCOLL must have a user replaceable battery.
- 3.3.2.2 The SCOLL must have no less than 14 days autonomy from the battery.

3.3.3 Control

- 3.3.3.1 The SCOLL must provide a means of programming the flash characteristics by the CCG.
- 3.3.3.2 The SCOLL must be capable of being manually or automatically turned off without disassembling the housing or removing the battery.
- 3.3.3.3 The SCOLL must be capable of switching on whenever ambient illumination, measured on the horizontal plane, falls below 75 lx (± 25 lx).

3.3.4 Protection

- 3.3.4.1 The SCOLL must be provided with a low voltage disconnect to protect the battery from damage.
- 3.3.4.2 The SCOLL must have reverse polarity protection to preclude inadvertent damage.
- 3.3.4.3 The SCOLL must have short-circuit protection and remain fully functional after a short-circuit situation.
- 3.3.4.4 The SCOLL must have over-pressure protection to prevent the build-up of gas within the lantern above an unsafe level.

3.4 ENVIRONMENT**3.4.1 Temperature**

- 3.4.1.1 The SCOLL must be capable of operating in temperatures ranging from -30 °C to +40 °C.

Performance Specifications**3.4.2 Humidity**

- 3.4.2.1 The SCOLL must be capable of operating in relative humidity from 0% to 100% condensing.

3.4.3 Icing

- 3.4.3.1 The SCOLL must be capable of operating when exposed to ice loading up to 22 kg/m².

3.4.4 Wind Speed

- 3.4.4.1 The SCOLL must be capable of operating in wind speeds up to 160 km/h.

3.4.5 Electromagnetic Interference

- 3.4.5.1 The SCOLL must not be susceptible to interference from radiating devices normally found in the marine environment when tested in accordance with IEC 60945.

3.4.6 Static Discharge

- 3.4.6.1 The SCOLL must incorporate protection from static discharges and induced transient voltages on power leads that may occur due to nearby lightning strikes.

3.4.7 Shock

- 3.4.7.1 The SCOLL must remain operational after a shock event as outlined in MIL-STD-810G Method 516.6 Procedure I – Functional Shock.

3.4.8 Immersion Protection

- 3.4.8.1 The SCOLL must meet ingress protection (IP) per Table 3 in accordance with IEC 60529:1989+AMD1:1999+AMD2:2013 and CSV/COR2:2015.

Table 3 - Minimum IP Rating

Model	Minimum IP Rating
1.5 nm	IP 68
2 nm	IP 68
3 nm	IP 68
4 nm	IP 68
5 nm	IP 67
6 nm	IP 67

3.5 SERVICE LIFE

3.5.1 General Considerations

- 3.5.1.1 The SCOLL must have an expected service life of no less than 8 years.
- 3.5.1.2 The expected deterioration over the service life of the SCOLL must be presented in tabulated or graphed form.
- 3.5.1.3 The battery must have an expected service life of no less than 5 years.



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ANNEX C

Evaluation Matrix

1 INTRODUCTION

1.1 METHODS OF COMPLIANCE

There are several methods available to verify the requirements of this solicitation; they are detailed, below:

- a) **Acknowledge:** A narrative that clearly demonstrates that the Bidder has read and understand the information presented in the documentation.
- b) **State/Statement of compliance:** A narrative that clearly demonstrates that the requirements are met. Drawings, schematics, and other documents and data may be included in support of the narrative.
- c) **Submit data:** Data in the form of reports, drawings, schematics, and other documents sufficient to demonstrate that the requirements are met.
- d) **Analysis:** Detailed technical or engineering analysis to demonstrate the requirements are met.
- e) **Test:** Results of tests, previously performed internally or by other accredited independent labs or agencies to approved test specifications, to demonstrate the requirements are met. These tests must conform to provisions, as applicable.

SELF-CONTAINED, OMNIDIRECTIONAL, LED LANTERNS: EVALUATION MATRIX
Mandatory Technical Requirements

Item no.	Mandatory requirement	Specification reference	Method(s) of compliance	Compliant (Y/N)?	Bid cross reference
GENERAL					
Fundamental Design					
1	The SCOLL must use LED(s) as a light source.	Annex B, 3.1.1.1	Submit data		
Material					
2	The SCOLL must be made of materials which will not be subject to damage due to corrosion or rust during the life expectancy of the SCOLL.	Annex B, 3.1.2.1	Submit data		
3	The SCOLL must not contain any toxic or radioactive materials.	Annex B, 3.1.2.2	State		
Finish					
4	External components must have a smooth finish and be uniform in colour and appearance.	Annex B, 3.1.3.1	State		
5	The lens must not affect the transmission of IALA colours for no less than the service life of the SCOLL outlined in 3.5.1.	Annex B, 3.1.3.2	Submit data		
6	Ultraviolet exposure must cause minimal material breakdown of the housing so the unit maintains structural integrity for no less than the service life of the SCOLL outlined in 3.5.1.	Annex B, 3.1.3.3	Submit data		
7	All components of the SCOLL must be free of cracks, burrs, sharp edges, and other defects and blemishes that could affect their life, appearance, and serviceability.	Annex B, 3.1.3.4	State		
Protection from Birds					
8	The SCOLL must have a means of restricting the ability of birds to roost on it.	Annex B, 3.1.4.1	Submit data		

SELF-CONTAINED, OMNIDIRECTIONAL, LED LANTERNS: EVALUATION MATRIX
Mandatory Technical Requirements

Item no.	Mandatory requirement	Specification reference	Method(s) of compliance	Compliant (Y/N)?	Bid cross reference
Physical Characteristics					
9	The SCOLL must not exceed the dimensions and weight identified.	Annex B, 3.1.5	Submit data		
Mounting Provisions					
10	The bottom of the SCOLL base must be parallel to the light's focal plane.	Annex B, 3.1.6.1	Submit data		
11	Any part of the SCOLL that overhangs the mounting holes must be no less than 72.5 mm above the mounting foot. Refer to Figure 1.	Annex B, 3.1.6.2	Submit data		
12	The mounting baseplate of the 1.5 nm, and 2 nm SCOLL must be in accordance with the 150 mm bolt circle in Figure 2.	Annex B, 3.1.6.3	Submit data		
13	The mounting baseplate for the 3 nm, 4 nm, 5 nm, and 6 nm SCOLL must be in accordance with the 200 mm bolt circle in Figure 2.	Annex B, 3.1.6.4	Submit data		
Identification Nameplate					
14	The SCOLL must have an identification nameplate with the following information: <ul style="list-style-type: none"> Name of manufacturer Model number Serial number Date of Manufacture (YYYY-MM-DD) 	Annex B, 3.1.7.1	Submit data		
15	The identification nameplate must be indelible.	Annex B, 3.1.7.2	State		
16	The identification nameplate must be located on the exterior of the unit.	Annex B, 3.1.7.3	Submit data		

SELF-CONTAINED, OMNIDIRECTIONAL, LED LANTERNS: EVALUATION MATRIX
Mandatory Technical Requirements

Item no.	Mandatory requirement	Specification reference	Method(s) of compliance	Compliant (Y/N)?	Bid cross reference
OPTICAL PERFORMANCE					
General Considerations					
17	All SCOLL using rapidly pulsed LEDs must operate at frequencies no less than 100 Hz.	Annex B, 3.2.1.1	Submit data		
18	The SCOLL must meet the optical characteristics outlined in Table 2. Luminous intensity must be calculated using the Schmidt-Clausen method with an atmospheric transmissivity coefficient of 0.741.	Annex B, 3.2.1.2	Analysis		
Flash Characteristics					
19	The SCOLL must be capable of producing the common flashing (Fl.) as listed in the Canadian Coast Guard List of Lights, Buoys and Fog Signals.	Annex B, 3.2.2.1	Submit data		
Signal Colours					
20	The light signal provided by green, red, white, and yellow SCOLL must fall within the boundaries of the optimum regions and satisfy the chromacity requirements of IALA E-200 (reference 2.2.1).	Annex B, 3.2.3.1	Test		
ELECTRICAL REQUIREMENTS					
Solar					
21	For typical solar insolation, values for St. Anthony, NL (51.36° N, 55.60° W) must be used as the basis for power calculations.	Annex B, 3.3.1.1	Acknowledge		
22	For limited solar insolation, values for Prince Rupert, BC (54.31° N, 130.32° W) must be used as the basis for power calculations.	Annex B, 3.3.1.2	Acknowledge		
23	Annual use lanterns must have their autonomy calculated for the month of December using a 12.5% duty cycle.	Annex B, 3.3.1.3	Acknowledge		

SELF-CONTAINED, OMNIDIRECTIONAL, LED LANTERNS: EVALUATION MATRIX
Mandatory Technical Requirements

Item no.	Mandatory requirement	Specification reference	Method(s) of compliance	Compliant (Y/N)?	Bid cross reference
24	Seasonal use lanterns must have their autonomy calculated with the dates of March 21 st and November 21 st and using a 30% duty cycle.	Annex B, 3.3.1.4	Acknowledge		
25	Calculated autonomy values must be provided for each proposed lantern category and type.	Annex B, 3.3.1.7	Analysis		
Battery		Annex B, 3.3.2			
26	The SCOLL must have a user replaceable battery.	Annex B, 3.3.2.1	Submit data		
27	The SCOLL must have no less than 14 days autonomy from the battery	Annex B, 3.3.2.2	Analysis		
Control		Annex B, 3.3.3			
28	The SCOLL must provide a means of programming the flash characteristics by the CCG.	Annex B, 3.3.3.1	Submit data		
29	The SCOLL must be capable of being manually or automatically turned off without disassembling the housing or removing the battery.	Annex B, 3.3.3.2	Submit data		
30	The SCOLL must be capable of switching on whenever ambient illumination, measured on the horizontal plane, falls below 75 lx (± 25 lx).	Annex B, 3.3.3.3	Submit data		
Protection		Annex B, 3.3.4			
31	The SCOLL must be provided with a low voltage disconnect to protect the battery from damage.	Annex B, 3.3.4.1	State		
32	The SCOLL must have reverse polarity protection to preclude inadvertent damage.	Annex B, 3.3.4.2	State		
33	The SCOLL must have short-circuit protection and remain fully functional after a short-circuit situation.	Annex B, 3.3.4.3	State		
34	The SCOLL must have over-pressure protection to prevent the build-up of gas within the lantern above an unsafe level	Annex B, 3.3.4.4	Submit data		

SELF-CONTAINED, OMNIDIRECTIONAL, LED LANTERNS: EVALUATION MATRIX
Mandatory Technical Requirements

Item no.	Mandatory requirement	Specification reference	Method(s) of compliance	Compliant (Y/N)?	Bid cross reference
ENVIRONMENT					
Temperature					
35	The SCOLL must be capable of operating in temperatures ranging from -30°C to +40°C	Annex B, 3.4.1.1	Test		
Humidity					
36	The SCOLL must be capable of operating when exposed to relative humidity from 0% to 100% condensing.	Annex B, 3.4.2.1	Test		
Icing					
37	The SCOLL must be capable of operating when exposed to ice loading up to 22 kg/m ² .	Annex B, 3.4.3.1	Test / Analysis		
Wind Speed					
38	The SCOLL must be capable of operating when exposed to wind speeds up to 160 km/h.	Annex B, 3.4.4.1	Test / Analysis		
Electromagnetic Interference					
39	The SCOLL must not be susceptible to interference from radiating devices normally found in the marine environment when tested in accordance with IEC 60945.	Annex B, 3.4.5.1	Test		
Static Discharge					
40	The SCOLL must incorporate protection from static discharges and induced transient voltages on power leads that may occur due to nearby lightning strikes.	Annex B, 3.4.6.1	Test		

SELF-CONTAINED, OMNIDIRECTIONAL, LED LANTERNS: EVALUATION MATRIX
Mandatory Technical Requirements

Item no.	Mandatory requirement	Specification reference	Method(s) of compliance	Compliant (Y/N)?	Bid cross reference
Shock					
41	The SCOLL must remain operational after a shock event as outlined in MIL-STD-810G Method 516.6 Procedure I – Functional Shock.	Annex B, 3.4.7	Test		
Immersion Protection					
42	The SCOLL must meet ingress protection (IP) as per Table 3 in accordance with IEC 60529:1989+AMD1:1999+AMD2:2013 and CSV/COR2:2015.	Annex B, 3.4.8.1	Test		
Service Life					
General Considerations					
43	The SCOLL must have an expected service life of no less than 8 years.	Annex B, 3.5.1.1	State		
44	The expected deterioration over the service life of the SCOLL must be presented in tabulated or graphed form.	Annex B, 3.5.1.2	Analysis / Submit data		
45	The battery must have an expected service life of no less than 5 years.	Annex B, 3.5.1.3	Analysis / Submit data		

SELF-CONTAINED, OMNIDIRECTIONAL, LED LANTERNS: EVALUATION MATRIX
Mandatory Management Requirements

Item no.	Mandatory requirement	Contract reference or competency	Method(s) of compliance	Compliant (Y/N)?	Bid cross reference
46	The manufacture of the proposed SCOLL(s) must be governed by a Quality Management System.	Annex A, 3.1	The Bid must include a narrative and any supporting documentation (e.g., quality procedures) to demonstrate how the following items are addressed under the governing Quality Management System: a) Material certification; b) Testing and inspection of finished goods; c) Equipment calibration; d) Nonconformity and corrective action; and e) Risk mitigation.		
47	The Bidder must demonstrate the capability and capacity of the original equipment manufacturer (OEM) to manufacture and deliver the proposed SCOLL(s).	Proven, recent experience	<p>The Bid must include a narrative that briefly describes the OEM and the authorized distributor (if applicable); number of years in business; and requisite qualifications to perform the Work, including any proposed contribution from subcontractor(s).</p> <p>The Bid must include a minimum of two project examples to demonstrate similar SCOLL manufacturing capability. Each project example must include the following information:</p> <ul style="list-style-type: none"> a) Client organization; b) Client contact name, title, and contact information (i.e., phone number and email address); c) Duration of project (MM-YYYY to MM-YYYY); and d) A brief description of the Work performed, including the total quantity of SCOLLs manufactured and delivered. <p>The Bid must include a lead time estimate for each proposed SCOLL, based on the following quantity ranges:</p> <ul style="list-style-type: none"> a) Less than 50 units ordered on a given call-up; b) 51 to 99 units ordered on a given call-up; and c) Greater than 100 units ordered on a given call-up. 		