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SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

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

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

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Title - Sujet CCGS Terry Fox VLE	
Solicitation No. - N° de l'invitation F7049-200041/B	**Amendment No. - N° modif.** 037
Client Reference No. - N° de référence du client F7049-200041	**Date** 2022-06-10
GETS Reference No. - N° de référence de SEAG PW-$$MD-043-28394	
File No. - N° de dossier 043md.F7049-200041	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à** 02:00 PM Eastern Daylight Saving Time EDT **on - le** 2022-07-12 Heure Avancée de l'Est HAE	
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☐ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Pandini, Madeleine	**Buyer Id - Id de l'acheteur** 043md
Telephone No. - N° de téléphone (873) 353-9119 ( )	**FAX No. - N° de FAX** ( ) -
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Signature	**Date**

Canada

Solicitation Amendment # 037

This amendment is hereby raised :

1. **To include Questions and the Responses for the solicitation.**
2. **To update Annex A - Statement of Work Part B SOW item 17.1.**

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1. To include Questions and the Responses for the solicitation.

A log (added at the end of this amendment) includes all previous Questions and Answers.
This Amendment 037 adds questions ref 419 to 422 to the log.

2. To update Annex A - Statement of Work Part B SOW item 17.1.

Subsequent to question 419, the following edits apply.

Annex A - Statement of Work (SOW), located in Annex A - Statement of Work folder (included in the attachment 'annex_annexe_a_REV1.zip') is revised.

In subfolder 3, SOW PART B, and in file 'Part B Section 17 – Deck Equipment Ship Support REV1'.

Under section 17.1 Forty (40) Tonne Deck Crane Replacement:

- Delete (in it's entirely):

3.3.1.4

- Insert (additions are shown in bold italics and deletions are struck through)*:*

3.3.1.4 The crane being proposed must be capable of meeting the following parameters and requirements:

a) Have one (1) main hoist with a forty (40) tonnes SWL at 8.5 metres radius. Maximum vertical load and moment must be forty (40) tonnes and 340 t-m respectively. It must have a main winch cable of fifteen (15) m/mi. (thirty-five 35) m/mi. empty hook).

b) One (1) x whip hoist; five (5) tonnes SWL at 60 m/min (140 m/min empty hook).

c) Crane must be fitted with a flood light.

d) ~~Crane to be cable of operation, whilst being supplied by shore power~~ ***EMPTY***.

CCGS Terry Fox VLE - F7049-200041/B, Question and Answer Log		
Ref	**Question**	**Answer**
Note that amendments 001 to 010 have been released separately and copied here, for convenience. Any discrepancy in language between the questions and answers will result in the original amendment wording taking precedence.		
AMENDMENT 001 - Ref 1 to 3		
1	Am I correct to interpret that if we (e.g. Company ABC - North America) were to send you an NDA (non-disclosure agreement) signed by the authorized representative of another legal entity of ours (e.g. Company ABC - Europe, where our international engineering team works), that we (Company ABC - North America) would be able share the confidential information (contents of the Technical Data Package, TDP) with the entire team (from Company ABC - Europe) in that legal entity? Or do you need an NDA for each one of those engineers (or employees)?	Correct. To share the information with other colleagues from a different entity (where Company ABC - North America needs to share information with Company ABC – Europe, to acquire their engineering expertise, for example), then Company ABC - North America and Company ABC - Europe will both submit NDAs, signed by each authorized representative, who will distribute the information (on a need-to-know basis) to their employees within their entity; each employee is not expected to sign an NDA.
2	Does Canada have specific guidelines for the transfer of information (from the TDP) to our suppliers & subcontractors? Are they considered employees according to the terms used in Annex S (non-disclosure agreement)?	Anyone to whom the drawings or documents (contents of the TDP) are disclosed to, must sign a non-disclosure agreement (i.e. the entity's authorized representative must sign on that entity's behalf). Have your subcontractors and suppliers also sign the NDA and either: a) forward it to me (the signed NDA) on their behalf and then, you can send them the applicable TDP drawing/document; or b) forward the signed NDA and request that I send them the links (and any updates), and then you tell them which TDP drawing/document to use, exactly; or c) the supplier/subcontractor can send the NDA directly to me, then I will send them the link and updates, and you can tell them which TDP drawing/document to use (some suppliers have already sent me the NDA).

3	When will the Pricing Data Sheet (PDS) for this project be published on BuyandSell.gc.ca?	The PDS is targeted to be published approximately a week before the first Site Visit day of November 30th.
AMENDMENT 002 - Questions 1 to 2 (ref 4-5)		
4	Are there going to be 4 complete days for the site visit to the vessel? Or will each group (such as a ship yard bidder, supplier, or engineering designer, for example) only have a predetermined time period for the visit?	Given the situation with the pandemic, Canada is going to assign time slots for the Site Visit to each group wanting to attend. Canada, therefore, needs to know the total number of groups attending in order to maximize the time slot duration on the vessel for each group. Amendment 001 requested your responses no later than 6 pm November 17, 2021. CCGS Terry Fox VLE (F7049-200041/B) - Buyandsell.gc.ca If you have not responded yet and would like to attend the Bidders' Conference or the Site Visit (or both), please respond so that Canada can determine and share the assigned vessel time slots and time slot durations with each party (on November 18), so that they can proceed with making arrangements.
5	I was discussing a potential site visit with our team this morning and basically the necessity to attend is somewhat influenced by the quality of the vessel 3d scans etc. When is the government intending to release this information? If not before the site visit will there be another opportunity to visit once this information is available?	3D scans have been made available, per SOW Part A GR 01 section 1.1.1.7 instructions (also indicated in SOW Appendix A, under 'Other Resources'). Additional virtual 3D scans will likely be available by November 22 (end of day). Another vessel viewing is not anticipated. Efforts will be made to accommodate late confirmers but these slots may not be guaranteed to be as long in duration as predetermined slots.
AMENDMENT 003 - Questions 1 to 2 (ref 6-7)		
6	Can videos and photographs be taken during the Site Visit - Vessel?	Videos and photographs are permitted for the purposes of clarifying the interpretation for the SOW.
7	When will the Pricing Data Sheet (PDS) for this project be published on BuyandSell.gc.ca?	The PDS is targeted to be published approximately a week before the Bidders' Conference on December 6.
AMENDMENT 005 - Questions 1 to 3 (ref 8-10)		
8	Can you kindly advise how this project has achieved an exemption from having ITB requirements?	There are a number of factors to consider in determining the applicability of the ITB Policy including, but not limited to, the project pre-tax dollar value, scope and duration as well as the portion of labour that will be carried out in Canada. An assessment was conducted and it was determined that the ITB Policy would not apply for the Terry Fox requirement.
9	Is this solicitation considered part of the NSS?	Yes, the Terry Fox VLE requirement falls under the National Shipbuilding Strategy.

10	Under the NSS Canada has employed a successful contracting strategy of awarding a funded ancillary contract to the shipyard to perform detailed design work, followed by a funded definition contract to complete the detailed engineering work and produce an indicative price from which Canada can obtain funding or budget certainty. However, in this solicitation PSPC is expecting the bidder to be able to complete the VLE detailed design work during the bid phase, to a sufficient level of confidence, to offer a firm price. This is not possible to any acceptable level of accuracy. It is also unfair to ask bidders to take on this level of work at the bid phase. Bidders are aware that their efforts will lead to wildly inaccurate pricing and an unsuccessful VLE, even if determined the lowest responsive bidder. This procurement strategy is extremely high risk to both parties and will work contrary to the very successful contracting strategies currently employed under NSS. Will Canada re-consider this procurement strategy to allow for a balanced risk approach that will lead to a successful outcome for both the Bidder and Canada?	Canada acknowledges that ancillary contracts have been used in certain circumstances, however, they are not considered for competitive procurement processes under the NSS. Industry responses to the RFI posted in October 2020 confirmed the procurement approach, that being, to bundle the procurement of long lead items with the VLE work carried out at the shipyard. Canada is moving forward with this procurement strategy. Canada appreciates the level of effort required to prepare bid packages. The Terry Fox VLE is a unique work package that requires a different level of effort compared to previous refit/VLE requirements. Bidders are encouraged, as needed, to work with key suppliers, engineering and/or project management firms to develop their bid. Canada has included an initial 8 month work period after contract award to carry out detailed design work and procure the long lead items.

AMENDMENT 006 - Questions 1 to 3 (ref 11-13)		
11	SOW item 12.1, section 3.4.2.2. The ME's must be medium speed, four stroke diesel en-gines, with medium speed being defined for the purpose of this SOW as being between 600 rpm and 750 rpm. SOW item section 12.1 3.4.2.20. The ME's must be capable of accommodating Combinator Mode (CM) of propulsion control wherein engine and propeller speed is variable and matched with propeller pitch to offer maximum PM efficiency of operation. Considering that, the Marine Industry recognizes that Medium speed engines are normally rated at up to 900 rpm and, as such, would "Medium Speed" engines that meet all other requirements be acceptable if rated at 900 rpm? What about the four strokes, is it mandatory or a 2-stroke engine would also be a possibility as well? We have both products and would like to be able to provide the most suitable quote, which could be a 2-stroke engine and its very cost attractive lifetime maintenance price.	The intent is that the four stroke engines provided will deliver the specified Maximum Continuous Rating (MCR) power requirement at a speed of between 600 and 750 RPM. Per SOW item 12.1 section 3.4.2.2, 'The ME's must be in-line, medium speed, four stroke diesel engines, with medium speed being defined for the purpose of this SOW as being between 600 rpm and 750 rpm.'
12	In future amendments, is it possible to combine questions and answers so that the last amendment includes all the amendments for the project?	This is typically done near the end of the bid period (approximately 2 weeks prior to the end of the bid solicitation period). Canada has reconsidered and is using this log (Dec 23, 2021, AMD 011)
13	We note that many significant changes (per Amendment 005) were being made to Annex A - Statement of Work (SOW). Will a revised SOW be published in the near future to incorporate these changes?	Yes. We are going to soon release a REV 1 to the SOW.
AMENDMENT 007 - Questions 1 to 21 (ref 14-34), Biddes' Conference Minutes		
14	Para 2.7.1 - The Initial Work Period of eight months is inadequate for this work scope to be com-pleted. Will Canada consider 14 months for this Definition and Engineering Phase (i.e. Initial Work Period)?	The Initial Work period has an 8 month minimum duration prior to the vessel arrival and the start of the Vessel Work Period. It could be as long as 10 months, subject to the duration of the solicitation process. Not all equipment purchased is expected to be delivered during the Initial Work Period. Although most of the engineering work is expected to be completed by the Critical Design Review stage (refer to Annex V for PDR and CDR deliverables as well as article 7.33.1 in the RFP), Canada may authorize additional time for some engineering work during the Vessel Work Period. At this time, we will not increase the duration of the Initial Work Period.

15	How many days will Canada take to analyse the bid (to evaluate the bid)?	The bid evaluation period is estimated to last between one to two months
16	(question submitted outside the Conference): The proposed basis of selection is lowest cost compliant, using only mandatory criteria, with no rated elements. This approach poses risk to both Canada and the bidder as the lowest price with the least capable bidder is not a formula for project success. A lowest cost evaluation using only mandatory criteria provides no assurance of the ca-pability or quality of the proposed solution. The addition of evaluated technical criteria will provide Canada a greater assurance of the contractor's capabilities. Consequently, the bidder requests a change to the evaluation criteria to include a mix of mandatory and evaluated technical criteria, with weighting assigned to both technical and price categories. Given the highly complex nature of this refit, limited timeframe and heavy engineering input, the Bidder recommends a best value selection method that scores price and technical merit in a ratio of 40:60.	The basis of selection and evaluation criteria method will not be changed. The mandatory criteria have been established to ensure that compliant bidders have the ability to carry out the Work (SOW) after Contract award.
17	Please confirm, at a suitable time, what the overall schedule is. The minimum period, with no gap between the engineering period and execution period seems to be 26 months. Is this correct?	The minimum Total Work Period is 26 months. The Vessel Work Period duration is fixed at 18 months (from April 1, 2022 to September 30, 2023), however the duration of the Initial Work Period is a minimum of 8 months. It could be as long as 10 months, subject to the duration of the solicitation process.
18	Evaluation Process. Can Canada define what are all "Eligible Mandatory Criteria?" How do these differ from the 11,000+ Must statements in the SOW? (and, also, as submitted outside of the Conference, below) The SOW contains over 11,000 "must" statements, meaning that there are effectively over 11,000 mandatory requirements. GR 01 section 1.4.1.3 states that all requirements are mandatory. Given that this is an RFP and not an ITT, will the bidder be allowed to propose alternatives to the 11,000 musts, provided that they meet the performance requirements related to those mandatories? How will Canada evaluate the over 11,000 mandatories?	Canada evaluates the mandatory criteria identified in the RFP (Annex P) in order to ensure the Bidder's ability to carry out the Work (SOW) after Contract award. The SOW includes contractual obligations (must statements) that the Contractor must meet after Contract award.

19	In terms of a phased analysis of the bid, Annex H appears to be the only document for comparison between eligible bidders. Is there any technical evaluation scoring as well; especially since lifecy-cle costs and known work can be a significant number. The only technical aspect is if the replace-ment systems have a lower true life cost. That will significantly save for that technical solution. Is there any analysis of technical requirement weighted against these for pricing evaluation?	The Basis of Selection is for the lowest cost compliant bidder. To be compliant, the Bidder must satisfy the mandatory requirements listed in Annex P, in addition to submitting the requirements listed in the RFP, as highlighted in Annex O, the checklist guidance document. There are no point-rated evaluation criteria.
20	In Annex H – Table of life-cycle cost, the total cost includes a 15 year period for lube oil but only an annual cost for the fuel. Could Canada explain that? The thought behind comparing 15 years vs 1 year?	That is correct. A costing exercise was conducted and, from the results, it was decided to include an annual fuel cost in the total life cycle cost, so that it would not outweigh other relevant criteria.
21	The equipment warranty was indicated to be 1 year from acceptance. Is the acceptance milestone from equipment FAT or CCG SAT acceptance?	The equipment warranty starts after successful sea trials and acceptance by the Canadian Coast Guard.
22	Can a Bidder accumulate credits or transfer credits related to the IPC from other programs, much like what is done in the ITB program? For ITBs, if we have a program with unused credits (for ex-ample, the Louis Saint Laurent does not have an ITB but it does have Canadian work on it that we are allowed to credit to Davie's overall ITB budget; that credit can be used towards other programs that do requires an ITB (such as the ferry build program). Can the same be done for IPCs (for ex-ample, if another ship does not have an IPC requirement, but it does use Indigenous Participation; can that be credited and used towards the Terry Fox program or does the IPC need to be directly for the Terry Fox VLE? If we have contracts such as the one on the Louis St. Laurent that does not have a IPC requirement can we use credits from that project on this contract?	The response to this question shall be elaborated on in a subsequent amendment.

23	Annex P - Mandatory Technical Requirements. Can Canada confirm how compliance with the Mandatory Technical Requirements will be assessed. As these will not be scored, how will pass/fail be measured?	For mandatory technical requirements listed in Annex P, each requirement (M#) includes two parts: 1) The first part states the requirement; and 2) The second part identifies what needs to be submitted in order to demonstrate compliance. The Phased Bid Compliance Process (PBCB) provides opportunities where Canada may seek clari-fication or request additional information from Bidders. For details regarding the PBCB, refer to article 4.1.1 of the RFP.
24	Within the PBCP there are three phases. Phase I is a simple review for Financial Completeness. Phase II will be limited to a review of the Technical Bid to identify any instances where the Bidder has failed to meet any Eligible Mandatory Criteria requested for the bid, including evaluation of equivalent products per section 4.1.2, if applicable. However there are no mandatory criteria listed for any deck equipment. As such how will the deck equipment offered be assessed to ensure that it at minimum meets the listed criteria outlined within the individual sections of the annex A, SOW. If there are no assessment criteria then a less ex-pensive product could be offered that does not meet the listed “must” criteria within the SOW. Currently as the Phased assessment is written there is nothing to stop this occurring.	The awarded Bidder will be under contract to satisfy each equipment requirement specified in the SOW. Canada also requires information on proposed equipment per Annex Q; proposed equipment must meet all mandatory requirements specified for each equipment SOW item.
25	(submitted outside the Conference) The SOW is rampant with the statement: “to the satisfaction of the Technical Authority”. As “satisfaction” is subjective, in order to be able to bid a subjective re-quirement the Bidder requires Canada to either delete this clause or replace it with appropriately de-fined acceptance criteria.	The Contractor is to demonstrate to the Technical Authority, that the delivered work satisfies the requirements called up or outlined in the SOW and any applicable regulation. PSPC will oversee and negotiate any issues or disputes that could potentially arise. PSPC will also have an onsite technical representative present during the Vessel Work Period.

26	(submitted outside the Conference) If the Inspection Authority is also the Technical Authority, how will PSPC ensure that the inspection of the work will be objectively conducted? The Technical Authority has a vested interest to interpret the specification in its favour. In order to ensure that the inspection of the work is done objectively and fairly to the Contractor, the Inspection organiza-tion must reside outside of the Client Department. In order to ensure a fair and equitable inspection of the work, the Bidder requires that the Inspection Authority to be an objective 3rd party.	The Canadian Government's structure identifies the Canadian Coast Guard as the Technical Authority and the Inspection Authority for the project. The Canadian Coast Guard will identify different individuals to perform these roles but they will both be individuals employed by or engaged by the Canadian Coast Guard. PSPC will oversee and negotiate any issues or disputes that could potentially arise. PSPC will also have an onsite technical representative present during the Vessel Work Period.
27	(submitted outside the Conference) GR 01 section 5 lists many Reference Standards without clear statements regarding their full applicability. The standards are indicated as mandatory but may only be partially applicable. In order to accurately bid the Work, the Bidder requires Canada to be more specific as to what precise sections of the references are applicable.	The Acts and Regulations referenced in SOW Part A GR 01 sections 5.2 to 5.5 are mandatory. Any standards, rules, codes or guideline referenced in the regulations (section GR 01, 5.2 to 5.5) are to be considered as mandatory, as well (reference GR 01, 5.6.1.1). The requirements of ABS Rules and any standard referenced within the SOW must also be met as applicable. Standards, rules, codes, or guidelines referenced within a particular SOW item in Part B are also applicable. The Contractor must apply each standard and use professional knowledge and experience to en-sure that the work, as carried out on the Terry Fox, will deliver a vessel that is compliant with all applicable standards.
28	Does the Canadian Coast Guard actually know of five Diesel mechanical CPP machinery sets for ice breaking of the same size as the CCGS Terry Fox? I think that will be a difficult requirement to meet.	From SOW item 12.1, the following sections are extracted: 3.3.1.13. The PM must be of proven performance in ice breaking applications in vessels of compa-rable arrangement, service, and power. The Contractor must provide five installation references wherein the proposed PM has been successfully applied on Icebreakers with Diesel-Geared CP Propeller PM. 3.3.1.14. Alternatively, in lieu of icebreaking application references, the Contractor must provide installation references wherein the proposed PM has been successfully applied in equally arduous service applications to icebreaking involving repeated, rapid, and extreme load changes from maximum load to zero load, and/or maximum load in the ahead direction to maximum load in the astern direction over pro-longed periods of time. Note that 3.3.1.14 offers alternatives. Annex P of the RFP shall be updated (to Rev 1) and published in a subsequent amendment, to clarify and include as a Mandatory Criteria requirement.

29	When we attended the site visit, we were not allowed to look at any of the power distribution equipment; we could not see inside the switchboard because they were live. If this can be the only site visit, how can we know what is inside; the dimension, etc.?	Please provide a request detailing the specific information that you require.
30	Within section 17.1 for the 40 tonne deck crane, there is reference to a recognized Classification Society but it only notes one society within the section (which is ABS) which I believe is for the deck structure. Could you confirm if the crane can be certified to any approved classified society?	The crane must meet the Regulatory requirements set out in SOW Part A GR 01, section 5 includ-ing approval in compliance with the Cargo Fumigation Regulations, section 317, 1 (b). This approval can come from any of the Canadian Government approved Classification Societies. The Bidder must confirm with ABS that they will accept the crane and also meet the requirements of 'ABS Certification of Lifting Appliances (2020)', as applicable.
31	In some cases, specific equipment has been defined and, in other cases, the equipment replace-ment is not defined. For the equipment that has been defined, has that equipment been previously (and successfully) integrated on another ship, for instance?	Yes, defined equipment under section 18 is used on other vessels; Canada wishes to have commonality across the fleet.
32	At some convenient point, will Canada please confirm what the required status of all design work is before the engineering period is considered complete. It is one thing to say the main engines must be ordered but what is the status required for things like deck equipment, auxiliary equipment etc.	Not all equipment purchased is expected to be delivered during the Initial Work Period. Although most of the engineering work is expected to be completed by the Critical Design Review stage (re-fer to Annex V for PDR and CDR deliverables as well as article 7.33.1 in the RFP), Canada may authorize additional time for some engineering work during the Vessel Work Period. The shipyard, however, will also need engineering support during the Vessel Work Period for working drawings and such.
33	For the warranty, when we talk about sea trials, is it after those conducted in ice?	Warranty will begin after acceptance. The acceptance is assessed after the Sea Trials at the end of the Vessel Work Period (Ice trials are not feasible in October).

34	I'm a little worried about the timeline and the closing dates. We have not been able to do much yet due to missing drawings. I was wondering if this will be taken into consideration in regards to the closing dates.	The Canadian Coast Guard is conducting a verification on the content of the TDP. If there are any specific documents or drawings that you require sooner, please submit a specific request. At this point in time, we will not be extending the bid closing date.
AMENDMENT 009 - Questions 1 to 10 (ref 35-44)		
35	1. In regards to bid closing date, five months is unrealistic given the amount of engineering required upfront. Would PSPC be willing to extend the bid period to close in the month of September? 2. At the bidders meeting, it was asked if it was possible to have an extension to the tender deposit. Could a one month extension to the submission of bids be granted?	Canada will extend the bid closing date by one month (May 16, 2022). Bidders are encouraged, as needed, to work with key suppliers, engineering and/or project management firms to develop their bid. Canada has included an initial 8 month work period after contract award to carry out detailed design work and procure the long lead items.
36	Why is a phased bid compliance process (PBCB) being utilized for this project instead of using a pre-qualification process?	It is our policy to apply the PBCP for this type of procurement. It was determined that the prequalification process was not warranted and that it is more advantageous for Canada to keep the competitive process open.
37	The site visit time was inadequate for a requirement as complex as this. Also many key areas did not allow for access, ie electrical switchboards and consoles. Will Canada allow further ship access?	Canada is arranging for a second site visit from Jan 18 to 21, 2022, at Botwood, NL (refer to Amendment 8, item 1).
38	In regards to Request for Proposal (RFP) **2.7.1. Initial Work Period**, eight months is inadequate for this work scope. Will Canada consider 14 months for this Definition Phase?	The Initial Work period has an 8 month minimum duration prior to the vessel arrival and the start of the Vessel Work Period. It could be as long as 9 months, subject to the duration of the solicitation process. Not all equipment purchased is expected to be delivered during the Initial Work Period. Although most of the engineering work is expected to be completed by the Critical Design Review stage (refer to Annex V for PDR and CDR deliverables as well as article 7.33.1 in the RFP), Canada may authorize additional time for some engineering work during the Vessel Work Period. The Final delivery of working drawings, for example, can occur after CDR and per the actual Vessel Work Period schedule. At this time, we will not increase the duration of the Initial Work Period.

39	Also in regards to section RFP **2.7.1. Initial Work Period**, the RFP states Canada is procuring the one PS. Please can Canada clarify, who is procuring the PS, the shipyard or Canada? Will it be GSM?	The Propulsion System (PS), per the SOW, is supplied by the Contractor and will not be supplied by Canada. In the RFP, Delete (in its entirety): 2.7.1 Insert (***the sentence in bold and italics has been modified***): 2.7.1 The Initial Work Period of the Contract will start at Contract Award and will have a duration of at least eight (8) months. This period will end at the start of the Vessel Work Period, defined in the following section. ***During this Initial Work Period, the Contractor is procuring one PS, as well as other long lead components (as identified in Annex "A" - Statement of Work) to be fitted onboard the CCGS Terry Fox during the Vessel Work Period .*** Additional preparation activities conducted during the Initial Work Period must include engineering work necessary to ensure the proper integration of new equipment on the vessel, as well as any preparation work required for the other VLE or refit maintenance described in Annex "A" – Statement of Work. Design Review Meetings must take place during this period.
40	In regards to section **4.1.1.2 (i) Phase I: Financial Bid**, since to the "satisfaction of Canada" is subjective and undefined, will Canada publish its Evaluation Plan? Will Canada employ a Fairness Monitor?	The evaluation plan is already published per section 4 in the RFP. The need for a fairness monitor was accessed and was determined to be not required.
41	In regards to section **4.1.2 (c) Evaluation Procedures for Proposed Equivalent Products,** "If requested during evaluation, the Bidder must submit a sample of any proposed equivalent product to the Contracting Authority for testing". Will this testing be performed by an independent 3rd party or will Canada determine the equivalency? Will Canada pay for this test?	Canada will make arrangements for testing to be performed internally or carried out by a third party, as required, and Canada will pay for this testing.
42	In regards to section **4.1.6 Financial Evaluation**, will revisions to the Governmental Covid protocol, post bid closing, be paid by Canada through the normal 1379 process?	Any unforeseen issues that result from COVID-19 protocol-required changes (required by federal/provincial and or municipal revised regulations) after bid closing will be paid by Canada through PWGSC 1379, provided that the Contractor provides acceptable substantiation, which may be subject to an audit.

43	Mandatory Technical Requirement M5-B is a low bar to pass and is not representative of the complexity of a major project level requirement. A $5M docking for a vessel the size of CCGS Terry Fox is not much. Will Canada consider changing this experience threshold to a more appropriate complexity level, say $50M?	This requirement will not be modified.
44	In regards to RFP section **4.1.3 Technical Evaluation** Who will perform the technical evaluation? How will the evaluation be conducted?	The client department (CCG) is responsible for the technical evaluation of the bids. (Is PSPC responsible for overall process/provides an audit function?) For mandatory technical requirements listed in Annex P, each requirement (M#) includes two parts: 1) The first part states the requirement; and 2) The second part identifies what needs to be submitted in order to demonstrate compliance. The Phased Bid Compliance Process (PBCB) provides opportunities where Canada may seek clarification or request additional information from Bidders. For details regarding the PBCB, refer to article 4.1.1 of the RFP. Mandatory criteria are assessed on a simple pass/fail basis. Bids that fail to meet any of the mandatory criteria will be considered non-responsive. For added details refer to section 5.40 and 5.40.1 of the supply manual, as well as section 4.1.1.3 in the RFP.
AMENDMENT 010 - Questions 1 to 14 (ref 45-58)		
45	SOW Part B SOW item 12.1 – items 3.4.2.5 & 3.4.2.6: Main Engine size is unclear and per requirement cannot be determined pre-contract award, can Canada please provide desired engine size in kW? **Background Question 1:** In item 3.4.2.5b it is mentioned that 50% of the vessels full electrical load should be provided by the main engines via the shaft generators. The full electrical load is determined by the load analysis defined in Section 14.1. SOW 14.1 requires a load analysis engineering study, where the CCG is to be consulted regarding usage profiles as per 3.2.1.2e. This consultation is to happen post contract award, therefore it would be impossible to create the load analysis accurately pre-contract award.	CCG to provide additional information in January 2022.

46	SOW Part B SOW item 12.1 – item 3.4.2.10, in order to determine whether this requirement can be met the target engine size needs to be known, can Canada specify the engine size?	CCG to provide additional information in January 2022.
47	SOW Part B SOW item 12.1 – item 3.4.2.15 what is considered low load operation, and what are considered extended periods of time?	Idling (no load), can occur for up to 8 hours.
48	SOW Part B SOW item 12.1 – item 3.4.3.2, what is meant by integration of the ME Controls with the Gearbox and Clutch controls?	The engine control systems must not operate independantly of the clutch and gearbox controls. Engine control functions must be coordinated with clutch and gearbox controls, either directly or through overall propulsion control and/or power management control.
49	SOW Part B SOW item 12.1 – item 3.4.3.6, why is the electronic governor specified to be a Woodward 733, what unique attribute makes this system most suitable? For many diesel engines speed control and load sharing is handled by the local engine control system. Can Canada allow engine maker's engine control system to handle engine speed control and load sharing as an equivalent?	If the proposed engine manufacturer's engine control arrangement incorporates stand alone electronic speed and load management control hardware, then this hardware must be a Woodward 733 electronic control. If the proposeed engine manufacturer's control arrangement includes engine speed and load management control as integral functions within the engine manufacturer's control hardware/software, and stand alone speed/load management, then the control hardware is not required; this will be acceptable. Either arrangement must be compatible with the Woodward PGG-EG engine mounted actuators, specified in section 3.4.3.7.
50	SOW Part B SOW item 12.1 – item 3.4.3.12, gauges are typically no longer used in a modern set up. Engine control systems have the process values available on a digital local display unit. Can operational parameters be provided digitally without the need of gauges?	No, the gauges are to be supplied as per the SOW.

51	SOW Part B SOW item 12.1 – item 3.4.5.18, this requirement mentions a PTI, however the need of a PTI is not mentioned in SOW 13. Is a PTI a requirement?	In subfolder 3, SOW PART B, and in file 'Part B Section 12 – Propulsion & Maneuvering Systems', under section 12.1 PROPULSION MACHINERY REPLACEMENT: Delete (in its entirety): 3.4.5.18 Insert: 3.4.5.18. The existing GB arrangement includes a single, auxiliary Power Take Off (PTO) output rated for driving a 1000 KW alternator. The new GB's must be arranged, instead, with an auxiliary drive capable of Power Take Off suitable for application with an electrical machine (alternator) of capacity determined in SOW item #13.1 Shaft Alternators & Power Stabilization. The gear manufacturer must provide PTO components up to and including the mating flange on the PTO shaft for coupling of the new shaft alternator.
52	SOW Part B SOW item 13.1 - Item 1.1.1.2f & 3.3.1.1, sizing of power bridge system is to be based on results of the load analysis defined in spec 14.1. This load analysis calculation requires consultation from CCG regarding usage profiles. This makes it impossible to determine size prior to contract. Can Canada please provide the needed rated output of the system?	CCG to provide additional information in January 2022.
53	SOW Part B SOW item 13.1 - Item 3.3.3.7, modern converters are nowadays of fuseless design, will Canada allow fuseless converters?	Yes, a fuseless design is acceptable, provided the performance and class requirements are met.
54	SOW Part B SOW item 13.1 - Item 3.3.3.12, will Canada allow 460 V 3AC infeed for the converters, as long as same redundancy is achieved?	Use of a switchboard UPS is preferred; the UPS system is redundant and has a larger battery bank. The distance shouldn't cause significant voltage drop. There are rules to comply with, and typically 24VDC UPS systems have the actual output voltage at 27.2V. A combination of two 24VDC sources: -the first from the proposed internal 24V supply (460V infeed), and -the second from the switchboard UPS, is acceptable. Note: The proposed solution with an internal UPS contains additonal batteries in each unit; batteries of small size that have to be maintained, cataloqued, and peridically replaced.

55	SOW Part B SOW item 13.1 - Item 3.3.7.1, can Canada please provide the technical data of the motors of the bubbler systems and the stern thruster? Are these motors suitable for converter operation? What is the purpose of the VFDs, just for starting or also for operation?	In subfolder 3, SOW PART B, and in file 'Part B Section 13 – Electrical Power Generation', under section 13.1 SHAFT ALTERNATOR REPLACEMENT AND FREQUENCY STABILIZATION: Delete (in its entirety): 3.3.7.1 Insert: 3.3.7.1 (NOT USED)
56	SOW Part B SOW item 13.1 - Item 3.3.3.5, is it allowed to provide a different voltage for the PTO converter and generator then what is shown in the single line?	A higher voltage will be acceptable, up to a maximum of 690 Volts.
57	As noted in 5.11.1.1. ABS Rules for Building and Classing Marine Vessels (Marine Vessel Rules) Updated January 1, 2020, apply as well as those standards referenced by ABS Rules. CSA requirements included below must apply where defined by ABS as a requirement to be applied.	As noted in 5.11.1.1. ABS Rules for Building and Classing Marine Vessels (Marine Vessel Rules) Updated January 1, 2020, apply as well as those standards referenced by ABS Rules. CSA requirements included below must apply where defined by ABS as a requirement to be applied.

58	SOW Definition of the SSSI - The Industry Day briefed the SSSI as follows: The Contractor must arrange for supply and integration of both new and existing machinery, systems and equipment by a Single System Supplier and Integrator (SSSI). The SSSI may be the Contractor, a subcontractor, an engine supplier, or an engineering company. The SSSI is responsible for the integration of all the following specification items: • Propulsion Machinery • Main engines, clutches, gearboxes and all associated auxiliary machinery upgrades and all associated control and individual component safety and monitoring systems. •Shaft Alternators Replacement and Frequency Stabilization • Switchboard Upgrades and Power Management System • Motor Control Centers Upgrade •Propulsion Control Systems Replacement •Central Control Alarm & Monitoring System Replacement • MCR Console Refurbishment The Bidder requests revision of the SOW to ensure that it properly defines the SSSI as: either an individual assigned by the shipyard or a subcontractor or an engine supplier or an engineering company	The SSSI is, as stated, responsible for: •Propulsion Machinery •Main engines, clutches, gearboxes and all associated auxiliary machinery upgrades and all associated control and individual component safety and monitoring systems. •Shaft Alternators Replacement and Frequency Stabilization • Switchboard Upgrades and Power Management System • Motor Control Centers Upgrade •Propulsion Control Systems Replacement •Central Control Alarm & Monitoring System Replacement • MCR Console Refurbishment The SSSI can be the Contractor, a subcontractor, an engine supplier, or an engineering company. The requested resume for evaluation is for the SSSI Project Manager (consequently, refer to RFP edits and SOW edits) who acts as the onsite representative overseeing and managing the integration activities. **Refer to amendment 010 for detailed edits to the applicable RFP sections, including Annex P, and to the applicable SOW sections.**
AMENDMENT 011 - ref 59 to 76		
59	In regards to Request for Proposal (RFP) section 4.1.4 Joint Ventures Experience; why is Canada amending its own policy and restricting JV bidders to only 2 JV members? Will Canada consider following its own policy and remove the 2 JV party restrictions?	Canada does not have a policy that restricts us from limiting the number of members in a Joint Venture. After some consideration, the number of participants allowed will be increased from two to three. Refer to item 4 of this amendment for the subsequent RFP edits.
60	In regards to RFP section 6.7.2 (d) Preliminary Work Schedule, we request that FSR scheduling be removed. It will be impossible to schedule FSRs until post contract award since no contractual commitments will be made by bidders until after contract award. Suppliers will not guarantee FSR services until a contract is in place.	For the purposes of the preliminary schedule, this FSR detail can be omitted. Refer to item 5 of this amendment for the subsequent RFP edits.

61	In regards to RFP section 6.7.2.2 Preliminary Work , can Canada explain why the level of detail such as manpower loading is being requested with the bid? The bidder is already certifying that it has adequate resources to meet the contractual delivery date. The level of detail required to provide loading across disciplines before detailed and production engineering is complete is not possible with any level of accuracy. The bidder requests that this requirement be removed.	In support of the Bidder certifying that it has the resources required to meet the contractual delivery date, Canada requires this information to ascertain how the Bidder plans to resource this Work given the level of effort required for this VLE.
62	In regards to RFP section 6.7.2.3 Preliminary Work, the same concern mentioned above for 6.7.2.2 holds true for this requirement, since the determination of direct and indirect labour will not be made until the production planning phase when full labour availability is known.	Refer to the response given in ref 61, above.
63	Mandatory Technical Requirement M-6 is unrealistic and excessive as a proposal mandatory. It will be impossible for a bidder to respond with any accuracy unless PDR has been completed and that will not occur until after Contract Award.	Refer to responses in Questions ref 61 and 62. Annex P has been updated per the response in ref 60, and is attached (ANNEXES_Prev2_Qrev0.zip).
64	RFP Part 2, 2.9 lists bid challenge and recourse mechanisms. However, it appears the neither the OPO (Office of the Procurement Ombudsman) nor the CITT has authority over this bid. Will Canada clarify what opportunities will be available to potential supplier?	The Canadian International Trade Tribunal (CITT) would be a viable option for this bid.
65	The SOW defines bi-weekly and bi-monthly so that these are essentially the same thing (every two weeks). Is this correct?	They are similar; bi-weekly means every 2 weeks, and bi-monthly means 2 times per month. Refer to SOW Part A, GR 01 (2.1.1.4 and 2.1.1.5).
66	Further to the above, many management deliverables are required to be provided bi-monthly; i.e. every two weeks. This will be a large administrative burden. Can Canada confirm that this is the schedule intended?	Yes. Canada needs the information on work progress to be provided bi-monthly i.e. to detect an early indication of any slippage in schedule.
67	RFP Annex H, Appendix 1, requires that Contractors provide life-cycle costing information such as maintenance labour rates 15 years in the future. This is an unrealistic requirement, which will be interpreted inconsistently by bidders. Will Canada please revisit this requirement to something more sensible.	Engine manufacturers publish the interval between major overhauls and costed parts lists for the different engines. Bidders are to use this information to complete the required forms. This is not a new approach.

68	The pricing data sheets (Annex H, appendix 1) assume that all items are stand-alone, which will not be the case. In the event that scope of work is reduced does Canada accept that line items cannot necessarily be used in isolation as the basis for price revisions?	Yes, in the event of a reduction of Work scope, Canada understands that line items cannot be used in isolation as the basis for price revisions.
69	Further to the above, as much of the work is required to be provided by a Single System Supplier Integrator (SSSI), an SSSI will normally quote for much of the work against the integration task, which will be split across many items. Will it be mandatory to split out these costs in an arbitrary way	Yes, the pricing must be weighted out separately in the pricing data sheet.
70	The pricing data sheets (annex H appendix 1) include a single line item for all project management activities and appear to have nowhere to quote any of the engineering work that will be required to accomplish the project. As these are likely to be significnatly more costly than most of the other line items, will Canada explain how they are to be presented to ensure that Contractors are quoting realistically for these essential elements of the work?	Engineering costs should be incorporated into the individual SOW items, as applicable for each SOW Work item.
71	Amendment 005 Answer 2 makes it clear that Canada has developed an estimated cost for this modernization. Will Canada share this with bidders to allow them to make a determination of an appropriate level of effort to apply to their proposals? To explain this question further, we note that the ITB policy is requried to be applied to all CCG procurements of $100M or above. It appears hightly likely that the work will exceed this threshold, and therefore the project is likely to be delayed, cancelled or descoped if bids exceed this threshold.	No, this information will not be provided in a competitive solicitation
72	The engine fuel consumption evaluated through Annex H is specified to be at 100% power and 85% power. How is this to be interpreted? It is very unlikely that all engines proposed will have the same MCR as each other or as the existing engines.	The bidder is to use the published fuel consumption numbers for their proposed engine.

73	For a Fixed Price contract the below expectations are unreasonable? "8.7.1.1 The Contractor must submit copies of all purchase orders for primary machinery and equipment required to complete the specified Work to the TA for review and comment. 8.7.1.2. A list of Purchase Orders required for review will be made available by the TA. 8.7.1.3. Provision of additional purchase orders must be accommodated when requested by the TA." Equipment will be specified during the engineering phase and cited in drawing BOMs. CCG approval during PDR & CDR is the venue to discuss how the selected equipment meets the technical requirements of the RFP. Reviewing individual purchase orders in ineffecient and unneccesary.	The intent is for the TA to do a quick review of the specifications' related information. The Contractor is responsible for meeting the requirements of the SOW. If a discrepancy is noted, at that time, the Contractor could save restocking costs. The review will not involve TA approval.

74	In preparation for this project Canada has commissioned a number of studies related to work items; for example certain steel repairs, new deck hatch, galley layout, etc. The materials provided are very useful in developing costs for these items. However, we also note that in many of these cases there is still uncertainty in what the final scope of work will be, with provision for adjustment by 1379. Meanwhile, for the vast majority of work items, including the most complex items, no such studies are available. From Amendment 009, Answer 1 it is clear that Canada expects that bidders will “work with key suppliers, engineering and/or project management firms to develop their bid”. In order to provide realistic fixed firm prices, bidders and their engineering firms will need to develop at least the same level of detail as that in the existing studies. This must be done at their own cost, with limited access to the vessel, with no certainty as to the correctness of existing drawings and scans, and with no ability to account for even the level of uncertainty acknowledged by Canada under a majority of the existing studies. Obviously, an extremely high level of technical, cost and schedule risk is involved in this approach. Basing contractor selection purely on low bid and minimal mandatory requirements then transfers all this risk to Canada, as a successful bidder may not have the competency or resources to actually perform, and Canada is not currently requiring any substantive evidence of a bidder’s ability to do so. Will Canada therefore consider modifying its bid evaluation approach to allow bidders to provide supplementary information that demonstrates their due diligence in scoping the work and in assembling the project team needed to undertake it?	Refer to the response given in Amendment 7 questions 3 and 6.

75	The PDR/CDR deliverables tables in a number of areas include wording such as "to include, and not be limited to". Will Canada explain how contractors are intended to respond to this type of open-ended requirement? Whose opinion of what is needed will prevail?	This is written as a performance specification. Bidders are responsible to determine the number of units required for each spec item. Bidders are to use their experiance and are advised to include a risk factor if they have concerns that they missed a unit.

76	The CDR deliverables for the Deck Crane include FAT test data approved by class,etc. This is required by Feb 2023 at the latest. Will Canada explain how the scheduling of this item is intended to be achived?	Not all equipment purchased is expected to be delivered during the Initial Work Period. Although most of the engineering work is expected to be completed by the Critical Design Review stage (refer to Annex V for PDR and CDR deliverables as well as article 7.33.1 in the RFP), Canada may authorize additional time for some engineering work during the Vessel Work Period. The Final delivery of working drawings, for example, can occur after CDR and per the actual Vessel Work Period schedule. The procudure for the FAT may be approved by then but the testing will obviously not occur at that time.
AMENDMENT 012 - ref 77 to 80		
77	Canada's response to Amendment 5, Question 1 (Question ref 8) is evasive, however, confirms that the ITB Policy, as published by ISED, is not being followed, link refers: https://www.ic.gc.ca/eic/site/086.nsf/eng/home Therefore we ask the following supplemental questions: a. Please provide bidders the project pre-tax dollar value estimated by Canada? b. Where is scope and duration defined in the ITB Policy as a factor for determining eligibility? c. Like all refit projects, the vast majority of the work will be performed in Canada. Why would this project be treated differently than, say the Frigate DWPs, which require ITBs? d. Can Canada provide bidders with the assessment conducted by Canada and referred in their response to this question?	a. Canada will not release the estimated project value. b. Scope and duration are examples of a number of factors that ISED (Innovation, Science and Economic Development Canada) considers when determining the application of the ITB (Industrial and Technological Benefits) policy. c. Canada has discretion when applying the ITB policy. As per Question ref 8 response, an assessment was conducted and it was determined that the ITB policy would not apply. d. No, this information will not be released.
78	Supplemental to Canada's response to Amendment 5, Question 2 (Q ref 9), as follows: a. Is this project also considered a Major Crown Project? b. Will a Fairness Monitor be utilized?	a. The Terry Fox VLE requirement is not considered a Major Crown Project. b. A Fairness Monitor will not be utilized for this requirement (refer to question ref 40 response).

79	Canada's response to Amendment 5, Question 3 (Q ref 10) is factually incorrect and bidders ask the following supplemental questions: a. Canada stated, "… ancillary contracts have been used in certain circumstances, however, they are not considered for competitive procurement processes under the NSS (National Shipbuilding Strategy)." The contracts resulting from NSS were as a result of a competitive processes and several ancillary contracts have been awarded to those shipyards. In addition ancillary or bridging contracts are common place in engineering or complex projects. Among several other reasons, they are used to mitigate the risk of proceeding with work before detailed design work or engineering is completed and accurate indicative costing can be established. What makes matters even higher risk in this tender is Canada requiring bidders to perform this detailed design work during the bid phase. Given the facts in the matter, will Canada reconsider its answer?	a. Ancillary contracts have been used in certain circumstances, however, they are not broadly used for competitive procurement processes. They will not be used for the Terry Fox VLE requirement.

	b. Also in its response to Amendment 5, Q3 (Q ref 10), Canada stated, “Industry Responses to the RFI posted in Oct 2020 confirmed the procurement approach, that being, to bundle the procurement of long lead items with the VLE work carried out at the shipyard.” This is a misrepresentation of the RFI, the attached link refers: https://buyandsell.gc.ca/cds/public/2020/10/05/9f352c50a72272bee4c997de501a706f/ABES.PROD.PW__MD.B042.E27915.EBSU000.PDF. In the RFI Canada described an acceptable procurement strategy as follows: “ The intent would be to issue one Contract for the procurement of most of the equipment, materials, engineering and conduct of the VLE. Canada intends to provide performance based specifications for the main engines and other long lead items. The contract would result from a competitive procurement among capable shipyards in Eastern Canada. Due to the nature and complexity of the requirement, Canada will entertain traditional prime/subcontractor or joint ventures in the project. Canada intends to use a point rated bid evaluation process to evaluate the bids. The criteria for the award of contract would be determined by the lowest overall point evaluation of the bids. Overall point figures would be determined by a combination of mandatory, technical and financial bid evaluations.” It is clear that Canada has abandoned its RFI strategy whereby capability would be determined first, followed by rating the best proposal from prequalified yards. What we have here is a clear “bait and switch”. Will Canada reconsider this high risk, high cost to Industry procurement strategy for one that was advertised in its RFI?	b. The procurement strategy for the Terry Fox VLE will not be changed to include point rated criteria. At the time of RFI posting, the intention was to use a point rated evaluation process. Upon further review, Canada implemented an evaluation strategy using the selected mandatory criteria summarized in Annex P that simplifies the evaluation process and provides bidders with clearly defined criteria that must be met to be considered responsive. The mandatory criteria set out in Annex P, coupled with the SOW contractual requirements, achieves the original intent.

	c. Canada states that it, “appreciates the level of effort required to prepare bid packages.” By not considering Industry’s request to change this strategy, bidders do not believe that Canada at all appreciates the cost to bid this procurement. Bidders ask the following supplemental questions: i. Will Canada compensate bidders for their costs should there be no successful bidder? ii. Bidders believe that Canada has insufficient funds to complete all work defined herein. Will Canada assure bidders it will not cancel this procurement due to insufficient funds?	c.i. Under no circumstances will Canada compensate bidders for their costs to prepare bids. c.ii. As per SACC 2003, article 11 (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/1/2003/25#rights-of-canada), Canada reserves the right to cancel the bid solicitation at any time.
80	In regards to Annex A Part B Section 12.2 Bubbler Compressor Replacement section 2.2.1.2 and 2.2.1.4, the SOW states the Procurement of the new ABCS has not been finalized. When will this be completed and when will the requisite documentation be made available to bidders?	Annex A Part B Section 12.2 Bubbler Compressor Replacement has been revised to include an allowance for the installation. Please refer to item 2 of this amendment for a new version of 12.2.
AMENDMENT 013 - ref 81 to 132		
81	SOW Part B 12.1 - Items 3.4.2.5 & 3.4.2.6: Main Engine size is unclear and per requirement cannot be determined pre-contract award, can Canada please provide desired engine size in kW? **Background Question 1:** In item 3.4.2.5b it is mentioned that 50% of the vessels full electrical load should be provided by the main engines via the shaft generators. The full electrical load is determined by the load analysis defined in Section 14.1. SOW 14.1 requires a load analysis engineering study, where the CCG is to be consulted regarding usage profiles as per 3.2.1.2e. This consultation is to happen post contract award, therefore it would be impossible to create the load analysis accurately pre-contract award.	For bidding purposes the engines are to be sized to provide rated propeller power plus an allowance of 1200 KW per side (port and starboard) to address the vessels electrical load, plus or minus 5% overall. Final engine selection must be based on the final electrical load analysis to be completed by the Contractor.
82	SOW Part B 12.1 - Item 3.4.2.10, in order to determine whether this requirement can be met the target engine size needs to be known, can Canada specify the engine size?	Refer to the response given in question ref #81.

83	SOW Part B 13.1 - Item 1.1.1.2f & 3.3.1.1, sizing of power bridge system is to be based on results of the load analysis defined in spec 14.1. This load analysis calculation requires consultation from CCG regarding usage profiles. This makes it impossible to determine size prior to contract. Can Canada please provide the needed rated output of the system?	Refer to the response given in question ref #81.
84	SOW Part B 13.1 - Item 3.3.4.1a, can Canada explain the need for this requirement as the necessary pumps to support the engines and PTOs will not be running?	Could the author for clarification, to be more specific. It looks like the "AC bus" is being mis-interpreted, probably as the PTO generator output. In the SOW part B, section 13.1: "AC bus" refers to the respective buses of Main Switchboard (460V).
85	RFP 2.7.1 - Can Canada provide a schedule for when the vessel will be available to visit during Phase 1 (the Initial Work Period) of the contract, in support of surveys to complete the engineering works?	The vessel will be available to the greatest extent possible, in accordance with the vessels operational schedule. This schedule will be confirmed at a later date.
86	Need clarifications on Annex A Part B SOW item 15.12 (compressed air systems), 3.3.3. Air Pressure Reducing Stations: The written reducing stations values need to be clarified (there are discrepancies between the SOW and the drawings).	Refer to Item 2 of this Amendment for an update to Part B SOW item 15.12, 3.3.3.1.
87	Annex A Part B SOW Item 10.7 (High Pressure Local Application Water Mist Fire Fighting System (LAFFS)); are the Protected spaces at 3.2.1.2 still protected with Halon? Will this be an additional fire protection for these spaces? Will the automatic release of the LAFFS (3.2.1.13) affect the already fitted system (Halon)?	The affected spaces will continue to be protected by FM200. The LAFFS will be in addition to the existing FM200 stystems. Automatic release of the LAFFS will not impact function of the FM200 systems.
88	Annex A Part B SOW Item 15.12, 4.3.1.4: During each compressor run trial, all monitored conditions must be recorded at 10- minute intervals. Data recorded must include: _____. (missing the end of the sentence).	•Ambient air temperature. •Air pressure and temperature going in and out of each stage of compression. •Oil pressure Refer to Item 3 of this Amendment for an update to Part B SOW item 15.12, 4.3.1.4.
89	Part B SOW Item 16.3, 4.2.1.1 - Is it possible to indicate a weld length to be tested rather than a percentage?	No. The Contractor must determine the length using the information provided in the TDP (the TDP is available to those who have signed the non-disclosure agreement in Annex S - Non-Disclosure Agreement of Request for Proposal, RFP/Annexe S - Accord de non-divulgation).

90	In regards to Annex A Part B Section 14.2B Emergency Switchboard - The bidder cannot be expected to quote the emergency switch board when it is not known if this needs to be replaced or not, as the engineering study deciding this has not conducted yet. Would Canada consider changing the scope of this SOW to exclude the modification or replacement of the switchboard and for this to be handled by a 1379? This approach is what is being requested on SOW Item 17.12 Tow Pin Installation, where the purchase and installation will be done via 1379 after the completion of the feasibility study.	Canada will not be changing the scope for 14.2B. The Bidder must bid on refurbishing the existing switchboard. Any change in approach determined to be feasible post Contract award will be addressed at that time. Refer to Item 4 of this Amendment for an update to Part B SOW item 17.12, 1.1.1.2 (the 'Note', at the end of the section, is removed; no PWGSC 1379 will be applied).
91	Part B SOW Item 15.3 - Are the interior surfaces of the 12 tanks available?	No. The Contractor must determine tank internal surface areas from the information provided in the TDP.
92	Part B SOW Item 15.3 - 4.2.1.1 - Is it possible to indicate a weld length to be tested rather than a percentage?	No. The Contractor must determine the length using the information provided in the TDP.
93	Part B SOW Item 15.10 - Are the interior surfaces of the 23 tanks available?	No. The Contractor must determine tank internal surface areas from the information provided in the TDP.
94	Part B SOW Item 15.10,. 4.2.1.1 - Is it possible to indicate a weld length to be tested rather than a percentage?	No. The Contractor must determine the length using the information provided in the TDP.
95	Part B SOW Item 13.1, 3.3; Part 1 question - In the absence of the result of the load studies to be produced at 14.1 which will dictate the power of the shaft alternators, can we consider proposing the equivalent powers to what is currently on board and adjusting the power and price once the studies have been carried out?	Refer to the response given in question ref #81.
96	Part B SOW Item 13.1, 3.3; Part 2 question - Can this be applied to other items in the quote where the engineering must be completed before the equipment is selected in order to close/secure our bids?	The Contractor is requested to clarify specifically to which items this can apply.
97	Part B SOW Item 12.1 3, 13.1.2 - What is the mixture of coolant, what is the product used and how much to pump/dispose of?	The central cooling medium is fresh water treated with Liquidewt by Ashland Drew Marine. The volume of the fresh water system is 10 cubic meters.

98	Part B SOW Item 11.10 - Can the length of each valve to be replaced be specified? (space between flanges)	No, for bidding purposes, assume a space based on a valve standard, such as ASME B16.10. Detailed engineering shall be completed after award.
99	Part B SOW Item 11.19, 3.3.1.4 - Does Canada supply the 24 fittings in question? If so, can we see the details, if not can you specify what needs to be provided?	No, fittings will not be provided. Further information will not be provided.
100	Part B SOW Item 11.13 - Is it possible to have the surfaces of each of the elements to be painted in this item (Superstructures, decks, bulwarks, splices, rails, ladders, pipes and other structures on the exposed decks of the ship's superstructure, from the main deck to the top of the chimney and the railings of the wheelhouse to apply new coatings)?	No. The Contractor must determine surface areas from information provided in the TDP.
101	Part B SOW Item 12.1 - 3.3.1.3 (f) - The new PM package must not exceed the weight of the existing PM package. Can Canada provide a detailed breakdown for the weights of the existing PM package.	Main engines - 78,500 Kg each Gearboxes - 33,000 Kg each
102	Part B SOW Item 12.1 - 3.3.1.3 (f) - Further to the above, is there an overall weight limit/target for the modernization? It would not appear logical to constrain a single vital aspect while not controlling the overall issue.	Refer to SOW Part A GR 8.0.
103	SOW Part A GR 02 - What is intended by the following scope statement? 3.2.1.2. The Contractor must address all interference items as may be required to facilitate completion of the specified Work.	The Contractor must assess each Work item and determine any interference materials in the area surrounding the object being worked on. The Contractor must include (in their costs) the temporary removal of these items, the replacement of these items at the completion of the Work, and the verification of performance of the replaced items on completion of the Work.
104	SOW Part A GR 01, 5.7.2 - The vessel is required to meet the Canada Shipping act (GR1, section 5.3) including the Arctic Shipping Safety and Pollution Prevention Regulations. Section 5.7.2 lists IMO Instruments for guidance, but states those references in sections 5.1-5.5 are mandatory. Can Canada confirm that the Polar Code is mandatory.	The Arctic Shipping and Pollution Prevention Regulations (ASPPR) and Polar Code do not apply to government vessels when they are being used only in government non-commercial services, however new components supplied and installed as part of this contract should meet the requirements of the ASPPR and the Polar Code in general although a Polar Class is not prescribed.

105	SOW PART A GR 01, 8.2 - In order to define the work sufficiently to support a FP (fixed price) proposal the as-fitted system drawings are needed. However the RFP indicates: "The Contractor must note that not all Guidance Drawings supplied are “As-Fitted” Drawings. The Contractor must physically verify all affected items and all dimensions necessary for the Work." Its unreasonable to expect each bidder to define the as-fitted systems in order to respond to the proposal. It is requested that Canada certify the supplied drawings to be an accurate definition of as-fitted systems.	The Contractor must establish the bid based on the information provided in the TDP. Any demonstrated deviation between the documentation provided and the final as-fitted condition, at the time of execution, will be addressed using PWGSC 1379.
106	SOW PART A GR 01, 8.4 - In order to provide a FP (fixed price) proposal in response to the RFP, equipment may need to be defined and costed during the proposal stage. Can Canada confirm that the review stage, as defined in section 8.4, will not result in the change of equipment.	No change will be required, provided the proposed equipment meets all requirements of the SOW,
107	SOW PART A GR 01, 8.3-8.4 - The RFP requires that working drawings be submitted to the TA for review and comment. This will cummulatively add significant leadtime and cost to the project. Additionally the opportunity for scope creep through TA comments on individual working drawings will mean that the final cost and schedule for the project is indeterminate. In order to create a fair and competitive RFP would Canada consider removing scope items of this nature that make it impossible for contractors to bid.	The TA will review the drawings to advise if any descrepencies are noted between the drawings and the specified requirements. Canada will ensure it applies the required resources so that this review will not unreasonably delay the Contractor's design effort. The Contractor can conduct parrallel work while this review is taking place.
108	What is the required Polar Class for the ship? This will have a fundamental effect on the cost and weight of the gearbox and other items.	The Polar Class of the ship is not defined for the purposes of the SOW. The replacement of each component must be based on original equipment data, the vessels original ice classification and specifications provided within the SOW.
109	SOW Part A - The low temperature range for the vessel is set at -35C. Is this PST, MDLT or other?	The low temperature requirement for the vessel should be considered a Polar Service Temperature (PST) of -35C.

110	Part B SOW item 13.1, 1.1.1.2.f - The requirement for the new power bridge system note: "Rated output of each power bridge system to be based on results of load study, defined in SOW item 14.1, Electrical System Analysis. In practical terms, due to space limitation, the power bridge system should have the largest capacity possible." This requirement is internally contradictory. How will Canada decide whether "as large as possible" has been achieved? What are requirements for access, etc?	Refer to the response given in question ref #81.
111	Part B SOW item 13.1, 3.3.2.1 - Further to the above, various types of shaft alternator are permissible. These types typically have different power densities (etc). Selection for low price will amost inevitably lead to lower performance. Does CCG accept that the selection at the proposal stage will be a binding limitation for performance?	The specified performance has to be met, no matter which type of alternator is proposed. Proposed alternators have to fit in the available space and have to meet all the criteria (a to j) defined in SOW Part B, SOW item 13.1, 3.3.2.2. Attention to be paid to: the capability to provide rated power in all speeds of propulsion combinator mode, and the capability to autonomously supply AC bus with required active (kW) and reactive power (kVARs).
112	Part B, SOW item 13.1, 3.3.2.2 - The selection of air or water cooling for alternators will also need to be made at bid stage. Does CCG accept that the selection at the proposal stage will be a binding limitation for performance?	Yes. It remains the Contractor's responsibility to confirm and ensure that whichever cooling medium is selected, it is viable in consideration of all other existing and new vessel structures and systems, as applicable. ie: the selection must work within the overall VLE scope and must not invoke any further work scope or costs subsequent to selection.
113	SOW Part A, 9.1.1.5 - The Contractor is required to ensure that selected equipment is "Currently in unlimited production..." How is this to be interpreted for custom items such as the gearbox, crane, etc?	Certification by the manufacturer stating that the equipment (or equipment parts for custom equipment) is in current production and that spare parts, technical support and service support will be availablle for at least 15 years is required. Note that this certification is specifically requested to be submitted at bid closure for propulsion machinery associated equipment (PME as indicated in RFP Annex P item M19b) and for auxilliary machinery equipment (as indicated in RFP Annex P item M19f).
114	Part B SOW item 11.11, section 3 - The application of SPS deck replacement described in SOW does not give any information on the thicknesses or grades of plate that will be (we assume) yard supply. Can this be clarified?	Refer to TDP update dated Dec 20, 2021 for additional reference material (the TDP and updates are available to those who have signed the non-disclosure agreement in Annex S - Non-Disclosure Agreement of Request for Proposal, RFP/Annexe S - Accord de non-divulgation).

115	Part B SOW item 11.11, 3.3.1.2 -In the specifications for SPS deck replacement it is noted that wastage of the existing deck can be up to 70% before any repair will be needed. Can this be confirmed, as it seems extreme.	Refer to TDP update dated Dec 20, 2021 for additional reference material Main deck UT assessment report is also included in TDP update (Refer to "ETS UT Survey Reports" provided in Section 11, under Documents folder).
116	Part B SOW item 12.1 - Inspection of the vessel and the drawings makes it clear that the design does not accommodate easy removal of the engine, gearbow, etc. Has Canada undertaken any feasibility studies into preferred options, or is this entirely the contractor's responsibility?	No. The Contractor is responsible for determining machinery removal routes and the associated requirements.
117	Specific example taken from Part B SOW item 15.2, 3.2.1.4 - In many areas of the SOW wording is used such as " The original pipe hanging, support and securing hardware must be retained and re-used to facilitate installation of the new piping." Can Canada explain how this will be applied when there will be extensive work in way; e.g. associated with engine removal? Will all such items need to be retained for re-installation?	Original pipe hangers, support and securing hardware must be used to the greatest extent possible. In instances where a piping system modification is specified, or where an adjoining structure is removed or replaced, new pipe hanging hardware may be installed. The Contractor must remain responsible for maintaining and/or reworking all new piping runs in a manner acceptable to the TA.
118	Example taken from Part B, SOW item 15.2 - Element of the specifications for the bilge and ballast system refurbishment appear internally contradictory, e.g. 3.4.2.1 and 3.4.2.2 first require retention of existing and then specify replacement. Will Canada clarify the intent?	The existing bilge and ballast system remote operated valve functionality is provided by a mimic and control panel in the MCR. This mimic and control panel is to be removed and not replaced. The functionality provided by the original mimic and control panel (to be removed and not replaced) is to be provided by the new CCAMS defined in SOW item 19.2, refer to section 3.15.27.
119	SOW Part A GR-02, 1.3 - The SOW requires that all equipment above decks must be protected by an enclosure. Can Canada clarify what types of equipment this requirement applies to?	All weather senstitive control equipment must be suitably protected from inclement weather and facilitate equipment operation in inclement weather conditions for the duration of the equipment's lifecycle.
120	Part B, SOW item 12.3, 4.2.27 - If propulsion engines can be offered with certain capabilities, these are required to be costed separately (e.g. variabe inlet valve timing). Can Canada clarfify the intention and confirm whether the inclusion of options will be part of the evaluated price?	No, the cost of any options offered will not be included in evaluated price.

121	SOW Part A, GR 01 - How is the below requirement measured? 1.1.1.4 "The vessel's overall performance capabilities must be retained and not compromised, in any way, as a result of this VLE" The vessel performance requirements will need to be defined, baselined through vessel trials prior to the VLE in order to create a measurable requirement upon completion of the VLE. Will Canada provide a definition of the "overall performance capabilities" which would be verified by the shipyard prior to the VLE?	Prior to the arrival of the vessel at the start of the Vessel Work Period i.e. during the Initial Work Period, open water sea trials are specified to be completed, for this purpose, refer to GR 7.0 (SOW Part A). Original ice performance data is documented in the reference material offered in TDP update dated Dec 20, 2021.
122	SOW Part A, GR 01, 1.2.1.3 - The below requirement is unreasonable. The TSR can only be responsible for those working on the CCGS Terry Fox contract whom are employed by, or working on the premises of the prime contractor. "Protection of all personnel associated with the Contract from abuse, or injury of any sort" The successful bidder should be expected to meet applicable Ocupational Health & Safety requirements and blanket RFP requirements such as this should be removed or modified.	The intent of this clause is to be applied to personnel working on the CCGS Terry Fox contract whom are employed by, or working on the premises of the prime contractor.
123	SOW Part A, GR 01 - What is the purpose of these drawings? "2.1.1.21. "Guidance Drawings" Guidance drawings are provided strictly for guidance purposes only. The Contractor must physically verify all Contract requirements and must then develop working drawings for approval." Is CCG expecting to recieve guidance drawings?	Guidance Drawings are provided by the CCG as a baseline reference, and to be developed as Working Drawings after the technical solution is determined, per the SOW. CCG does not expect to receive Guidance Drawings from the Contractor.

124	SOW Part A, GR 01, 5.12.2.1 - Are SAE standards acceptable for plated fasteners? "ISO 2081- Metallic Coatings- Electroplated Coatings of Zinc on Iron or Steel"	Yes.
125	SOW Part A, GR 01, 7.2.1.6 - This is provincial jurisdiction, what role does the TA play in this area? is there any other expectation aside from simply recieving an internal safety document. "7.2.1.6. The Contractor must provide, 5 days before the Kickoff Meeting lead paint Work procedures in place that comply with provincial regulations and have been approved by the Contractor's Workplace Occupational Health and Safety Committee."	Refer to SOW Part A GR 01 section 6.1.1.4 and 6.1.1.5. The Contractor's HSSE must meet or exceed the FSSS and must be fully accessible to the TA. Employees of Canada must work under requirements of the Canada Labour Code. Employees of the Canadian Coast Guard must work under the FSSM. The TA must have access to the Contractor's HSSE system and all related documentation in order to ensure that Goverment employees are adequately protected by the Contractor's HSSE system.
126	SOW Part A, 7.2.1.8 - Why is the TA interferring with the operation and management of Ocupational Health and Safety in the work place when this is provincial jurisdiction? "7.2.1.8. The Contractor must maintain records that demonstrate that his Quality Assurance department has the capacity to monitor on-site Work progress, is capable of performing air quality monitoring on an ongoing basis as required by the Occupational Health and Safety Regulations and is able to assess the affected areas post abatement process. Current training records must be maintained and must be made available for inspections. "	Refer to the response to question ref #125.

127	SOW Part A, 8.4.1.6 - The use of plotted drawings ended sometime in the 1990's. Drawing approvals should be paperless and electronic using the shipyard selected PDM tool. Will Canada accept an electronic workflow and endeavor to conduct its working/shop drawing review paperless through an electronic, configuration controlled workflow that would provide metrics on drawing approval performance and efficiency? "8.4.1.6. Drawings submitted for review, unless otherwise specified, must be in the form of plotted originals. Manufacturer's printed data sheets for standard items are acceptable providing pertinent characteristics are identified and relate to specified items"	The requirement will not change.
128	Part B, SOW item 12.1, 3.3.1.13/3.3.1.14 - Amendment 7 Answer 15 (question ref 28) - Canada has noted that section 3.3.1.14 allows for alternatives. Can Canada provide examples of alternative arduous services they deem applicable to icebreaking?	Examples of alternative arduous services deemed comparable to icebreaking include offshore anchor handling and supply vessels, ferries, and dredgers. These arduous services are also noted in RFP Annex P (rev 2), item M19h; required as part of the bid submission mandatory criteria.
129	Part B SOW item 16.2 - Installation of a second domestic water heater is required. Is this for capacity or redundancy? As little guidance is offered on installation or performance requirements it is not clear how this is to be plumbed into the overall system.	This is intended for, both, capacity and redundancy. It is to be plumbed in parallel with the existing hot water heater. It is to be of similar capacity as the existing HW heater. Further detail for the new hot water heater has been provided in TDP update dated Dec 20, 2021.
130	Part B SOW item 16.3, 3.4.2.13 - The Domestic Water Tanks requirements note that "The water supply required for this SOW item must not be added to the vessel's domestic water daily use. If the Contractor uses the same domestic water supply and same meter as that used for supply for general vessel's usage, the volume required for this SOW item must be deducted from the vessel's domestic water consumption meter when calculating overall usage for services billing. " Can Canada clarify the intent of this requirement?	Cost of water to be used for flushing, disinfecting and filling of the domestic water tanks is to be included in bid cost for this SOW item and not included in the daily consumption costs accounted for in SOW Part A GR 10, section 3.3.

131	Part B section 19 - Will the Canadian Coast Guard (via PWGSC) procure navigation equipment and hardware directly, or will this equipment be offered through the winning shipyard? We are happy to quote either way. Is there a preferred refit location? Sperry Canada has offices in St John's and Halifax, we can serve any CCG Location in Eastern Canada. Service partners Alliance Nav have offices in Quebec and Ontario.	Each SOW item under section 19 (or under any other section) specifies whether the equipment is GSM, i.e. navigation equipment and hardware will be supplied by the Coast Guard. The refit location is not yet known.
132	Part B, SOW item 17.1 FORTY (40) TONNE DECK CRANE REPLACEMENT 3.4.1.6. The crane being offered must be capable of performing the following: a) Recovering a crew barge from either the port or starboard side of the vessel. b) Recovering a fifteen (15) tonne environmental response barge from the port side of the vessel. c) Capable of performing a man lift whilst the vessel is at sea or in harbour. Could it please be clearly stated what the maximum personnel lifting requirement be for the 40 tonne deck crane (i.e. clarify item c, above).	The maximum personnel lifting requirement must accommodate 1500 lbs at the crane maximum boom radius. Refer to Item 5 of this Amendment for an update to Part B SOW item 17.1, 3.4.1.6.
AMENDMENT 014 - ref 133 to 140		
133	Need clarifications on Annex A Part B SOW item 16.10 (Incinerator replacement), 3.3.3. Sludge / Settling Tanks: The required number of sludge tank is one or two (as these tanks come as one unit only)?	Refer to Item 2 of this Amendment for an update to Part B SOW item 16.10, 3.3.3.1.

<table>
<tr><td>134</td><td>The milestone payment schedule (RFP Annex H, appendix 2) is very back end loaded and focuses entirely on the propulsion system, while other high value items (e.g. crane) are ignored. This poses considerable cash flow risk to bidders. Will Canada allow bidders to propose an alternative set of milestones and associated schedule?</td><td>Canada is not prepared to alter the milestones, at this time. There are milestones associated with equipment other than the propulsion systems (listed below), where Canada pays the Contractor upon this equipment receipt and inspection; this equipement includes the 40 tonne crane.
<table>
<tr><td>15</td><td>Part B Section 11.29 - Galley Equipment Package</td></tr>
<tr><td>16</td><td>Part B Section 13.1 - Shaft alternators & frequency stabilization equipment</td></tr>
<tr><td>17</td><td>Part B Section 14.2a - Main switchboard upgrade equipment</td></tr>
<tr><td>18</td><td>Part B Section 14.2b - Emergency switchboard upgrade equipment</td></tr>
<tr><td>19</td><td>Part B Section 14.3 - Motor control centers upgrade equipment</td></tr>
<tr><td>20</td><td>Part B Section 16.4 - Sewage treatment plant equipment</td></tr>
<tr><td>21</td><td>Part B Section 16.10 - Incinerator replacement & upgrade equipment</td></tr>
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<tr><td>23</td><td>Part B Section 17.2 - Deck machinery mechanical equipment</td></tr>
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<tr><td>25</td><td>Part B Section 17.5 - Mooring winch equipment</td></tr>
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<tr><td>29</td><td>Part B Section 19.2 - Alarm & monitoring system replacement equipment</td></tr>
</table></td></tr>
<tr><td>135</td><td>Following on from Q&A reference #64. The RFP is designated as part of NSS. NSS is covered by the national security exemption. Canada has previously used this exemption to block applications to the CITT. Will Canada confirm that they will not invoke the exemption for this procurement?</td><td>Canada will not be invoking an NSE (National Security Exception, Exception relative à la sécurité nationale) for this requirement.</td></tr>
<tr><td>136</td><td>Part B SOW item 16.1, 2.6.1.1 and 3.5.5 - For the renewed freshwater system, the Contractor is required to install five (5) GSM backflow preventers, however it is noted that only four (4) will be provided. Can Canada clarify which is correct? Also, as compatibility issues may arise why are these relatively minor items being provided as GSM?</td><td>All required backflow preventers must be supplied by the Contractor. For amendments to the SOW, refer to Item 3 of this amendment for an update to Part B, SOW item 16.1.</td></tr>
<tr><td>137</td><td>Will Canada be considering a BWTS for the Terry Fox ?</td><td>No, we won’t be installing a new ballast water treatment unit.</td></tr>
</table>

138	RFP, section 7.2, Standard Clauses and Conditions : Q : On the buyandsell website, there are many standard clauses and conditions that are not applicable for this contract, example: price for milk and butter. Also, many of them are “obsolete” and/or not updated. So, to have a clear view of all applicable clauses and conditions for this major project, we would ask to Canada to produce one complete Contract including all clauses and conditions extracted from buyandsell website and others clauses and all conditions from all specific sections produced for this project.	For section 7.2 (and for all of section 7), the only clauses that apply from the SACC site, are those that are either referenced or written out in full (in section 7). In section 7.2, for example, the referenced clauses (links) include, only: -2030 (2020-05-28), General Conditions - Higher Complexity - Goods (section 22 is amended as noted in 7.2.1); (link: https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/2030/19); -1029 (2018-12-06) Ship Repairs; and (link: https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/4/1029/5) -4006 (2010-08-16) Contractor to Own Intellectual Property Rights in Foreground Information (link: https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/4/4006/3)
139	Lowest Price vs Life Cycle Cost: The current format of a lowest price bid evaluation will encourage bidders to source the cheapest equipment available. While some consideration has been given to vessel life cycle costs with respect to spare sparts, fluid and fuel consumption, there is no criteria addressing the reputation of OEM’s (original equipment manufacturer) or equipment within an OEM’s portfolio of products. a) Will Canada consider a weighted criterion for major equipment items based on OEM’s record of performance? b) Would Canada consider specifying OEMs for major equipment?	a) Refer to question ref 79b response. Furthermore, in RFP Annex P, Mandatory Criteria has been considered and included for (i) manufacturers of major equipment, as well as for (ii) major equipment identified in all of M19 (a to h) as Propulsion Machinery Equipment (PME defined in M19b) and as Auxilliary Machinery (AM defined in 19g). PME Equipment includes: -Propulsion Machinery Engines (PME in Part B SOW item 12.1); -Propulsion Machinery Clutches (PME in Part B SOW item12.1); -Propulsion Machinery Shaft Alternators (Part B SOW item13.1); -Switchboard equipment (Part B SOW item14.2); -Motor Control Centres (Part B SOW item14.3); -Propulsion Machinery Controls System Upgrade (Part B SOW item19.1), and -Alarm and Monitoring System (Part B SOW item19.2). AM Equipment includes: -associated AM components (Part B SOW item12.1) including PME related AM pumps, compressors, prefabricated tanks, receivers, filters, valves, regulators, relief valves, and general instrumentation and the Start and aux air compressors replacement (Part B SOW item15.11). b) Canada has already established a 'no-substitute' list of components without allowing for equivalent products, on an exceptional basis as itemized in Annex U of the RFP. No further additions to the list can be made at this time.

140	Capacity: No consideration or weighting of a contractor's capacity to execute the work has been factored into this solicitation. Should bidders not have to provide a reasonable level of assurance that they have the facilities, manpower, etc. to execute the work within the timeframe specified by Canada? Specifically, in reference to backlogs at bidders' respective facilities? Would Canada consider a weighted bid evaluation whereby bidders provide a work schedule that clearly demonstrates a facility's capacity to execute the project within the time frame specified by Canada?	Refer to question ref 79b response. Furthermore, to demonstrate a facility's capacity to execute the project within the time frame specified, Canada has requested, in Annex P, mandatory requirement M6, where the Bidder must provide a Preliminary Work Schedule that must include the workforce deployment plan, or labour loading, for the following disciplines: -Steelwork; -Piping; -Mechanical; -Electronics; -Controls/Instrumentation. The Bidder must indicate which intended labour resources will satisfy the proposed labour loading for each discipline i.e. are the resources supplied in-house, or from subcontractor(s) and suppliers. Indicate subcontractor names and specify any suppliers. Also, M7 requests anticipated Sub-contractor engagement, including a list of all subcontractors and additional details. **Refer to M6 and M7 of Annex P (amended to rev 2 in Amendment 011) to see the entire content.**
AMENDMENT 015 - ref 141 to 161		
141	Part B, SOW item 16.19 - Design criteria for the new wheelhouse air handling unit provide different temperatures than those required for most other systems; furthermore the capacities of the unit are specified. How are the temperatures to be interpreted, and what type of acceptance criteria are to be followed?	Refer to Item 5 of this Amendment for an update to Part B SOW item 16.19, 3.6.2.1.

142	Engineering schedule Given the anticipated scope and complexity of the project, we anticipate a significant amount of custom detailed drawings and manufacturing information will have to be generated. We do not feel the eight-month period from contract award to vessel arrival is sufficient to account for the engineering effort required. Furthermore, as many scopes of work items are conceptual and largely undefined, the amount of custom drawings and manufacturer information required is a variable difficult to account for and creates significant risk for both the cost and schedule of the engineering work. Will Canada extend the design/procurement period from eight months to, at minimum, eighteen months?	Canada will extend the Initial Work Period. Refer to Items 2, 3 and 4 of this Amendment for an update to the RFP.

143	Procurement of Long Lead Items As mentioned above, we feel the design/procurement period of eight months from contract award to vessel arrival is insufficient. This is further exacerbated by the fact that design and acceptance of long lead items needs to take place before a purchase order is issued to OEM's. It is highly unlikely the prime contractor will be able to develop a detail design for major equipment, have said design accepted by Canada, order machinery and have it manufactured and install it in the vessel during the proposed contract period. Major items such as main engines may have to be built, a process which could take a year or more, especially given the pressure supply chain issues caused by COVID-19. a) What happens if a design is submitted and not accepted by Canada and delivery of major equipment is delayed either as a result of an extended design period or, OEM production delays? Will the contractor be held responsible for these delays? How will the contractor account for additional engineering costs as a result of re-work to a design not accepted by Canada? b) If Canada will not amend the solicitation to a two phased contract approach, we recommend at a minimum, a period of at least eight months design and acceptance followed by an eight to ten-month procurement period before the vessel arrives.	a) The Contractor is obligated to provide equipment that satisfies the requirements in the SOW. The Procedure for Unscheduled Work process (RFP Annex F using form PWGSC 1379), will be utilized to negotiate reengineering Work that can be attributed to Canada with acceptable substantiation. Delays will be addressed per 2030 11 Excusable Delay. b) Refer to the response to question ref 142 response.
144	Part B, SOW item 15.1, 3.3.1.8 states that ''The Contractor must replace cooler discharge valves with new valves of same arrangement and style as original.'' Looking at drawing 71-01-02, revision 3 states that the valves on the return lines from the coolers were deleted. Can you validate?	These valves have not been deleted and remain in place. They must be replaced with new valves, per the SOW.

145	For the same SOW item (15.1), it is mentioned at 3.1.1.2 that sections to be replaced have been indicated on drawing 71-01-02. These sections are not identified on the specified drawing.	These sections have been identified on the specified drawing in an update to the TDP (TDP update 22.01.06; section 15, Drawings).
146	SOW Part B SOW item 17.1 - The new deck crane appears to represent a capability increase from the existing crane and a greater capability than other cranes in service with the CCG fleet. As this will be an expensive item with considerable ship impacts, will CCG consider installing the same crane recently selected form other CCG vessels which will provide lower cost and greater fleet commonality?	The Bidders must select a crane that meets the requirements of the SOW.
147	SOW Part B SOW item 17.1, 3.6.1.5 - The documentation requirements for the deck crane specify "Three (3) complete sets in English and three (3) complete set in French (if available) of the instruction, operation, maintenance, parts lists, and spare parts catalogs/manuals.." Will Canada confirm that French language documentation is not required?	French manuals are required. Refer to Item 6 of this Amendment for an update to Part B SOW item 17.1, 3.6.1.5.
148	SOW Part B SOW item 17.1, 5.3 (5.3.1.1) - The spares requirements for the deck crane include "a) Sufficient spares for two (2) preventative maintenance routines and any other critical spares which are recommended by the OEM to be carried on board. b) Spare parts suitable for two (2) years of maintenance routines and any other critical spares which should be stocked." Are these to be taken as cumulative, or is the more extensive of the two alternatives required?	a) and b) are cumulative requirements.

149	SOW Part B SOW item 17.2, 3.2.1.7 - The Contractor is required to assess whether the tow winch tow wire is to be removed as part of the proposal. How is the Contractor supposed to make this determination without an opportunity for inspection? Will CCG unreel some or all of this as part of a second ship visit? Will Canada change this requirement to allow for removal, stowage and reinstallation to be considered as a 1379 item?	The Contractor must determine if the specified maintenance of the winch can be completed with the wire in place on the drum. If it cannot (and the wire must be removed to allow completion of the specified maintenance of the winch), then the Contractor must address the requirements of section 3.2.1 of SOW item 17.2 accordingly. The Contractor is not required to inspect the wire.
150	SOW Part B SOW item 17.2, 3.4.2 (3.4.2.1) - The Contractor is required to conduct a 200 tonne bollard pull test of the refurbished winch; however the vessel performance data (SOW Part B Section 13) suggests that it cannot apply 200 tonnes. Will Canada clarify this requirement?	The Contractor must conduct a bollard test to demonstrate the maximum capability of the winch, without exceeding 200 tonnes
151	SOW Part B SOW item 17.2, 3.5 - The scope of work required for refurbishment of the anchor handling winch may exceed the replacement cost of the winch. Can the Contractor propose this as an alternative?	No, the Contractor cannot propose an alternative.
152	Part B, SOW item 15.2, 5.5.1.2 - "The Contractor must provide proof of Class inspection and acceptance of all components and function of the new bilge and ballast systems." This SOW cannot be fulfilled without an exception from the Rules being granted because the existing ballast system does not inlude a ballast water treatment unit and there is no SOW for adding it.	Class acceptance of the waiving of the requirement for a BWTS (Ballast Water Treatment System) will be arranged by CCG. The Contractor must provide proof of Class inspection and acceptance of all other aspects of the bilge and ballast systems.
153	SOW Part B, SOW item 17.5, 17.7, etc - , The forward deck (in particular) mooring arrangements are to be extensively reworked, but no sketch or other information is offered to ensure that Bidder's proposals will meet CCG operational requirements. Can bidders therefore assume that any arrangement assumed in their proposal will be acceptable? If not, can bidders assume that any rework required to obtain CCG approval will be work arising?	Reference document 17.5-1 is available in TDP Update 21.12.20; this resource ensures that Bidders' proposals will meet CCG operational requirements.

154	SOW Part B, SOW item 19.5 - The MCR consoles are to be refurbished rather than new consoles being provided, despite the fact that most items will be entirely new. This approach will be difficult to implement and will lead to considerable performance and schedule risk as it precludes any ability to test most aspects by FAT rathan in-situ. It also raises many human engineering challenges, especially as layouts must be approved by CCG without any objective criteria being established for this. Will Canada consider changing this requirement to allow for provision of new consoles?	Yes. Any new console must align with all of the requirements of the SOW, as well as retention of all existing console hardware and functionality not dealt with in SOW.
155	SOW Part B, SOW item 12.1, 3.4.2 - The new PM system is required to include a new combinator control option. Is this to be available in both open water and ice modes? If so, what limiting engine speeds will be accepted for ice operation?	Combinator mode availability is defined in SOW Part A section GR 12.
156	SOW Part B, SOW item 12.9 - The Contractor is to supply and install a complete set of new propeller blades to the original design. This will preclude any improvements in efficiency and noise reduction available from utilizing state-of-the-art design, and will constrain the design of other aspects of the propulsion machinery. As the "lowest compliant bid" approach will prevent offering better alternatives, will Canada consider undertaking a study of alternatives during the Initial Work Period?	No, Canada will not undertake such a study.

157	Question ref #72 Amendment 11 - Follow on from Question ref #72. To clarify our question, please note that similar engines do not generally have identical power ratings, and bidders would normally be expected to offer what they consider to be the best engineering solution. However, the bid evaluation approach will penalize good practice. The existing MEs are rated at 4275kW each. Assume that a candidate replacement is available at 4200kW, and another supplier's engine at 4500kW. Both have similar specific fuel consumption. However, the 4500kW engine will appear to have roughly 7% worse fuel economy using the evaluation approach. In reality, it may actually have better performance, as running at 100% load is worse for fuel economy and for maintenance. We therefore request that Canada revist the requirement to reflect a specified delivered power requirement that avoids this problem.	The Contractor must select the engine it wishes to include in it's proposal and use the specific fuel consumption for that engine.
158	Question ref #76 Amendment 11 - Follow on from question ref #76. We thank Canada for the clarification, but note that the requirement has not actually been changed. Will Canada please amend the requirements to ensure that there is no dispute as to intent following contract award.	Yes. Refer to Item 4 of this Amendment for an update to the RFP.
159	SOW Part B SOW item 17.1, 3.4.1.1 - The new deck crane is to "..as a minimum, be in current production and in marine service and be well supported in Canada.." Can Canada confirm which characteristics are to be covered by this requirement, as the requirements call for a customized unit rather than a standard production model.	The bidder must demonstrate that spare parts and service will be available for the specified period. A verifiable, class approved reference for a similar crane on a named vessel will satisfy this requirement.
160	Question ref #67 Amendment 11 - Follow on from Q&A reference #67. To clarify our concern, we fully understand that OEMs will provide current year parts costs. However, the RFP requires that we quote parts and labour prices for 15 years into the future, which is unrealistic. We therefore repeat our request that this requirement be revisited.	All engine maintenance and operating costs (for both labour and materials), should be based on the selected engine maker's data, and priced in today's dollars.

161	Performance of the vessel: No engineering or modelling has been done to assess the vessel operational characteristics with the new equipment installed. As the contractor is responsible for procuring and installing major equipment, we feel an untenable amount of risk is placed on the prime contractor with respect to performance and acceptance of the vessel. The preferred course of action would be to model the vessel with all new equipment and systems, in order to accurately predict the operational characteristics of the vessel before any work is done and provide certainty to Canada that the vessel will operate as desired. This modeling should be done to compare different equipment options before equipment is selected. Who will be responsible if the operational characteristic of the vessel is deemed unsatisfactory during the acceptance phase?	The Contractor is obligated to provide equipment that satisfies the requirements in the SOW. The Procedure for Unscheduled Work process (RFP Annex F using form PWGSC 1379), will be utilized to negotiate reengineering Work that can be attributed to Canada with acceptable substantiation. The Contractor will be responsible for implementing each item in the SOW and ensuring the performance of any equipment installed as well as the integration of that equipment with any other new equipment or retained equipment. The operational characteristics are not anticipated to change.
AMENDMENT 016 - ref 162 to 177		
162	SOW Part B SOW item 17.1, 1.1.1.2 - The RFP notes that if the new crane requires additional deck support structure, that this will be dealt with as work arising. Will the work arising also cover additional engineering required for the redesign?	Completion of the initial Finite element analysis (FEA), specified in 3.1.2 must be included in the bid cost. Engineering required for the definition of additional structure and steel work will be addressed using PWGSC 1379 process.
163	SOW Part B SOW item 17.1 - The new deck crane is likely to require new stowed support arrangements. Are these at the discretion of the Contractor to define? If not, what location and other constraints are applicable?	The Contractor must assess and modify the existing crane boom storage crutch to suit the new crane. The Contractor must also assess any potential interference between the stowed crane and towing operations and adjust the crane stowage arrangement to avoid any interferences.
164	Part B, SOW item 12.1, 3.5.10.1 - "The Contractor must assess the existing ME exhaust uptake system against the needs of the new PM and define all modifications to the exhaust uptake system required to meet the needs of the new PM." Please advise of noise requirements for replacement engines and engine exhaust systems (dB).	The noise level requirements of the exhaust system must meet the Regulations and ABS Rules and codes stipulated in the SOW, GR 01 (Part A), section 5.0. This includes the noise limits in the engine room and the accommodation space. As a minimum, the levels must not exceed the previously measured noise levels, per survey 287478 CCGS Terry Fox Noise Monitoring Report, NL, March 5 2021. The machinery space maximum noise level limit is 110 dB.

165	Followup on QA ref #75 Amendment 11 - We do not understand this response, as a list of items is not a performance specification. Contractors cannot infer what other documents Canada may decide it requires, or on what basis. We therefore request that this requirement is reworded.	The edits to Annex V were completed and referenced in the last amendment (015). Annex V SOW items indicating "to include, and not be limited to" wording were reworded. Refer to Item 4 of Amendment 015, including the updated Annex V (Rev 1).
166	SOW Part B, SOW item 12.2 - Amendment 12 updates the bubbler compressor requirements but reduces the amount of useful information provided. The bubblers are a very large electrical power draw (1200HP for current system, new system requirements unknown). As such, they will impact on many elements of the electrical system modifications. It is impossible to verify compliance with many other requirements without better definition of the bubbler system. Will Canada provide this information to bidders during the RFP phase?	The solicitation for new ABCS will be posted during the week of Jan 25, and will include the ABCS SOW. All VLE bidders may view it on Buy and Sell; if any questions remain outstanding, the bidders may then submit their questions.
167	SOW Part B, SOW item 12.2, 12.3 - No performance requirements are specified for the bubbler system and it is therefore unclear what the testing and acceptance requirements are supposed to be, or what functionality the bubbler is intended to provide. Will Canada provide additional clarification on modes of operation, balancing, working pressures and other information?	The Contractor must demonstrate that the new ABCS, when installed, will meet the manufacturer's specified performance specifications.
168	SOW Part B, SOW item 17.1, 1.1 - Requirements for crane operation refer to Beaufort sea state, which does not correspond to normal definitions of sea state. (a) will Canada please confirm significant wave height requirements? (b) will Canada provide a seakeeping analysis that allow bidders to assess acceleration and motion additions to static load requirements?	a) Refer to the link, https://www.rmets.org/metmatters/beaufort-scale. b) No, the Contractor is responsible for determining the design parameters of the new crane.

169	SOW Part B, SOW item 15.4, 3.4.1.2 - New bilge/ballast and fire pumps must "be of the same make, model, capacity, and arrangement as the original pumps. The QVP series is not listed in the manufacturer's marketing material (only QV and QVK series detailed). Has Canada confirmed that these pumps are still in production? Why can the sea water connection not be modified to suit a new pump when the pipework is all being replaced anyway.	The manufacturer, in 2020, had confirmed that these pumps can be supplied and will remain supported. New pumps must be supported for 15 years.
170	Sow Part B, SOW item 16.1, 3.5.5.1 - "The Contractor must install Government supplied backflow preventers in each of the five main domestic water distribution mains at convenient locations after the main distribution manifold" Would these backflow preventers serve more use in the lines to machinery header tanks and sewage plant to prevent backflow into the domestic system rather than preventing clean water backflowing into the machinery systems?	Bidders must bid on installing backflow preventers per the SOW and per the response to Question ref 136.
171	SOW Part B, 16.3 - Are any additional winterisation measures required for the conversion of water ballast tank to fresh water tank? The tank extends above the waterline and will now have a liquid with higher freezing point	No.
172	The response to this question seems to contradict the answer to question 27, where Canada stated that "(section GR01, 5.2 to 5.5) are mandatory" Can Canada breakdown the list of reference standards, indicating which ones are mandatory in their entirety, which ones are partially applicable including which specific sections are applicable, and which ones are not applicable.	The previous answers to Question ref 104 and Question ref 27, regarding the application of regulations and standards, are correct. The Contractor may request clarification if there is a question related to a particular Regulation, Rule, Code or Standard.

173	TDP - Many of the answers provided in Amendment 13 refer to the TDP update dated 20 December, 2021. We were not informed of this update until 11 Jan, 2022. Will Canada (a) confirm that all bidders were given knowledge of this update at the same time (b) ensure that future substantive changes to the RFP package are communicated through the formal amendment process and (c) ensure that there is a more timely dissemination of essential information, given the extreme time pressure for RFP repsonse?	a) Yes, according to our records, all eligible TDP recipients, including the author of this question, were given access to updates on December 23 (for TDP update named TDP Update 21.12.20). TDP Update 22.01.06 and TDP Update 22.01.14 were also e-mailed out on January 11 and January 14, respectively. b) Moving forward, TDP updates, accessible to eligible recipients, will only be announced through a solicitation amendment on Buy and Sell. c) Thanks for your feedback.
174	TDP update (6th Jan 2022) has a drawing index that suggests there are .dwg files available. None were found within this package or any other TDP. Can Canada provide these files please?	General Arrangement Drawings have been made available in .dwg format in the TDP Update 22.01.14. The remainder of the drawings will be made available in .dwg format after contract award.
175	In response to answer ref 54 (regarding SOW Part B SOW item 13.1 - 3.3.3.12) , how does Canada want to run the pumps and perform pre-charging using 24V?	SOW Part B SOW item 13.1 - Item 3.3.3.12, defines requirements for the Control power of 24VDC. It does not envision to run the pumps and perform the pre-charge from the 24 VDC circuit.
176	In response to clarification request for answer ref 84 (regarding SOW Part B 13.1 - 3.3.4.1a): The auxiliaries of the PTO-Converter and driving Main Engine (cooling water) are not working without any electrical energy provided, it is not possible to start-up the ship mains (“AC bus”) with the shaft alternator alone. The normal procedure for running up a ship mains from the blackout is the way via the emergency genset as it is air cooled / mainly self-contained. Alternatively large UPS, made for 460 V 3AC can play the role of the Em-Genset.	The capability to connect the power bridge to a dead bus is required. The converter connects to the PTO bus, and that PTO bus can be de-energized when its bus coupler to the ship service bus is open. The source of auxiliary power, pre-charge circuit and cooling pumps, needed to start the power bridge should be defined by Contractor. The possibilities are: 1- the PTO generator (if it is capable to operate autonomously), 2 - an added feeder (spare breaker) from the ship service bus.
177	SOW Part B SOW item 13.1 - 3.3.3.3, can another front end towards the shaft generator be considered if deemed to provide the same performance towards the grid?	The converter must meet the requirement of SOW Part B SOW item 13.1 - Item 1.1.1.2.b. The AFE referes to a converter capable of maintaining / regulating the DC link voltage at the required level in all operating modes.
AMENDMENT 017 - ref 178 to 184		

178	Part B SOW Item 16 : - Document PL 70-11-02 grey water system of 31 pages, page 22 is illegible;	Page 22 contains items listed for Galley drains. A clearer copy is not available, but the items required for this page are referenced in an updated **3D Virtual Scan (link - https://mpembed.com/show/?m=K7qtxRJn1yy&mpu=71&mpv=CCGTFOX; password = TerryFoxVLE**), under Section Directory 'Bubbler Compartment' and 'FWD AUX Machinery Compartment Upper landing'. New tags are labelled under Area Spec Index as '16.6 Sewage & Grey Water Piping System'.
179	RFP section 6.1 Financial Capability : For the presentation of financial reports, Point 6.1. For the purpose of disclosing this confidential information to competent persons only. Do we have the possibility of making a videoconference meeting to present his information ? This would make it possible not to give away his documents.	The information to be provided requires a detailed assessment by a cost analyst; a videoconference meeting is not sufficient enough to carry out the assessment. The requested information would be sent, from the bidder, directly to the cost anayst.
180	RFP article of agreement 7.11 Insurance Requirements: - Can we have the insurable value of the Terry Fox ship ? - Annex D, point D4, Can you clarify what is included in the $ 15,000,000 property listing ?	No, the insurance value of the vessel will not be disclosed. Point D4 (All Property Insurance) is requested as the Contractor is going to order high value equipment, spare parts, etc., and the goods will remain in the Contractor's care, custody and control after they are delivered.
181	RFP article of agreement 7.13 Contract Financial Security: For the financial guarantee, can you confirm that PWGSC will recognize that the extras will be subject to the increased costs of the financial guarantee ?	No, PWGSC does not recognize that there will be an increase. After award, Canada will make Milestone and monthly progress payments on completed Work; the remaining Work to be invoiced for the duration of the contract will not be larger than the initial value and risk secured at award, even as extras get added.
182	In regards to request for proposal (RFP) section 2.7 Work Period, a bidder cannot make this certification in good faith without knowing what is a reasonable amount of unscheduled work. This is becoming increasingly difficult as Canada amends the SOW (amendment 5 refers) to refit selected areas through per unit pricing which is essential, refit by 1379. Given this reality can Canada define precisely how many hours is "reasonable".	No, Canada cannot precisely define the number of hours that constitutes a reasonable amount of unscheduled work.

183	TDP, 1-07-80-2 Load Analysis - We note that the only electrical load analysis provided dates back to before delivery of the vessel and many line items do not correspond to data provided elsewhere in the requirements. Can Canada provide a more recent version of the load analysis, as this is a critical design document for sizing new equipment and systems?	Refer to item 2 of this amendment. The CCG has recently completed a general load analysis of the existing electrical installation (TDP Update 22.01.27). This analysis is for reference only and in no way limits the awarded Contractor's responsibility to develop and maintain electrical load analysis, per SOW item 14.1, to reflect all changes associated with the VLE refit and determine all final electrical system design requirements.
184	SOW Item 11.4 – HULL PROTECTION SYSTEM SERVICE: * Para: 3.3.1.1: “The Contractor must isolate, disconnect, and remove all existing electrical cables from the existing Cathelco control panel to the four reference cells and the ten anodes.” * Para: 3.5.1.6: “The Contractor must install all new electrical cabling from the new, and the original hull protection system control panels to their respective reference cells and anodes in accordance with Jastram instructions” * And Amendment 5: “The four forward anodes and two forward reference cells must be connected to the new forward thyristor control cabinet.” * Just got in touch with the OEM representative (Charles Brown) from Jastram. He told us that not all of the electrical cables were to be replaced (his recommendation). * Could you confirm that ALL the cables are to be replaced by new ones for all the aft and forward anodes and reference cells?	Yes, all electrical cables must be replaced as specified in 3.3.1.1 and 3.5.1.6 of SOW Item 11.4.
AMENDMENT 018 - ref 185 to 187		
185	Ref Q&A 166, When will the ABCS (air bubbler compressor system) solicitation be published?	The ABCS solicitation was published on Jan 31, 2022. https://buyandsell.gc.ca/procurement-data/tender-notice/PW-OLZ-002-7757

186	ANNEX P of the RFP, Mandatory Technical Criteria, M18, Procurement Team, point b. *'The Bidder must provide two Procurement Specialists who will be purchasing equipment itemized in Annex "H" – Appendix 2 - Milestones (Price and Delivery), as specified in Annex "A" - Statement of Work. Each individual must:* *b. have handled the procurement of a component valued at a minimum of 10 million dollars during their experience.'* This requirement suggests that the Procurement Specialist must have issued a purchase order for a single component valued at a minimum of 10M$. This is a very high value for a single component, it is very unlikely to happen even on large projects. A requirement such as «procurement of components valued at a minimum of 10M$ for a single project» would be more in line with what is happening in the Canadian marine industry. In this perspective, the demonstration could not be done with the submittal of a single purchase order. Alternatively, reducing the 10M$ to 1M$ or 2M$ would open the door to serious candidates.	After more consideration and further review, Canada has corrected and clarified the intent, and added an equivalent criteria to M18, b. Refer to Item 2 of this amendment for an update to Annex P (rev 3). NOTE: Amendment 010 (Annex P, rev 1) updated requirements M19h (per item 2) and M10 (per Q14 in the amendment or Qref 58 in the log)). Amendment 011 (Annex P, rev 2) updated requirements M6 (per Q ref 61 and item 2).

187	The current Contract Financial Security requirement states that the bidder must provide a price for: a) a performance bond (form PWGSC-TPSGC 505) and a labour and material payment bond (form PWGSCTPSGC 506), each in the amount of 20 percent of the Contract Price; OR b) a security deposit as defined below in the amount of ten percent (10%) of the Contract Price. The cost of this security will be part of the evaluated price. This will be an excessively high $ number which adds no value to the ship, the refit nor does it protect against non-performance. We again request PSPC to reconsider their procurement strategy and prequalify shipyards first, then evaluate them on best value, a combination of price and technical merit, without inclusion of the cost of financial security.	This request, regarding the method of evaluation, has been previously answered. Responses to identical or similar type questions can be found at Question refs 16, 79b, 139, and 140. In regards to the requirement for financial security: 1) Financial security protects Canada from Contractor default; should a Contractor default, any contract financial security shall be redeemed and applied to compensate Canada to the limit permitted in the contract; 2) It is equally applicable for all Bidders to include in the evaluated cost; and 3) If awarded, Canada will pay for the entire cost of financial security, as it appeared in the bid submission.
AMENDMENT 019 - ref 188 to 196		
188	SOW item 12.1 - Regarding item 3.4.3.7, a governor with mechanical backup is no longer seen as beneficial, as they can cause stability problems and eventually break the engine coupling. Considering this, is the use of a Woodward PG-EG without backup allowed?	The requirement defined in item 3.4.3.7 will remain unchanged.
189	SOW item 12.1 - Regarding item 3.4.3.14, engine control is hard wired; we believe that it is required to be hardwired for safety reasons (formal confirmation pending). Either way, whether required by Class or not, it is deemed safer to have engine control signals hardwired. Can Canada please allow engine control to be hard wired?	Engine Control functions may be hardwired. The onboard engine control and monitoring system must be capable of bus communication with the central control, alarm and monitoring system (CCAMS).

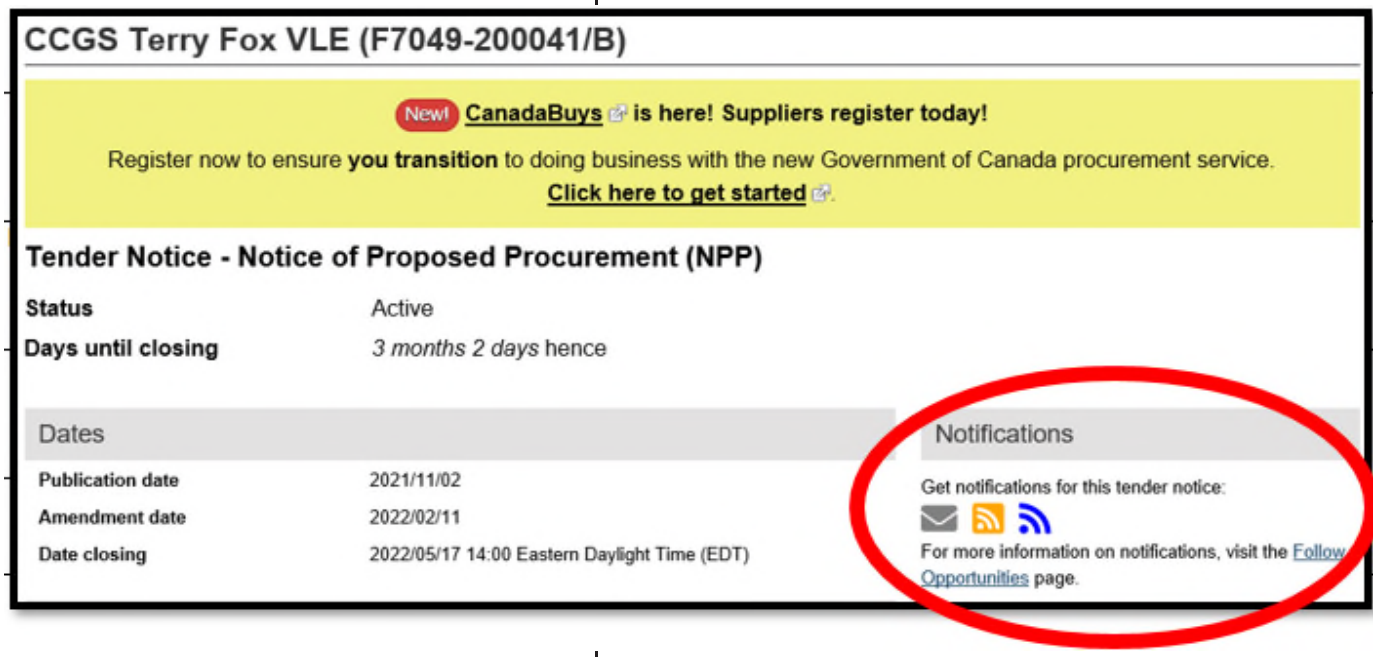
190	Can a Bidder accumulate credits or transfer credits related to the Indigeneous Participation Component (IPC) from other IPC programs, much like what is done with the Industrial and Technological Benefits (ITB) program? For example, the Louis Saint Laurent does not have an ITB but it does have Canadian work on it that we are allowed to credit to our overall ITB budget; that credit can be used towards other programs that do require an ITB. Can the same be done for IPCs, or does the IPC need to be directly for the Terry Fox VLE?	No, it has to be directly for the Terry Fox VLE contract.
191	SOW Part A, GR 7.0: The answer to question ref 121 under Amendment 013 notes that pre-refit sea trials are to be conducted i.a.w the SNAME Sea Trials Bulletin under GR 7.0, SOW Part A. This bulletin covers many trials, many of which require instrumentation that is not currently installed on the ship. Is the contractor required to provide and install this equipment, and if so how and when is this to be done and costed?	The Contractor is to bid per the SOW. The Contractor is to arrange for a vessel performance assessment to be conducted by those experienced in doing so and who are able to provide the required instrumentation. CCG will make available the time required for the installation and removal of such instrumentation, prior to and after the trials.
192	Various, Q&A ref 81: The request for proposal (RFP) refers in various places to "rated propeller power" and the answer to question ref 81 notes that this is to be used for sizing the propulsion plant. However, we cannot find a definition for this value in the RFP or supporting documentation. Will Canada clarify the value expected to be used?	Refer to drawing # A111582 CPP Propeller, offered in TDP Update 21.12.20, Section 12, Documents, Folder 12.1-1. The existing propeller designed power is to be considered 8088 Kw per shaft.
193	SOW Part B, 11.18: The SOW for the new forward mast states "c) fabrication of new mast as per guidance drawing supplied" Is the guidance drawing referring to 2046-418-S-045 Rev2 Forward Mas Nav. Light Platforms Detail Drawing (Allswater)? Can Canada confirm the intent to have an identical mast as per the original, with new platforms. Is there any reason the platforms cant be added to the existing mast?	Refer to SOW, section 3.1.1.1 which states "The Contractor must replace the vessel's forward mast with a new assembly as per guidance drawing #20046-418-S-045 Rev 2." The Contractor must bid accordingly, on the basis of the referenced guidance drawing. Refer to SOW section 1.1.1.1 which states "The intent of this specification is to replace the vessel's forward mast with a new mast of new structure and arrangement."

194	SOW Part B, 12.6: Jastram Model S2-723-35 steering gear system has been identified as the pre-selected replacement package. It is the contractor's responsibility to ensure that the proposed system will meet or exceed the functionality and performance of the current system, and will meet the requirements of both ABS and TCMSS. Are any required changes to the pre-selected steering gear package to be identified at the bid stage and included in a new technical proposal/quotation?	The Bidder must assume that the proposal, as presented, is sufficient and that no changes are required.
195	SOW Part A, GR 07: It is required that the vessel performance after the VLE is, in all respects, equal to or better than that prior to the VLE. This is to be demonstrated by comparison of pre-arrival sea trials and delivery trials. However, this poses a number of challenges and we request further definition of Canada's expectations. The pre-arrival trials will be conducted with degraded hull coatings, etc. While this will make some performance attributes easier to meet, others will become more difficult - for example crash stop and other manoeuvres. How are the trials results to be interpreted to account for these factors?	The pre-arrival trials will be conducted immediately after ice breaking operations; the hull can be assumed to be clean. The hull is coated with Inerta and can be considered to be in good condition.
196	SOW Part A, GR 08: Can the documents presented in GR 08, 1.2.1.1 be provided? MSI Doc May 2019 (weights and centres..), MSI Doc Jan 2012 (Towage Stability), Dwg # TBD (Hydrostatic Curves), Dwg # TBD (Draft Marks), Dwg # TBD (Trim and Stability Book) and Dwg # TBD (3D modelling manual).	To be included in TDP Update 22.02.11.
AMENDMENT 020 - ref 197 to 210		

197	Part B, SOW item 11.14: The ETS (Eastern Technical Services Company) report only identifies the points where the steel is under the acceptable thickness decrease, it does not delimit the areas of steel to be replaced. The CCG should sit down with the company that took the thickness tests and the classification society of the ship in order to agree and produce a plan/drawing precisely delimiting the plate inserts and structural elements to be replaced considering a percentage of additional decrease since the tests were taken and knowing that it does not want to return to these spaces in the coming years to replace steel again. It is always the responsibility of the Ship Owner to agree with his Classification Society what he must replace on his ship. This exercise cannot be done by the shipyards as part of a call for tenders evaluated on the price. Will a steel plan/drawing to be replaced with a summary detailing, location, sampling, lengths or dimensions and steel grade of each of the elements to be replaced be provided to bidders so that they can all bid for the same quantities of steel?	Refer to Item 3 of this amendment.

198	Part B, SOW item 12.1: For item 3.4.2.26d, individual cylinder pressure sensors are common in dual fuel or gas engines. When operating with gas with otto-principle, cylinder heads need to be equipped with special electrical sensors to adjust individually cylinder specific sensitive burning process. This is needed to load the cylinders equally, to avoid knocking and misfiring which may result explosions in exhaust gas duct. So, there are strong arguments with gas engine. However, in diesel engines the burning process is different and no engine specific adjustments are needed. There are no other strong arguments either which would add value for the investment. That is why cylinder heads aren't commonly equipped with continuous cylinder pressure monitoring, as it adds costs and brings little value. If we were to implement continuous cylinder pressure monitoring on our diesel engines it would take specific R&D, engineering and testing to implement this on the cylinder head. Also, it would result in Canada owning an engine with specially made cylinder heads not used elsewhere. And not likely to be used elsewhere either. Medium speed diesel engines do have indicator valves on top of the cylinder head where peak pressures can be measured by a handheld device. Would it be possible to eliminate this requirement and allow peak pressures to be measured by handheld devices?	Provision of individual cylinder pressure monitoring will be considered optional. Bidders must include the cost of provision of such a system, as specified, as an option, if available. The cost will not be included in the overall bid price. Refer to Item 4 of this amendment for edits to the SOW.
199	Bubbler RFP and Terry Fox VLE Part B, SOW Item 12.2 The system is to be delivered to St. John's, NL, during the expected refit period. This will require any bidder not based in St. John's to pay for unnecessary shipping costs and for the risk of multiple long distance deliveries. Will Canada revise this requirement to avoid penalization of certain bidders?	Canada will deliver the compressor to the awarded site.

200	Bubbler RFP and Terry Fox VLE Part B, SOW Item 12.2: The bubbler RFP includes a requirement for the supplier to develop an installation design package. However, the VLE bidder is required to take responsibility for this. How will any conflicts be resolved?	The VLE Contractor must install the new Air Bubbler Compressor System (ABCS) hardware in accordance with specific installation requirements defined by the supplier of the new ABCS, as would be expected for the installation of any new equipment or hardware. More general installation requirements such as an access and closing plan, lifting requirements, electric cable replacement and other general requirements unique to the vessel must be developed by the VLE Contractor, taking into account the equipment and hardware specific requirements of the ABCS supplier. The VLE Contractor is responsible for the correct installation of the new ABCS. This is covered under the installation allowance in the Terry Fox SOW (SOW item 12.2 in Part B, refer to question ref 80). An access and closing plan has been added to ANNEX V PDR-CDR (REV 2), per section 3.2.1.5 of SOW item 12.2 (refer to item 9 of this amendment). Note that REV 1 was released per question ref 158 (and Item 4 of Amendment 015).
201	Bubbler RFP and Terry Fox VLE Part B, SOW Item 12.2: The bubbler scope of supply includes various replacement panels for consoles that are to be removed in the VLE. How are bidders to ensure that these panels will be compatible with the new consoles?	The Bidder must assume that any new panels will not conflict with console planning. Any conflicts will be addressed after award using the PWGSC 1379 process.
202	Bubbler RFP and Terry Fox VLE Part B, SOW Item 12.2: The bubbler RFP does not include any space, weight or power information, other than a not to exceed power. Are VLE bidders required to assume that this maximum power will be used? What other information can be utilized to assure that the delivered equipment will not conflict with other aspects of the VLE, given that bubbler selection will presumably not be confirmed until after VLE bids are finalized?	The Bidder must assume that the new bubbler machinery will: a) Require 485KW electrical feed to each new bubbler compressor VFD. b) Fit within same footprint as existing equipment. c) Will not present any change in weight. d) Will not conflict with other aspects of the VLE. Any changes to the above confirmed after contract award will be dealt with via the PWGSC 1379 process. Refer to Item 5 of this amendment for edits to the SOW.

203	Bubbler RFP and Terry Fox VLE Part B, SOW Item 12.2: Is it now the responsibility of VLE bidders to track all Q&A on the Bubbler RFP to stay informed of changes to the scope? Will Canada inform VLE bidders of amendments to the bubbler system RFP in a timely manner?	Bidders can request notifications for any tender notice on Buyandsell.gc.ca (see image below for guidance). Note that any questions regarding the Bubbler Compressor RFP can be directed to that file's Contracting Authority. Refer to the response to question ref 185 for the link. 
204	Bubbler RFP and Terry Fox VLE Part B, SOW Item 12.2: In general, why is the bubbler compressor being treated as GFE in this way, while other larger and more complex items are part of the VLE package? This approach adds considerable risk due to the types of interfacing issue noted above.	Such approaches are determined at the discretion of the CCG.
205	Bubbler RFP and Terry Fox VLE Part B, SOW Item 12.2: We note that the bubbler RFP uses a rated technical bid evaluation approach, which is sensible given the complexity of the technical issues involved. Will Canada therefore reconsider the evaluation approach to the VLE as a whole, which is vastly more complex and higher risk?	This request, regarding the method of evaluation, has been previously answered. Responses to identical or similar type questions can be found at Question refs 16, 79b, 139, and 140.

206	SOW Part B, SOW Item 17.1 - 40 T crane - 3.4.1.6 (a) requires the crane to recover a crew barge from either port or stbd side of the vessel. Can the weight of the crew barge be provided please?	The lifting weight of the barge is 19000 lbs. The drawing of the barge will be available in TDP Update 22.02.18.
207	SOW Part B, SOW Item 17.1 - 40 T crane - 3.4.1.6 (f) requires the crane to position deck loads over the majority of the working area of the deck. Can the weight of the deck loads be provided please? Can the term "majority of the working area" be clarified please?	These items will not exceed the crane lift and extension requirements specified elsewhere in the SOW.
208	SOW Part B, SOW Item 17.1 - 40 T crane - 3.4.1.6 (g) requires the crane to discharge stores, containers, palletized goods and equipment from vessel to shore. Can the weight of these items be provided please?	These items will not exceed the crane lift and extension requirements specified elsewhere in the SOW.
209	TDP Section 11 - In Drawing 07-07-04/05, Double Bottom Fr 60 to 79 P&S, Frame 2, the double bottom tanks between Frs. 60 and 95 are identified as holding water ballast. Drawing T131027, Tank Capacity Plan, identifies the same double bottom tanks as Fuel Oil tanks. Please confirm the latter is correct.	#2 Double Bottom Tanks between frames 60 and 94 carry diesel fuel oil. The notation on drawing 07-07-04 is incorrect.
210	SOW Part A, GR 08: Can the latest GHS (General HydroStatics) model be provided please?	No. A GHS model is not available. The Contractor must complete stability analysis in GHS and build a GHS Model, as required, to suit. GHS Stability analysis must be Class reviewed and approved prior to submission to CCG. CCG will supply a partial 3D model in Rhino, in TDP Update 22.02.18, for further development by the Contractor and for use in conjunction with the GHS model produced by the Contractor. Refer to Item 7 of this amendment for edits to the SOW.
AMENDMENT 021 - ref 211 to 217		

211	Mandatory Requirements, Annex P: The answer to question ref 140 in Amendment 014 notes the requirement to provide a Preliminary Work Schedule, as extended under Amendment 011. However, this does not address the issue of realism as posed in the original question. Will Canada assess the feasibility of the proposed schedule and labour loading based on metrics of yard and subcontractor capacity or merely use "ticks in boxes" to note that every bullet point is addressed? If the latter, then what if any penalties will be applied to a Contractor who submits an unreasonable proposal?	As set out in Part 2 of the RFP Instructions to Bidder, section 2.7 Work Period , by submitting a bid, the Bidder certifies that they have sufficient materiel and human resources allocated or available, and that the Work Period comprised is adequate to, both, complete the known work and absorb a reasonable amount of unscheduled work. In support of the Bidder certifying that it has the resources required to meet the contractual delivery date, Canada requires this information i.e. the schedule labour loading, to ascertain how the Bidder plans to resource this Work given the level of effort required for this VLE. Remedies under the contract will be exercised, as required, in the event the Contractor defaults on any contractual obligations.
212	RFP Annex S: Will Canada explain why an NDA is being required for all data sharing under this project? What policy is driving and justifying this restriction, given that the vessel is 40 years old and uses no sensitive technologies? The need to establish NDAs with a very large number of potential equipment suppliers is a large and increasing problem and risk to the delivery of proposals within the allotted time.	There is no policy driving this decision. For the CCGS Terry Fox, the NDA is legally required to safeguard selected third party content in the TDP.
213	RFP Annex S: Further to the above, if Canada continues to require these NDAs, can further clarification be provided on how far-reaching this requirement is? For example: a) Are independent contractors (contract staff) required to execute NDAs, or are they considered to be covered by the organization to which they are providing services? b) Are companies required to sign NDAs before receiving RFQs based on TDP information, or only when elements of the TDP itself are to be forwarded? c) Are vendors specified in the RFP required to execute NDAs, or has this already been arranged by Canada? d) If companies need to flow through information to their own suppliers and subcontractors, are they also required to put NDAs in place? e) What penalties will be applied to bidders and suppliers who fail to follow these procedures?	a) Anyone to whom the drawings or documents (contents of the TDP) are disclosed to, must sign a non-disclosure agreement containing the same terms (i.e. the entity's authorized representative must sign on that entity's behalf). b) If a document or a drawing needs to be shared, then yes (per a)), an NDA is required, but the NDA can be signed at the time the information is being shared. c) See response in a). No, the Bidder will be responsible for getting the NDAs signed by its sub-contractors. d) Yes, see response in a). and General Conditions 2030- 06 Subcontractors subsection 3.). No, the Bidder will be responsible for getting the NDAs signed by its sub-contractors. e) Information provided to the bidders is licensed to Canada and, as such, Canada can only share this information under the condition that it will be shared under a Non-Disclosure agreement. If a bidder or supplier fails to sign the NDA or fails to act in accordance with the NDA, Canada or the owner of the information, could commence legal action against the bidder. Moreover, Canada may consider that by failing to do so, you have not complied with all the requirement of the bid solicitation and are non-responsive, hence your bid will be rejected.

214	RFP Annex S: Further to both the above, as all bidders will be contacting many of the same vendors, OEMs, etc, will Canada establish and provide bidders with a copy of a registry of all companies who have already signed NDAs for this project, to avoid multiple requests?	No, Canada will not provide such a registry.
215	Part B, SOW item 12.1: Regarding local gauges item 3.4.3.12. Modern engine control systems have all requested information available in local display unit as a standard, where values are easy to find and comfortable to read. Electrical sensors fulfil the high safety and reliability standards expected from a modern engine, and no human is requested to read mechanical gauges for these purposes. Up-to-date sensors and electrical measurement devices are very reliable, more than traditional mechanical gauges. Maintenance, including changing electrical sensors is an easy and fast task. Having double measurements devices would mean high investment cost and increased operational maintenance cost without added value. It will also again mean that Canada will end up with a unique one-of-a-kind configuration. Considering the statements before, can Canada please explain why mechanical gauges are viewed critical?	The provision of local mechanical gages will be considered optional. Bidders must include the cost of provision for such an arrangement, as specified, as an option, if available. The cost will not be included in the overall bid price. If local gages are not offered, all parameters for which mechanical gages have been specified, must be included in the engine electronic monitoring package. Additionally, redundancy in electronic device monitoring must be provided for the following points: a) Lube Oil Pressure to main bearings b) Cooling Water Pressure c) Cooling Water Temperature to Engine d) Cooling Water Temperature out of Engine e) Charge Air Pressure f) Fuel Oil Pressure g) Exhaust Gas Temperature Before and After Turbocharger Refer to Item 3 of this amendment for edits to the SOW.
216	For Part B SOW item 12.14 requirement 1.1.1.2h, it is requested to refill the CPP system with EAL oil. To operate the CPP with EAL oil, the CPP needs to be upgraded to be EAL compliant. Is Canada requesting to perform such an upgrade?	No, Canada is not requesting an oil upgrade to an Environmentally Acceptable Lubricant. This requirement is to be deleted and reference made to clause 3.2.1.2. The systems are to be refilled with new oil. “New oil” is to be interpreted as being of the same type as is now in use as per “CCGS Terry Fox Lube 2021” application list offered in TDP, VLE SOW Documents/GR Documents, or an equivalent product as may be defined in GR 02, Section 7. Refer to Item 4 of this amendment for edits to the SOW.

217	For Annex H (life cycle costs for prolulsion engines); For the sake of clarity for all bidders can Canada please specify the activities for the 5 and 10 year TCMS Inspection to be considered?	Bidders are not required to consider TCMS 5 or 10 year Inspection requirements for the purposes of lifecycle cost assessment. Table 2 of ANNEX H appendix 1 life cycle costs to be disregarded.

TABLE 2 Cost of TCMS 5-Year Inspections (Inspection 1 completed after 5 years, Inspection 2 completed after 10 years)

Inspection No	TCMS 5-Year Inspection Activity Description	Level of Effort (hrs)	Applicable Rates ($/hr)	Parts, Material, Equipment, Tools Total Costs ($)	Cost ($) of TCMS Inspection Activity	Bid Pages References
1		0	$ -	$ -	$ -	
1		0	$ -	$ -	$ -	
1		0	$ -	$ -	$ -	
1		0	$ -	$ -	$ -	
1		0	$ -	$ -	$ -	
1		0	$ -	$ -	$ -	
1		0	$ -	$ -	$ -	
1		0	$ -	$ -	$ -	
2		0	$ -	$ -	$ -	
2		0	$ -	$ -	$ -	
2		0	$ -	$ -	$ -	
2		0	$ -	$ -	$ -	
2		0	$ -	$ -	$ -	
2		0	$ -	$ -	$ -	
2		0	$ -	$ -	$ -	
2		0	$ -	$ -	$	
	Total Cost for Table 2			$ -	$ -	

AMENDMENT 022 - ref 218 to 242

218	SOW Part B, SOW item 11.11 - The allocation of some responsibilities for the Main Deck Plate Replacement in SOW Part B, SOW item 11.11, differs from Table 3 of the TDP document "SPS Technology Specification.pdf." Please confirm that the SOW's assignment of the following responsibilities to SPS Technology, rather than the contractor/yard, is correct: - 3.2.3.1.c: "Provide the detailed engineering required, including provision of detailed fabrication and erection drawings." -3.2.3.1.e: "Coordination of all Class related activities, including certification, provision of required documentation and ensuring ABS' Surveyor's attendance during all phases of the construction process."	The Contractor must retain total system responsibility and must coordinate all requirements with the specified sub-contractor. The SPS Technology Specification is a draft copy, intended as a reference for the Contractor. The final plan must be developed and coordinated with SPS Technologies by the Contractor. Section 3.2.3.1e is to be deleted. The Contractor is responsible for all Class approval requirements and coordination of Class inspection requirements, per the General Requirements (SOW Part A). Refer to Item 5 of this amendment for the SOW edits.

219	SOW Part B, SOW item 16.3, point 3.1.1.1 says "The Contractor must open, modify, clean, inspect, recoat, and test the vessel's domestic water tanks identified in Table #2-2." However, Table 2-2 includes Fresh Water Tank, #1, which is being removed. Please confirm that the referenced scope is only required for the remaining tanks.	For interpretation purposes, the Work scope defined in section 3.2 must be considered a modification when viewed from the perspective of clause 3.1.1.1. Tank #1 must be opened, drained and and made safe for completion of applicable work scope defined in 3.2, and then removed. Tank #1 does not need to be cleaned, inspected or recoated, etc.
220	SOW Part B, SOW item 17.1, point 3.4.1.2 says that the new 40 T crane "must be a pedestal mounted, have 360° slewing capability and have an articulated (knuckle) main boom with a retractable jib boom. " Other references to the crane configuration say the main boom must be articulated but do not mention a knuckle boom. The SOW generally seeks the same capabilities for the new crane as for the existing one, which is not a knuckle-boom design. Can CCG please confirm whether a knuckle-boom crane is required, or whether the knuckle reference in 3.4.1.2 is an error?	The requirement is for an "articulated (knuckle boom)" crane. The terms articulated and knuckle boom are to be interpreted as interchangeable for these purposes. "Retractable jib boom" is in reference to the outer section of the boom assembly, beyond the knuckle pivot point (i.e. the outer boom section). "Retractable" is in reference to the ability of the outer boom section, beyond the knuckle joint, to be folded back under the main boom section. A knuckle boom crane is required.
221	SOW Part B, SOW item 16.8, point 3.4.1 - Minisplit condenser to be mounted in mudroom. This will have a significant impact on the heat load balance for the mudroom. Has this been assessed by Canada? Is additional cooling required for the mudroom?	No additional cooling is required for the mud room (aft cargo space).
222	Part B Section SOW item 19.2, Integrated Control Systems REV1 Section 2.2.1.1 makes a reference to a document 19.2-6. Please confirm if this document is accessible.	This document is not available and reference to it is to be deleted. The Contractor must develop the final point list for the new CCAMS based on all other requirements defined in SOW item 19.2. Refer to Item 6 of this amendment for the SOW edits.

223	Reference RFP SOW Part B SOW item 18 - For systems that are GFE and the solution has been fully designed by CCG, the bidder assumes that the following SOW requirement is solely CCG responsibility: "All design, material and Work must meet ABS and Transport Canada Marine Safety and Security (TCMSS) requirements for approval and purpose on the vessel." The systems affected are: - 18.2 Automatic Identification System Replacement - 18.4 Distance Measuring System Equipment Replacement - 18.6 VHF Direction Finder Replacement - 18.7 Closed Circuit Television System Can Canada confirm that this assumption is correct?	The Contractor must retain total system responsibility for all SOW items. The Contractor must submit the CCG provided design documents and hardware details to ABS for approval. If ABS approval requires any change to the design package and hardware provided by CCG, any such change will be addressed via the PWGSC 1379 process.
224	Reference RFP SOW Part B SOW item 18 - For systems where the new equipment to be installed has been defined by the CCG and the solution has been fully designed by CCG, the bidder assumes that the following SOW requirement is solely CCG responsibility: "All design, material and Work must meet ABS and Transport Canada Marine Safety and Security (TCMSS) requirements for approval and purpose on the vessel." The systems affected are: - 18.3 Autopilot Upgrade - 18.9 Gyro Compass Upgrade Can Canada confirm that this assumption is correct?	The Contractor must retain total system responsibility for all SOW items. The Contractor must submit CCG provided design documents and hardware specification details to ABS for approval. If ABS approval requires any change to the design and hardware definition package provided by CCG, any such change will be addressed via the PWGSC 1379 process.
225	Reference RFP SOW Part B SOW item 18.2 - The scope of 18.2 Automatic Identification System Replacement is to replace the R4 AIS system and upgrade to the new Canada-supplied R5 AIS system. However, the SOW scope is only for the replacement of 3 antennas and their associated cables. There is no mention of supplying/installing an R5 AIS CDU (Control Display Unit). Can Canada confirm if the R5 AIS CDU and associated components are already installed (and if so provide details) or will this be done post-delivery.	The installation of the noted CDU will be completed by CCG.

226	The SOW does not mention any Top side EMC analysis. Can Canada confirm that no analysis is required even though new antennas are being installed	An EMC analysis is not required.
227	Can Canada confirm the existing cable routes (trays, secondary trays) meet current class ABS requirements?	The Contractor must bid on the assumption that the existing cable trays and secondary trays meet the ABS requirements.
228	For legacy equipment that the bidder will be interfacing to, can Canada confirm/provide existing manuals if available (E.G. SAT radio)? Is access to the OEM available as well?	Manuals for retained, existing equipment can be made available (Bidders are requested to specify for which equipment). The bidders may contact the equipment OEM's, at their discretion.
229	Can Canada confirm which ABS MVR (rule set) is applicable?	Rules applicable to the SOW are defined in SOW Part A GR 01 (General Requirements 01), Section 5. Refer to section 5.10 for the definition of ABS rule applicability.
230	Reference RFP SOW Part B SOW item 18.2, requirement 3.3.1.11 – Statement appears to be incomplete 3.3.1.11. “The Contractor must re-use existing cable penetrations and repack with classification society approved products. Any cable penetration that is determined to be not reusable by the contractor must be approved for replacement by either the TA...” …	Delete "either". Refer to Item 7 of this amendment for the SOW edits.
231	Reference RFP SOW Part B SOW item 18, 18.3 Autopilot Upgrade - 2.4.1.1. The Contractor must source the new Navipilot 4000 Heading Control System. The requirement does not indicate whether a basic or track Control unit is to be procured. Can Canada confirm?	The Contractor is to procure the Basic Navipilot 4000 System in accordance with component part numbers offered in the SOW. If these part numbers are no longer applicable, direct replacement parts, as offered by the OEM, must be procured.
232	It appears that we are missing the Drawing the following Drawing/ Document for SOW Part B item 11.25 – Logistics Office Renovation: -11.25-3 – New Log Office Concept Development Guidance	Document 11.25-3 was merged with document 11.25-2 and is available in TDP update 21.12.20, Section 11, Documents, Refer to document 11.25-2_3 Logistics Office Design Guidance.
233	11.27 Passageway Decks (SOW Part B), 3.4.1.1 The new flooring system must be Dexotex Terrazzo M Fine topcoat over Dexotex A-70 underlayment. Question: Is this application to be installed in all areas on all 4 decks? Main Deck, Forecastle Deck, A-Deck and B-Deck?	Yes, the specified flooring system is to be installed in all areas noted.

234	11.29 Galley Renovation (SOW Part B), 3.7.1.6 Finished deck covering must be Dexotex seamless epoxy, color coat system over Dexotex VLW IMO underlayment. New floor covering system must include integral bas coves around complete perimeter of the area being dealt with to a height of 3"" above finished floor height. 3.8.1.7 The Contractor must install a tile base trim over the bulkhead lining system around the full perimeter of the new flooring system. The tile base trim must match the flooring tiles. Question: The tile base trim must match the flooring tiles? Is this a typo?	Yes, this is an error. Delete section 3.8.1.7. Refer to Item 8 A) and 8B) of this amendment for the SOW edits.
235	11.29 Galley Renovation (SOW Part B), 3.8.1.5 the contractor must install floor covering system as referenced in section 3.6.1.5. Question: I do not see section 3.6.1.5?	Delete 3.6.1.5 and replace with 3.7.1.6. Refer to Item 8 C) of this amendment for the SOW edits.
236	SOW item 17.12 TOWING PIN INSTALLATION (SOW Part B): Section 1.1.1.1 and 1.1.1.2 A) makes reference to a feasibility that will be provided by CCG. When will this study be provided?	This assessment is available in TDP Update 21.12.20, Section 17, Documents. Refer to 17.12-1 Tow Pin Assessment CCGS Terry Fox_2021-05-12.
237	SOW item 17.12 TOWING PIN INSTALLATION (SOW Part B): The sentence "Note: Items 3, 4 and 5 will be done via PWGSC 1379 action" in Section 1.1.1.2 are assumed to mean "c, d and e". Can you please confirm that this assumption is correct?	This note has been deleted. Refer to the response in question ref 90.
238	SOW item 17.12 TOWING PIN INSTALLATION (SOW Part B): Section 2.5.1.2 states that sections 3.5.1 and 3.6.1 of the SOW are to be completed regardless of proposal acceptance. The specification does not contain a section 3.5.1 or 3.6.1. Does the CGG mean 3.1.5 and 3.1.6?	Correct. Delete 3.5.1 and 3.6.1 and replace with 3.1.5 and 3.1.6 respectively. Refer to Item 9 A) of this amendment for the SOW edits.

239	SOW item 17.12 TOWING PIN INSTALLATION (SOW Part B): Section 3.1.2 states that “Sections 3.2.1.1 through to 3.4.1.6 are the requirements to be taken into account when developing the Contractor’s proposal”. This specification does not contain sections 312.1.1. through to 3.4.1.6. Please clarify the sections to be considered.	Delete 3.2.1.1 through 3.4.1.6 and replace with 3.1.2.1 through 3.1.4.7 respectively. Refer, also, to the response for question ref 241. Refer to Item 9 B) of this amendment for the SOW edits.
240	SOW item 17.12 TOWING PIN INSTALLATION (SOW Part B): Section 3.1.3.1 states “, as part of their bid the Contractor is to provide to the CG TA the costs to supply, install and connect either the “Shark Jaw” or the “Fork” system”. Are these costs expected to be provided with the bid or with the future proposal specified in section 1.1.1.2 b)?	These costs are to be included in the bid price.
241	SOW item 17.12 TOWING PIN INSTALLATION (SOW Part B): With respect to section 2.5.1.3, what work does the CCG expect the contractor to estimate for this bid?	The Contractor is to bid per the SOW defined requirements, based on the assumption that the specified hardware installation will be completed in accordance with the referenced Tow Pin Assessment CCGS Terry Fox_2021-05-12. The Contractor must review and validate this reference document and develop the required installation plan based on this document. Should any aspect of the referenced document be determined to be not feasible during the Contractor"s review and validation, then any related change in Work scope will be addressed using the PWGSC 1379 process.
242	SOW item 17.12 TOWING PIN INSTALLATION (SOW Part B): The PDS (pricing data sheet) requires the bidder to provide “All material, equipment and labour to complete the requirement of this Sub-Section.” It is not clear how this information can possibly be provided when the substantive effort of this specification is to do the review a study and create a proposal.	Refer to the response in question ref 241.
AMENDMENT 023 - ref 243 to 262		

243	The current ANNEX Q - ADDITIONAL INFORMATION ON SELECTED EQUIPMENT requests that we provide 'Start and aux air compressors replacement' information. This is a section currently not included in the SOW. Please advise what information the CCG is enquiring about.	The SOW reference (15.11) is to be changed to 12.1 (sections 3.5.5 and 3.5.7), and 15.12 (section 3). Refer to item 2 of this amendment for the edits to Annex Q.
244	SOW Part B, SOW item 16.18 - The steering gear compartment HVAC service provider is required to design the minisplit system but the two major components (condenser and evaporator) are specified in the SOW. Please confirm that Canada will take responsibility for the correct sizing of this system.	Canada will accept responsibility for design of the system.
245	SOW Part A (GR 01 - points 5.2.1.1, 5.3.1) gives inconsistent guidance as to the regulations that will apply for machinery and systems. Part A, GR 01, 5.2.1.1 says "The vessel must meet the Act and Regulations in accordance with the Canada Shipping Act 2001 and comply with the additional Regulations, Standards, Guidelines and Codes referenced therein. The vessel must also comply with the Acts, Regulations, Standards, Rules, Codes and Guidelines referenced in SOW Part A GR 1 sections 5.2 to 5.15." Section 5.3 includes Marine Machinery Regulations (SOR/90-264), but notes "These regulations do not apply as per MTRB M18057 referenced in SOW Part A GR 01 section 5.3 a) above." This can be read as a blanket cancellation of all Marine Machinery Regulations requirements. Part A, GR 01, 5.3.1 similarly says MTRB M18057 allows the use of "the draft Vessel Construction and Equipment Regulations (VCER) and associated amended Technical Publications (TP's) as a regulatory regime instead of the current Marine Machinery Regulations for the machinery and systems modifications contained within this Contract."	MTRB 18057 to adopt the draft Vessel Construction and Equipment Regulations and TP's is technically limited to the machinery listed in schedule c). The Marine Machinery Regulations (SOR/90-264) apply for all other machinery being refurbished, replaced or modified.

	However, MTRB M18057, as provided in Appendix C, waives the Marine Machinery Regulations specifically for the equipment listed in condition (c), items I to vi that is being replaced as part of the life extension. It does not appear to authorize a wholesale replacement of the Marine Machinery Regulations with the Draft Vessel Construction and Equipment Regulations, or even the use of VCER for all machinery and systems modifications in the Contract. For example, the steering gear in SOW Part B, 12.6 appears not to be covered. For machinery that is being refurbished but not replaced, or for replacement machinery not identified in MTRB M18057 (such as the steering gear in SOW Part B, 12.6), does Canada concur that the Marine Machinery Regulations still apply?	

246	"SOW Part A, GR 01, 5.10.1.1 says ""All modifications to the vessel and systems, including component supply, plan approval and onsite survey must be completed in accordance with ABS Rules and Codes,"" such as the 2021 Marine Vessel Rules. However, the vessel is not currently maintained in Class and was built to LR Class in 1983 As the vessel is not in class, it is unclear whether all aspects of the design and condition are to ABS's satisfaction. This appears to create a risk to the Contractor, in that ABS might not approve a system modification designed to the current Rules if the remainder of the system (i.e., existing elements not identified in the SOW) does not meet Rule requirements. (1) Has ABS evaluated the compliance of the vessel with ABS Rule requirement in its current state, and is a record of this evaluation available to bidder if so? (2) Would Canada consider modifying the GR to permit the PWGSC 1379 processs to be applied in the event that modifications beyond those identified in Part B are deemed necessary by ABS in order to meet ABS Rule requirements?"	No, the vessel has not been evaluated against ABS Rules. Any modification to retained systems and equipment for which modification is not directly specified in the SOW, as required to satisfy ABS requirements,will be addressed via the PWGSC 1379 process.

247	SOW item 12.1 - Regarding item 3.4.3.7, in answer 188 Canada replied that the requirement it to remain unchanged. We would like to raise this once again, as the risks in our opinion are significant. •A PGG governor is intended for generator sets, it has a speed setting motor for speed control. The speed setting is rather slow normally at a narrow speed range around rated frequency for exact and small speed corrections needed for load control (utilizing droop), synchronizing etc. It is not intended for main engines. The version with back up which is intended for main engines is the PGA (not asked for in SOW). Speed setting input is a pneumatic pressure giving fast speed changes over a large speed setting area, however this is never in use when using it as a backup. Instead it is used a manual knob which is backup for the pneumatic system, the knob is then set at maximum position during normal operation. The knob is however quickly turned to what corresponds to clutching in speed if required. Due to the above, when switching to backup during running, the failed engine will strive to increase speed and start dragging the healthy engine, which will result in damaging equipment.	Contractors must bid on the supply of the main engine governing system, as per the SOW. Should a bidder have concerns with the SOW governing system, as specified, the Bidder may provide detail of an alternate arrangement with a justification for any alternate arrangement. If an alternate arrangement is suggested, the bidder must provide the price difference between the specified governing system and their alternate proposal. Refer to item 3 of this amendment for edits to the SOW .

	•A modern electronically controlled engine will not run without its control system operational. Therefore, the control system has a redundant power source in case of a black out. The control system sends a speed control signal to the hydraulic actuator to control engine speed. This control signal is of low power (mA) and fed by a redundant power source in case of a black out. Since an engine will not run without its control system the mechanical ball head back up governor isn't really providing any redundancy as the redundant power source for the control system will still allow the engine to operate. In case the redundant power source for the control system isn't working the engine won't run either way. Mechanically controlling the engine while the control system is operational should be considered a safety issue where there is the risk for breakdown of equipment, loss of engine/shaft power, and possible personnel injury. •Conclusion: adding a mechanical back up is decreasing safety instead of adding redundancy. Adding a system for running healthy engine in parallel with faulty engine as well as parallel running of two faulty engines is quite complex when including how such switchover between different modes would happen automatically, and only decrease the safety of the system. Considering the above if Canada insists on a mechanical ball head back up governor, will Canada absorb the possible risk of safety and reliability issues and hold bidders harmless for any claims or damages resulting this governor selection?	
248	SOW part B, SOW Item 16.18, point 2.4.1.2: SOW Part B requires a class approved HVAC system for the steering gear compartment. What does this mean? Class societies do not normally approve HVAC systems	All work included in the SOW must be acceptable to Class. If Class waives the requirement for formal approval of any specific aspect of the overall work scope, this must be documented by the Contractor and conveyed to the TA.
249	Can Canada provide an updated schedule for when the vessel will be available post contract award for verification of the entire TDP package.	It is anticipated that the vessel will be available in St. John's NL. during the months of November and December 2022. Specific dates and arrangements for the Contractor access to the vessel will be confirmed after contract award.

250	SOW part B, SOW Item 11.26: The drawing 20-109-100 Rev 2, sheets 1 through 4. (developed by Poseidon Marine Consultants Ltd (PMC)) has indicated shelvings in these stores. However, SOW B has not specified these shelving units. Please advise if CCG will provide the shelving units.	The Contractor does not need to supply or install shelving as part of this requirement.
251	SOW part B, SOW Item 11.26: Please confirm if the structural assessment has been carried out for conversion of this void space to stores or not.	A structural assessment has been completed.
252	SOW part B, SOW Item 11.26: Please confirm if class approval has been obtained for this modification. Drawing no. 20-109-100 Rev 2, Sheets 1 through 4 (developed by Poseidon Marine Consultants Ltd (PMC))	Class approval has not been obtained for this modification. The Contractor must bid as per the SOW. The Contractor is responsible for obtaining Class approval for all requirements of the overall SOW. Should Class approval require changes to the detail of 11.26, these changes will be addressed via the PWGSC 1379 process.
253	SOW part B, SOW Item 11.26: The drawing 20-109-100 Rev 2, Sheets 1 through 4. (developed by Poseidon Marine Consultants Ltd (PMC)) shows a fiberglass grating which has not been addressed in SOW part B. Please confirm if CCG will provide this fiberglass grating.	The Contractor must provide this fibreglass grating.
254	Ref Annex A SOW Part B SOW item 18.1, para 3.3.7.6 – Requirement heading states: “Install 32 speakers …”; however, the sum of the subsections speakers (a)-(d) equals 33. Please confirm requirement.	Bid on 33 speakers. Refer to item 4 A) of this amendment for edits to the SOW.
255	Ref Annex A SOW Part B SOW item 18.1, para 3.3.8.3 – Requirement heading states: “Install (1) Master Station, and 11 IP telephones …”; however, the sum of the components in the subsections (a)-(b) equals 13. Please confirm requirement.	Bid on 13 telephones. Refer to item 4 B) of this amendment for edits to the SOW.
256	Ref Annex A SOW Part B SOW item 18.1, para 3.3.8.7 – Requirement heading states: “… two (2) DECT telephones …”; however the subsection (c) indicates 3 DECT telephones. Please confirm requirement.	Bid on 3 DECT Phones. Refer to item 4 C) of this amendment for edits to the SOW.

257	Ref Annex A SOW Part B SOW item 18.1, para 5.4.1.2 – Requirement states " The Contractor must provide two onsite training sessions, each of eight (8) hours duration. One session must be offered to each of two vessel crews and to the CCG Technicians responsible for the maintenance on the system". Please confirm this means: 1 session for Crew 1 1 session for Crew 2 1 session for CCG technicians	Two sessions in total CCG technicians will attend courses offered to the two crews.
258	Ref Annex A SOW Part B SOW item 18.1, para 5.4.1.2 – Please confirm “On Site” means Contractor’s facility	"On site" means the Contractor's facility.
259	Ref Annex A SOW Part B SOW item 18.1, para 5.4.1.2 – Please confirm that all sessions will be held serially (i.e. all session in a three day work period)	No. One session before crew change, and one session after crew change. Two sessions are required.
260	Ref Annex A SOW Part A GR 06 para 3.1.1.6 – Please confirm that all "manuals", including those from the OEMs are required in French.	Yes, all manuals from the OEMs are required in French.
261	Ref Annex A SOW Part A GR 06 para 3.1.1.6 – Please confirm that all "data sheets", are required in French.	Yes, all datasheets are required in French
262	Ref Annex A SOW Part B SOW item 18.1, para 3.3.2.45 – Please confirm that the IP requirement for sub para (a) and (b) should be upgraded to IP56 based on the requirement in Annex A SOW Part A GR04 para 1.1.1.3	The IP requirement must be upgraded to IP56. Refer to item 4 D) of this amendment for edits to the SOW.
AMENDMENT 024 - ref 263 to 276		

263	SOW Part A, GR 01, 5.12.2.1 and 5.13.1.1 lists numerous industry standards described as "applicable as referenced in the SOW item or otherwise in the Regulations or Rules listed in section SOW Part A GR 1 sections 5.1 to 5.10." However, many of these ISO, ASME, ASTM and other standards are not called out anywhere in SOW Part B, nor have we found references to them in the published Regulations and Rules listed in SOW Part A, GR 01, 5.3 to 5.10. Is the list accurate? Does CCG expect the contractor to apply all the standards listed in SOW Part A, GR 01, 5.12.2.1 and 5.13.1.1 to all relevant work on the project, even if they are not referenced?	GR 01, 5.12.2.1 and 5.13.1.1 have been amended; refer to item 5 of this amendment. Standards remaining in these sections are to be applied to the various SOW requirements, as applicable.
264	SOW part B, item 11.9 : Is a weather tight & heated shelter required to complete the U/W coating?	The Contractor must apply underwater coatings in accordance with the environmental conditions stipulated by the coating manufacturer. Refer to GR 02 section 9.2.

265

SOW part B, items 19.5 :
These documents/drawings seem missing:

Wartsila Dwg 6041C1001	Engine Control Room Console Layout
Wartsila Dwg 6043C1001	Stbd Wing Panel Layout
Wartsila Dwg 6042C1003	Fwd Wheelhouse Panel Lever Layout
Wartsila Dwg 6042C1001	Fwd Wheelhouse Panel Buttons Engine 1 & 2 Layout

Given the number of documents, we are looking for the documents by their identification # referenced in the specification.
The references of wartsila 6441C1001 have been integrated into the DDT without having reference # (from spec) only names… and, in addition, they seem to have been put in 19.1-2, instead of 19.2 as mentioned in the index.
Are these photos (below) that we should take as a reference?

Yes, the photos offered under specification 19.1 are to be taken as the offered reference to these panels, drawings are not available.

266	SOW part B, item 19.7: These documents/drawings seem missing (i.e. left side column submitted in question on the table below):	Refer to the document request List and the TDP (a snippet showing the right-hand side column, from the Request Log provided in the TDP shown below; note that MCP 100-40 is on page 118/406 of document JQ201305 Preliminary Manual.pdf):

Jastram Drawings (below)	TDP Update 21.12.20, Section 12, Documents - Drawings included in document JQ201305 Preliminary Manual at page numbers noted below.
B-721229 MCP 100-20 Enclosure O.A.D.	MCP 100-20 not applicable to project. MCP 100-40 applies, refer to drawing #C721682, pg 118
B-721243 Rudder Angle Indicator (RAI 580) O.A.D.	Pg 303/406
B-721311 AP 600 Alarm Panel Overall Dimensions	Pg 337,396/406
B-721312 CP 600 Control Panel Overall Dimensions	Pg 124/406
B-721319 CP 375 Control Panel Overall Dimensions	CP 375 not applicable to project, reference to be removed from SOW.
B-721354 NFU/FFU Lever Overall Dimensions	FFU Lever, refer to drawing B-721495, pg 122 NFU Jog Lever, refer to drawing A-721018, pg 123
B-721493 RAI (ROI) X80 Dual Stage Dimmer Assy. Overall Dimensions	Pg 126/406
B-721503 Helm Seat Lever Controller (LC 350H) overall Dimensions	Pg 279/406, B-721495, Pg 122, 278/406
B-721516 Unit Change-over Panel Overall Dimensions	Pg 125/406
C-721220 DSC Enclosure Overall Dimensions	Pg 117/406
C-721580 3-Face Rudder Angle Indicator (RAI 3300) Overall Dimensions	Drawing C-721580 does not apply. Refer to drawing C-721204, Pg 127/406
D-701265 Electric Wheel w/Mech ROI (Sht 3 of 3)	Pg 121/406

267	RFP Annex P - Mandatory Criteria 17c Senior Marine Engineer: CANADA has requested that a Senior Marine Engineer who possesses a TC certificate of competency as a First Class Marine Engineer be provided within the Engineering Firm Mandatory criteria. The requirement for this position is not entirely clear as the engineering firm will primarily be performing engineering and drafting work packages; as such it is recommended that this position be removed. Alternately, if the position is to be retained, can CANADA confirm that the requirement for a TC certificate of competency does not include a requirement for that candidate to have be currently validated to sail? Additionally will Canada accept similar certifications from other authorities, including the Canadian Navy's QL6B certification?	The position is to be retained. The individual's certification must be issued by Transport Canada, but it does not require to be currently validated to sail.
268	RFP Annex P - Mandatory Criteria 17a, b, c, d, e: The subject criteria "Hold a provincial, state, or federal (national) licence to practice as a professional engineer". Given that CANADA has previously confirmed in Q&A#1 that bidders may employ specialists in other areas of the world can CANADA please confirm specifically that a UK Chartered Engineer designation satisfies the intent of this requirement?	Although not required to be certified in Canada, Engineers used must have the education and experience required to be eligible for certification as a professional engineer in a Canadian Province.
269	SOW item 12.9 - 'Co XYZ' has received a request from a shipyard to quote on the replacement propeller blades for the Terry Fox icebreaker propellers. The drawings provided are old and illegible... Given the need for extreme precision, no propeller manufacturer would be able to submit a quote based on the poor quality of these drawings.	The propeller blades are to be sourced from Wartsila. These are identified on the No Substitute List (Annex U). Refer to section 3.2.1.1 of SOW item 12.9.

270	SOW item 12.1, 3.5.8 - We would like to be able to quote on this heat exchanger replacement to all the bidding contractors on this VLE, however I need more information about the existing equipment and the desired performance requirements. I have reviewed the latest amendment #022 and cannot find the performance specifics that I am looking for. The existing heat exchangers are indicated as; SPX Flow Technology, APV Type: J092, Plate Heat Exchanger SN: 629164 Capacity: 6406.0 kW Heat Transfer Surface: 157.8 m² Differential test Pressure: 16 bar Volume side 1/side 2: 262.9/262.9 Liters Working Temp: 110/0°C Could you please provide additional information on the following; •FLOW RATE, HOT SIDE & COLD SIDE (m³/h) •FLOW RATE, COLD SIDE (m³/h) •HOT SIDE - WORKING INLET TEMPERATURE •HOT SIDE - WORKING OUTLET TEMPERATURE	The new heat exchanger design criteria is to be confirmed by the Contractor. Cooling system modifications are to be engineered and matched to the new machinery installation being provided, through the SSSI. The intent is not to simply replace the existing heat exchangers; the new exchangers must be designed to accommodate propulsion system updates.
271	Question Ref 70 - The pricing data sheets (annex H appendix 1) include a single line item for all project management activities and appear to have nowhere to quote any of the engineering work that will be required to accomplish the project. As these are likely to be significnatly more costly than most of the other line items, will Canada explain how they are to be presented to ensure that Contractors are quoting realistically for these essential elements of the work?	Original response to question Ref 70 - Engineering costs should be incorporated into the individual SOW items, as applicable for each SOW Work item. Amended response: After more consideration, engineering costs have been added to the Pricing Data Sheet (PDS), Rev 1 (item 4 of this amendment).

272	Please advise if the A-70 underlayment mentioned in SOW item 11.25 (3.5.1.5), and SOW item 11.27 (3.4.1.1) shall be IMO certified or not? 11.25 - LOGISTICS OFFICE RENOVATION - 3.5.1.5. - The new flooring system must be Dexotex Terrazo M Fine Topcoat over Dexotex A-70 underlayment. 11.27 - PASSAGEWAY DECKS - 3.4.1.1. - The new flooring system must be Dexotex Terrazo M Fine Topcoat over Dexotex A-70 underlayment.	All flooring materials must be acceptable to Class.

273	Drawings & documentation that has been requested by our suppliers to assist in quoting section 18: 1.Topside (above bridge deck) top view layout drawing – required to establish the location for the VHF-DF antenna 2.BNWAS – (document and drawing) – required to interface to the Autopilot. 3.Updated Navigation lights drawing – As drawn 1-07-85-10 and 33.00.01 are not compliant with Collision Regulations Canada c. 1416 Rule 21 (g) and (h). 4.Magnetic Compass – (document and drawings) – if a fluxgate is provided it can be interfaced to the Autopilot. **Reference bullet point 2**: What BNWAS "document" is requested? •Pertinent regulation: Resolution MSC.128(75) (adopted on 20 May 2002) Performance Standards for a Bridge Navigational Watch Alarm System (BNWAS). 4.1.3.3 To initiate the reset function, an input representing a single operator action by the OOW is required. This input may be generated by reset devices forming an integral part of the BNWAS or by external inputs from other equipment capable of registering physical activity and mental alertness of the OOW. •RFP_CANADA: The TDP package includes drawings for the Autopilot but not the BNWAS. •Is there an interface drawing that shows the connections between the Autopilot and the BNWAS or alternatively a schematic diagram for the BNWAS, together with instruction/ service / technical manuals for BNWAS.	1. The antennae layout (1) is offered in TDP Update 21.12.20 (Bridge Top Antenna Layout offered as drwg MM692-001-AL with 18.2). 2. BNWAS Block Diagram and Wiring Diagram will be made available in TDP Update 22.03.25. Autopilot interface with BNWAS is indicated on these drawings. 3. The ship is fitted with a blue flashing light as described. Updated navigation light arrangement drawings are not presently available. 4. The Magnetic Compass information is found on drawing # MM692-035-WD (top left) and drawing MM692-034-BD. Both drawings are available in TDP Update 21.12.20, Section 18, Drawings. There is no other drawing available specific to the Magnetic Compass System. A fluxgate is not provided now and is not requested.

	Reference bullet point 3: Can bidder confirm what specification item this is related to? Part A GR Section – General Requirements Rev 1 – 5.3 (j) refers. •Pertinent regulation: Collision Regulations C.R.C., c. 1416; Rule 21 Blue flashing light means a blue all-round light flashing at regular intervals at a frequency of 50 to 70 flashes per minute. Pertinent regulation: Collision Regulations C.R.C., c. 1416; Rule 45 (a) Any government vessel or any vessel that is owned or operated by a harbour, river, county or municipal police force may exhibit as an identification signal a blue flashing light when the vessel (i)is providing assistance in any waters to any vessel or other craft, aircraft or person that is threatened by grave and imminent danger and requires immediate assistance, or (ii)is engaged in law enforcement duties in Canadian waters. •RFP_CANADA: The TDP package drawing 33.00.01 dated 16 March 1983 does not include the blue flashing light. •Please advise if an updated drawing of the navigation lights is available or if the blue flashing light as stated in Rule 21 and Rule 45 is waived.	
274	RFP Annex P - Mandatory Criteria 17d Senior Electrical Engineer and M17e Senior Controls System Engineer: In industry, the two subject positions are often performed by the same group of specialists within the electrical engineering department. Rather than providing two nearly identical individuals it is recommended that the two requirements be consolidated into a single Senior Electrical Engineer with oversight of all electrical packages.	The two positions are to be staffed by two individuals as specified. The Contractor must note that both of these positions need not be staffed directly by the Contractor but that one, or both, may be staffed by other parties engaged in a joint venture with, or as a sub-contractor to the prime Contractor.

275	It appears that the Drawing 07-10-01 07 Machinery _ OT Flats from Section 11, is not complete. It appears that only half of the Drawing has been scanned. Would you be able ask the CCG to provide the full document?	The complete drawing will be provided in TDP Update 22.03.25
276	SOW Part B, SOW item 12.1, 3.6.1.7 states: “The Contractor must complete and provide a global Finite Element Analysis of the proposed structural and seat modifications required to accommodate the new PM installation.” Global analysis typically involves evaluation of the entire vessel structure under global loads (for example, wave induced loads) and is not necessary for propulsion machinery replacement task; would a local analysis of the seats and supporting structure be sufficient?	A local analysis of the seats and supporting structure will be sufficient provided this also satisfies any specific requirement of Class.
AMENDMENT 025 - ref 277 to 306		

277	As per the ACAN https://buyandsell.gc.ca/procurement-data/tender-notice/PW-MD-039-28102, companies who have already participated in the specifications development are precluded from bidding on this stage of the VLE program. Can such company participate in the bid indirectly, as a subcontractor to a bidder?	The application of the Conflict of interest clause extends to subcontractors that were involved in the preparation of the bid solicitation or had access to information related to the bid solicitation that was not available to other bidders. Canada has an obligation to protect the integrity of the procurement process by ensuring that no bidder benefits from an unfair advantage over the other bidders. This may disqualify bidders for reasons related to conflict of interest. Canada is committed to maintaining the highest standards of integrity in regards to this bid solicitation. Canada also recognizes that given the structure of the industry it is sometimes necessary for the CCG to acquire the services of third party experts, thereby establishing relationships with these third parties for the development of technical requirements used in the Statement of Work (SOW). In response to your question, Canada has completed a thorough analysis of the work carried out to develop the SOW and the work conducted under the Standing Offer (SO) awarded pursuant to the above mentioned ACAN to determine if, given the scope of work and the accessible information, a conflict of interest offering an unfair advantage, existed and would affect the integrity of this procurement. It was determined that the work performed did not provide Canal Marine and Industrial Inc. with an unfair advantage. The SO was only used for support on the development of specifications related to work under the scope of the single system integrator in the VLE Statement of Work (SOW items 13.1, 14.1, 14.2, 14.3). To carry out the work Canal had access to supporting drawings that were included in the TDP for all bidders. The SO was cancelled resulting from the evolution of the pandemic situation in Newfoundland and with the availability of internal CCG resources. A conflict of interest or unfair advantage would only have arisen if the full scope of the standing offer had been realized. Refer to item 3 of this amendment, for related information.

278	In February 2021 PSPC directed a design contract to Canal Marine and Industrial Inc. (Ref: https://buyandsell.gc.ca/procurement-data/tender-notice/PW-MD-039-28102) related to work on the CCGS Terry Fox VLE. In the contract award notice PSPC stated that: To ensure a fair competition for the VLE work, Coast Guard requires the services of a firm who would not be bidding on any of the requirements during the implementation phase of the VLE. Can PSPC confirm that Bidders cannot use the services of Canal Marine and Industrial Inc. in their proposal for this contract.	Refer to the response for question ref 277.
279	I would like to request the following drawings for the Terry Fox regarding Spec Item 11.15 Void Tank: 07-11-13 07-11-15 07-11-16 07-12-01/02 CCG has provided 07-12-01_02 FR 6 Aft Unit Transom-FRC P_S, however it is a partial scan, please provide the full drawings 07-14-04 07-10-01/07 Previously requested in trailing email, included here for convenience These drawings are listed in 27-00-01 WT Manholes _ Hatches Standards _ Locations as showing the locations of manholes.	07-11-13 is available in the TDP; Fox VLE Spec Drawings, Section 11. 07-11-15 and 07-11-16 are part of drawing 07-11-14/15/16, which will be made available in TDP Update 22.04.01. 07-12-01/02 is only available in seven separate Frames (from microfiche collection), which will be made available in TDP Update 22.04.01. 07-14-04 is part of 07-14-03/04, which will be made available in TDP Update 22.04.01. Refer to item 2 of this amendment.
280	Ref Annex A SOW Part B Section 18.1 – It would be more cost effective to remove the existing GA system and replace it with PAGA system that provides this functionality. The current system uses a manual “Morse code” approach to generate the MOB alarm and General Emergency Alarm (Abandon ship alarm). I.E. 7 short, 1 long for Abandon Ship, 3 long signals for MOB and continuous ringing for the Fire Alarms. Would CCG consider replacing the existing GSA system?	The existing GA system will not be removed and will be interfaced to the upgraded PAGA system.

281	Ref Annex A SOW Part B Section 18.1 – Are the IP 68 submergence proof speakers in the scope for replacement of the ICS?	The Parts List is provided with the SOW.
282	Ref Annex A SOW Part B Section 18.1 – Does the existing talk-back system include portable arrangements for (IP 68) submergence proof microphone speaker combinations (for mooring stations)?	The Parts List is provided with the SOW.
283	Ref Annex A SOW Part B Section 18.1 – For non-ICS Equipment in the existing SRE Rack located in the Electronics room: is this in scope to fit into the new ICS Racks or will these be removed by CCG before the refit?	The Contractor is to remove equipment, as indicated within the SOW.
284	General - Ref Annex A SOW Part B Section 18 – Is the Bridge to operate a periodic one man watch?	No, the Bridge will not operate a periodic one man watch.
285	Ref Annex A SOW Part B Section 18.2 – Does CCG use pilotage services – possibly during overseas calls? This feeds into the Pilot Plug requirement as per SN1-Circ.227. The Saab R4, currently, interfaces to the radars and ECDIS as per AIS Class A capability requirements.	For bidding purposes, assume that there is no additional requirement to address this need, over and above the scope defined by the SOW.
286	Ref Annex A SOW Part B Section 18.2 – The AIS stores one external reference point for the external GNSS antenna position and one internal reference point if an internal GNSS is to be used as fallback for position reporting. The locations of these reference points have to be set during installation. Could CCG please provide these values.	These values will be provided during the commissioning of the systems.
287	Ref Annex A SOW Part B Section 18.2 – Is the long range function of the AIS required and is it currently interfaced to the GMDSS system? The antenna layout indicates an LRIT system.	The LRIT system has been removed, as it was only a test system. The Antenna layout drawing indicates the existing antennae, but will be updated by CCG. Once updated, CCG will provide a new antenna layout.
288	General – With the understanding that CCGS Terry Fox is an enclosed bridge is there a requirement for a signal sound reception system?	Refer to the Parts List within the SOW.

289	11.29 Galley Renovation 3.5.1.5 - The deck covering subfloor material is by Dexotex; approximately 2” thick. Can the CCG confirm that this material is Dexotex A-70 VLW (as indicated in section 3.7.1.6) and not a Fire Rated Underlayment A-60 Insuldex at 2” ?	It is not a fire rated underlay. Refer to Deck Covering Plan, drawing #35-00-01, and Insulation Plan, Drawing #44-00-01.
290	11.27 Passageway Decks Can the CCG confirm the thickness required of the A-70 underlayment in the following areas? 3.1.1.2 a) Main deck b) Forecastle, A and B Decks	A thickness of 10 mm is required, per Deck Covering Plan, drawing #35-00-01.
291	General - Ref Annex A SOW Part B Section 18 – Is there a cable tagging scheme available?	Within each specification SOW item there is a statement concerning cable tagging (labelling). If CCG has provided the documentation, then follow the provided cable tagging (labelling) scheme within the documentation. If a manufacturer is developing and providing the documentation, then follow the manufacturer’s cable tagging (labelling) scheme. If neither reference has been provided, the cable tagging scheme will be confirmed post Contract award.
292	General - Ref Annex A SOW Part B Section 18 – Is there an equipment tagging scheme available?	Refer to the response for question ref 291.
293	17.1 FORTY (40) TONNE DECK CRANE REPLACEMENT 3.3.2.11. The crane must be able to achieve the stated lifting capacity when the vessel is heeled to either port or starboard, and trimmed either forward or aft. The maximum static angle of trim or heel must be within the range of 4 to 8 degrees. The Contractor must confirm the maximum static angle of heel and trim at which the defined lifting capacity can be achieved. The statement above applies to the Forward Stores Crane 17.6. Can you please provide the list and trim conditions for the 17.1 FORTY (40) TONNE DECK CRANE REPLACEMENT?	The 40T crane must operate at the rated capacity, at eight degrees of heel, port or starboard, and 3 degrees of trim, forward or aft. Refer to item 6 of this amendment for edits to the SOW.

294	Annex “D” - D5. Environmental Impairment Liability Insurance; In its current form Annex D5, in relation to providing coverage for Asbestos Abatement, puts the responsibility on the Contractor for unforeseen hazardous materials. The onus should rest with Canada to identify any Hazardous Material in the work packages (SOW items). Any Hazardous materials that are not previously identified should be able to be charged by the Shipyard as an extra on a 1379. We are informed of a current contract that was awarded recently which contained the following provision to the Hazardous material clause: “Canada agrees that any Hazardous materials work that was not previously identified will be charged by the contractor as an extra on a 1379. The completion date for the Work takes into account the fact that the removal, handling, storage, disposal and/or working in the vicinity of hazardous materials such as asbestos, lead, PCBs, silica and other hazardous materials or toxic substances may be affected by the need to comply with applicable federal, provincial and municipal laws or regulations and that any hazardous materials work not previously identified will qualify as an excusable delay if so noted on the 1379” We request that Canada amend the current clause by adding the above addendum in order to reduce the liability for unidentified Hazardous Materials from the Contractor.	Annex D5, Environmental Impairment Liability Insurance, protects the Contractor against claims caused by gradual, sudden and accidental pollution damage to the environment as well as Bodily Injury and Property Damage to third parties (that may occur while the Asbestos remediation work is underway). Please review item 2 of Amendment 021, as it relates to your request, as well as item 4 of this amendment.

295	How can we transmit the non-compliance of any point/issue in the SOW?	Prior to the bid closing day, questions regarding the SOW content can be emailed to myself. These questions may include requests, clarifications, suggested SOW edits, etc. Questions should reference the specific SOW item and articles/paragraph numbers. The answers to all questions received during the bidding period are posted as Solicitaiton Amendments on Buy and Sell (https://buyandsell.gc.ca/procurement-data/tender-notice/PW-MD-043-28394). By submitting a bid, the Bidder certifies that they are able to comply with all of the content in the SOW, as amended during the bidding period, without exception. Any listed exceptions included in a bid submission would render the bid non-compliant.
296	SOW Part B, SOW Item 12.1 – Propulsion and Maneuvering, Section 3.5.2.2 states: “The new MEs must include an engine driven FO booster pump.“ Please note that modern engines have booster pumps which are electrically driven, often in a separate fuel-booster module. Engine driven booster pumps are uncommon and do not provide any additional safety or reliability benefits for the engine. We request that off-engine booster pumps be permitted.	Off engine fuel oil booster pumps will be acceptable. Refer to item 7 of this amendment for edits to the SOW (3.5.2.2 requirement is removed).
297	Annex P - Engineering Team (M17) for Canada - For the M17 Engineering Capability, would Canada consider allowing experience gained in vessel integration and installation package for the renewal or installation of a new vessel major equipment that was developed and implemented with Classification Society, Transport Canada or Naval Materiel Authority regulatory approval? Recent CCG procurements have allowed for engineering experience gained under multiple regulatory authorities or equivalents including commercial and naval work. This recognized the technical credibility and understanding of the application of regulatory standards in the development of large complex engineering projects.”	The Contractor must provide proof of experience in the development and implementation of the stated requirement with approval of a Recognized Organization as defined by Transport Canada.

298	Annex P - Engineering Team (M17) for Canada - The mandatory requirement for M17 Engineering Capability, states “vessel integration and installation Package for the renewal or the installation of a new vessel major equipment…” Would Canada confirm that vessel integration and installation packages for new construction will be considered as meeting the mandatory requirement?	Yes, experience with new construction will be acceptable.
299	Annex P - Engineering Team (M17) for Canada - The mandatory criteria for M17 restricts the bidder to providing 1 example that is required to meet several criteria, spanning a large body of engineering work. It is common in industry for larger projects to be divided amongst several engineering firms and/or for scopes of work to be competed at various milestones. As a result, several firms become engaged on multiple aspects of the work. Engineering firms build experience from a variety of projects to grow capability. Would Canada allow the use of multiple projects to cover all the sub-requirements of M17 Engineering Capability – Engineering Team?	The Contractor must submit documentation, as specified, that proves that either the Contractor or one of the firms engaged by the Contractor, has experience in overseeing, managing, directing and controlling the full work scope defined. Proof of experience with individual aspects of the specified requirement, in isolation of the whole, will not be satisfactory. The intent of the requirement is not to sponsor the growth of capability through completion of this project. It is to prove that experience with a project of this magnitude exists from the outset.
300	Annex P - Engineering Team (M17) for Canada - Could Canada please clarify what supporting documentation will be required to demonstrate M17 item 1) vi. as inspections, test and trials plans, procedures and reports are generally performed under classification society (or regulatory) witness however the inspection plans are not subject to formal reviews and class approval.	The Contractor must provide the requested documentation and proof that, if not approved by a Classification Society, the said documentation was acceptable to a Classification Society.

301	Annex P - Engineering Team (M17) for Canada - M17 Engineering – Engineering Team item 2), references the engineering firm having experience in “review of the vessel’s stability with major equipment installed…” the statement continues to require the firm to have produced a new Intact Stability Book. Depending on the size of the vessel, assessment of stability or lightship, and/or the loading conditions considered in the original Intact Trim and Stability Booklet, the extent of changes implemented may not warrant the production of a new Intact Stability Book. Would Canada consider other types of stability experience and reviews as it is common to issue documents that cover loading conditions without reissuing Intact Trim and Stability Booklets.	The Contractor must provide proof that the Contractor, or a firm engaged by the Contractor, has experience as specified.
302	Part B SOW item 10.3, 3.3.1.12: With regards to section 10.3 Fire Detection System can the CCG confirm if the MCR is considered a Category A machinery space or not? 10.3 FIRE DETECTION SYSTEM 3.3.1.12. Category A machinery space fire alarm initiating devices must be on a separate loop and must not serve any other area.	For bidding purposes, assume that it is not.
303	Part B SOW item 12.11, 1.1.1.1: For Spec 12.11 Rope Guards, paragraph 1.1.1.1. states “The intent of this SOW item is to remove, inspect and replace the vessels two propeller shaft rope guards.” Can Canada confirm that when saying “replace” it in fact means “re-install” the existing rope guards, after grit blasting and re-coating, as “replace” implies “replace with new”.	Correct. The intent is to re-install the existing rope guards.
304	Part B SOW Item 16.16, 2.4.1.3: For Spec 16.16 Machinery Space Fans, paragraph 2.4.1.3, should we read 7 axial fans instead of 13 axial fans?	Correct. The number of fans to be dealt with under this SOW item is 7, not 13. Refer to Item 8 of this amendment for related SOW edits.

305	Part B SOW item 11.19 AFT BULWARK REPLACEMENT: 1.1.12 General Scope a) Replacement of bulwark support stanchions with heavier material b) Replacement of the bulwark top rail c) Replacement of damaged bulwark plating d)installation of new bulwark plating stiffeners. For b) does CCG want the entire top rail replaced or just in way of the damaged plating replacement? (see 3.3 below for further instructions in SOW). 3.3. Repair 3.3.1.1. The Contractor must crop and replace the aft bulwark support stanchions and top rails, and replace them with new material, as per the approved drawing. New stiffening bars must be installed as per the same drawing.	The entire top rail is to be replaced.
306	RFP Annex H, PDS Rev 1: In the revised Pricing Data Sheet issued with Amendment 24 on 25 March Canada has added line items for each section of the SOW for engineering works. It is not possible to accurately split the engineering effort in this manner as the inter-related nature of the specifications on the VLE mean that engineering work on all sections will overlap. Can Canada confirm that it does not intend to cherry-pick engineering scope in the PDS and acknowledge that the entire engineering scope is not divisible in this way and must be contracted in it's entirety.	Yes, Canada confirms that Canada will not remove any of the engineering scope after contract award. The breakdown is requested to assist with the determination of progress payments only.
AMENDMENT 026 - ref 307 to 314		
307	The response to question #190 does not allow bidders to receive IPC credit outside of the CCGS Terry Fox contract, however can a bidder receive IPC credit for any indigenous involvement in preparation of the bid for the CCGS Terry Fox?	No, a bidder cannot receive IPC credit for indigenous involvement in the preparation of the bid.

308	I would like to bring to your attention that the PDF for: 07-14-02 FWD Unit UC FR 124 – Stem is actually a duplicate of 07-14-07 Focsle Deck FR 158 STEM. Can you please provide the 07-14-02 FWD Unit UC FR 124 – Stem drawing?	Refer to item 2 of this amendment (TDP update, TDP 22.04.08).
309	Do you mind clarifying if CCGS Terry Fox is considered a passenger or cargo vessel? This affects the requirements for the Public Address System. ABS MVR Part 4 Chapter 8 Section 2: **11.8.3 Cargo Vessels** For cargo vessels, the coverage provided by the arrangement of the system loops and speakers is to be such that after a single failure, the announcements and alarms are still audible in all spaces. Duplication of system loops and speakers in each room or space is not required provided the announcements and alarms are still audible in all spaces. **11.8.4 Passenger Vessels** For passenger vessels, a single system serving both public address and general emergency alarm functions is required to have speakers connected to two loops sufficiently separated throughout their length. The two loops are to be connected to separate amplifiers. (See 5C-7-5/13.15ii).	The Terry Fox is considered a cargo vessel, however, the requirements for the Public Address System must be in accordance with the Vessel Fire Safety Regulations, Section 145. 145 (1) The public address system or other means of communication required by regulation 12.3 must be available on all cargo vessels and all passenger vessels throughout the spaces referred to in that regulation, the muster stations, the embarkation stations and the machinery spaces. The requirements of Solas, Regulation II-2/12.3 for passenger vessels, are therefore applicable to cargo vessels in Canada as per VFSRs 145.
310	I am writing to request a one month extension on the bid submission deadline for the CCGS Terry Fox VLE.	Canada will extend the bid closing date by 4 weeks, to June 14, 2022. In order to adhere to the contract schedule, there will be no additional room for further extensions.

311	Reference Annex H- Financial Bid Presentation Sheet- Item B4: Canada is requesting a cost for 100,000 hours for unscheduled work. Can we have breakdown of this 100,000 hours per trade shift and/or the nature of this work?	The calculated cost is determined by multiplying the 100,000 hours of unknown unscheduled work arising with an hourly charge-out (blended) labour rate, determined by the bidder, i.e. refer to H2, quoted below: 'Authorized Other Unscheduled Work will be calculated as follows: Number of hours (to be negotiated) x $ _____ for the Contractor's firm hourly charge-out labour rate. This rate is to include consumables, overhead and profit. The net laid-down cost of materials may include a mark-up of ten percent (10%) plus applicable taxes. The firm hourly charge-out labour rate and the material mark-up will remain firm for the duration of the Contract including any subsequent amendments.' H2.1, H2.2 and H2.3 offer additional guidance. It is not possible to detail the content for 100,000 hours as these are undetermined and negotiable, but it is not anticipated that the labour would be concentrated to one specific trade. Note that, the minimum Contractor's firm hourly charge-out labour rate must be at least 85$/hr, per RFP Part 4, section 4.1.7 b).

312	RFP Annex H, PDS Rev 1: In the revised Pricing Data Sheet (PDS) issued with Amendment 24 on 25 March Canada has added three milestones for IPC, the values of these seem to be linked to the total value of the contract. It was our understanding that the IPC requirement requires the bidders to ensure 1.5% of the value of the contract is with Indigenous businesses, therefore this cost is already incorporated in the total price, and may be spread across multiple work packages. In creating these three line items it looks as though Canada is intending to withhold 1.5% of the total price pending the contractor providing the IPC reports and these being accepted by Canada. Can Canada confirm this is the intended use of these three IPC milestone line items? Can Canada also define what it means with the statement in the REV 1 edits #2 “any indirect costs will be deducted from the total value of the Contract (i.e. KNOWN WORK) that will be paid”.	The IPC milestone values are linked to the total value of the contract. The three milestones (3 x 0.5%), add up to 1.5% of the contract value to be awarded to Indigenous businesses. The Bidder must commit and submit signed Indigenous Participation Component Certification Forms (Annex K), Part 1 & Part 2. Part 1 certifies that 'the Bidder agrees that no less than 1.5% of the Total Estimated Cost of the Contract must be subcontracted to Indigenous business(es).' Part 1 also indicates that 'If the Contractor fails to meet these requirements, the associated Milestone payments described in Table B1.1 Milestones (Price and Delivery) of Annex “B” – Basis of Payment, will not be released.' Canada would withhold the milestone amount, pending the approval of documentation submitted by the Contractor. Per Annex N (Indigenous Participation Componen Reports), 'When seeking the Indigenous Participation Components Milestones, as described in Annex “B”, the Contractor must deliver the documentation (detailed in Annex N) to the Indigenous Participation Component’s (IPC) Authority, the Contracting Authority, and the Technical Authority for review.' Part 2 of Annex K, requires the Bidder to commit to the submission of an Indigenous Participation Component Plan within 2 Months after Contract Award, if awarded a contract. Note 2 of REV 1 of Annex H priceing data sheet, will be clarified and amended in REV 2 of Annex H priceing data sheet, to read as follows: ' Annex H Appendix 2 Milestones' SHEET - IPC calculations were added, as three seperate Milestones of 0.5% each for a total of 1.5% of the Total Estimated Cost of the Contract that must be subcontracted to Indigenous business(es).' REV 2 of Annex H, pricing data sheet is anticipated to be published in early May 2022.

313	Amendment 25 with its extensive and binding change to Clause 2.1 requires further clarification prior to Bidders committing to accept the contractual obligations contained therein. Where PSPC has stated: “6. If a Bidder disagrees with Canada’s categorization of specific third parties being listed as Allowable Parties or Non-Allowable Parties under Amendment 025 or any subsequent Amendment, they may submit written representation through the enquiry process of this bid solicitation, within 10 working days of the issuance of the Amendment in question. Such written representations must provide the details and basis in support of the Bidder’s position. If no such written representations are submitted by a Bidder within 10 working days of issuance of Amendment 025 or any subsequent Amendment introducing changes to the listed third parties, the Bidder will be deemed to have forever waived any claim arising from or related to this bid solicitation regarding the categorization of third parties consulted in the development of technical specifications used in the SOW." Prior to committing to accepting such a condition Bidders require the technical details of the work performed by these Allowable Parties and the IP clauses associated with their Work. The 10 day clock cannot commence until PSPC provides the technical and IP details associated with these work packages. When will PSPC make this information available so that Bidders can decide whether or not to accept or challenge the contractual conditions imposed by this amendment?	Canada provided all relevant information regarding the work carried out by the Allowable Parties in the amended section 18 table, including a summary of the work contributions (third column) for the related SOW items (second column). The technical contributions are in the specified SOW items and TDP; IP is addressed by limiting TDP access to those who sign the NDA, which restricts TDP content use for Terry Fox VLE bid submission preparation and subsequent work post award, only. As stated, if a Bidder disagrees with Canada’s categorization of specific third parties being listed as Allowable Parties or Non-Allowable Parties under Amendment 025 (published on April 1, 2022) or any subsequent Amendment, they may submit written representation through the enquiry process of this bid solicitation, within 10 working days of the issuance of the Amendment in question. The inquiry has been considered and no changes will be made to the RFP as a result of this inquiry.
314	In regards to Annex “P” – M2 : Will a current and valid 5 year drydock certificate, which is renewed every 5 years, be acceptable to meet the intent of this RFP?	Yes, this is acceptable.
AMENDMENT 027 - ref 315 to 321		

315	Part B SOW item 17.6, 3.3.2.24: Would it be possible to know the existing power (kW) or consumption (Amp) for this electrical supply to the HPU (hydraulic power unit)? Considering this info, we would decide the power for the HPU, the maximum hoisting speed, and if it would be necessary a soft starter for the HPU electric motor.	The existing power supply for the HIAB crane being replaced is 60A, 460VAC, three phase, 60 Hz.
316	Part B SOW item 17.6, 3.3.2.27: For the extension booms, instead of hot deep galvanized, we would apply a metallized coat (per ISO 2063). In our experience this is at least equal for the resistance against marine corrosion, and better for the affection and control of thickness (those are mechanized pieces). This is an improvement that would lead in no extra cost. Is this acceptable?	Yes, this will be acceptable.
317	Part B SOW item 17.6, 3.4.1.1.f): No class approval will be delivered with the offer because this is a crane with customer design to adapt to the existing seat/skid, and with special pedestal to integrate the HPU. Is this acceptable?	Class approval of the installed crane, all related hardware, mounting and attachment arrangements is required.
318	Part B SOW item 17.12, 3.1.2.5 & 3.1.6.2: To check the necessary height dimension for both pins and fork, we would need the deck layout drawing (profile view) to check: -height over deck of the stern roller, and distance to towpins and fork -height over deck of the block connected to the gob-eye, and distance to towpins and fork stern roller, and distance to towpins and fork -height over deck of the towing winch drum, and distance to towpins and fork (if applicable direct pull, not going through gob-eye block) -relative position from pins to side line top (wire stopper on top of the cargo rail	These dimensions should be able to be determined from documents provided in TDP.

319	SOW item 17.12, 5.5: We can't see, in the vessel class notation, what applies to this equipment (AH, anchor handling or TOW, towing) therefore only the frame to be welded to the hull (and so becoming part of the HULL) will be certified by Class. Reference: ABS, Part 5, Ch.3, Sec.4.	The statement is incorrect. The Terry Fox was built in 1983, is delegated to ABS but is not 'in-class' and therefore does not carry the ABS notations, however as per the General Technical Notes, section 5.10.1.1 "All modifications to the vessel and systems, including component supply, plan approval and onsite survey must be completed in accordance with ABS Rules and Codes. The vessel is delegated to ABS in accordance with Transport Canada's Delegated Statutory Inspection program but not 'in-class'." Therefore the Applicable ABS Rules for 'towing operations' and towing by 'Offshore Support Vessels' shall apply. It remains the Contractor's responsibility to deliver a fully Class approved installation in all respects.
320	Part B SOW Item 11.14, paragraph 3.1.1.11 : In Amendment 020, Canada is requesting Shipyards to quote on the replacement of the wasted steel surface areas in figures 1 to 4 and 6 to 9. These surfaces are clearly described in figures of the Amendment 020. But receiving the Annex H Rev 1 on March 25th, Canada is requesting Shipyards to quote for every figure 20 sq meters of steel on every thickness of each location. This amount of steel is making no sense according to the SOW. Could Canada review the amount of steel per figure to a reasonable amount according to the SOW?	All items listed at quantity 20 sq meters (referenced 3.1.11) in section 11.14 of the Pricing Data Sheet (PDS), Annex H, are only intended for determining Unit Prices (cost per square meter); they will be prorated and only used for additional work cost determination; if no additional work arises, the Contractor will credit appllicable 20 sq m included in the bid price. A title line indicating this information was missed in Section 11.14 of the PDS Rev 1 for amendment 020 (line added below in yellow in updated PDS Rev 2). The actual repair cost for the known work should be included in the cost above the yellow line (referenced 3.1.1.8). An updated PDS Rev 2 is to be published in May.

11.14 INTERNAL STEEL REPAIRS										
All material, equipment and labour to complete the requirement of this sub-section, that is not covered by the line items listed below, for this sub-section			$ -	$ -	$ -	$ -				
3.1.1.8 (Amendment 027, Rev2)	***Unit price per square metre for each individual steel type, thickness and location(s).(refer to 3.1.1.11 below) Final amount will be prorated.***									
3.1.1.11 (Amendment 020, Rev1)	Figure 1 Port Supply Trunking - Forward Side									
	Plate 6.5 mm						20	sq. m.	$ -	$ -
3.1.1.11 (Amendment 020, Rev1)	Figure 2 Port Supply Trunking - Aft side									
	Plate 6.5 mm						20	sq. m.	$ -	$ -
	Plate 8 mm						20	sq. m.	$ -	$ -
	Plate 12 mm						20	sq. m.	$ -	$ -

3.1.1.8 (Amendment 027, Rev2)	***Unit price per square metre for each individual steel type, thickness and location(s).(refer to 3.1.1.11 below) Final amount will be prorated.***

321	Missing a drawing that is referenced in the SOW Section 16.2. Drawing Number 15-00-122 – Seat No 141 HW Calorifier Would CCG be able to provide the drawing mentioned above?	Refer to item 2 of this amendment (TDP update).
AMENDMENT 028 - ref 322 to 322		
322	1.Considering all of the uncertainties of the current situation with the global supply chain and the timeline of the project, will Canada put forward a compensation mechanism for amortization of unrealized appreciation of assets or a general increase in prices and fall in the purchasing value of money (inflation)? 2.Will Canada use the form PWGSC-TPSGC 450 or another mechanism to assume the risks and benefits of exchange rate fluctuations?	1 and 2) Yes; refer to items 2 and 3 of this amendment.
AMENDMENT 029 - ref 323 to 342		

323	Can CANADA confirm how the assessment of satisfactory engineering work experience and academic credentials will take place to demonstrate eligibility for certification as a professional in a Canadian province? In addition, can Canada provide details of what additional information, if any, needs to be provided to demonstrate this requirement is satisfied in accordance with the M17 mandatory requirements related to engineering positions?	Each Annex P criteria (M1 to M19h), including criteria regarding engineering work experience and academic requirements, indicates the specific requirements followed by the documentation needed to be provided in the bid in support of these requirements. See example M17a, below.

M17a	1) Senior Naval Architect Engineer	6.15	The Bidder's proposed Senior Naval Architect Engineer must: a. Possess a university degree in naval architecture engineering; b. Hold a provincial, state, or federal (national) licence to practice as a professional engineer; and c. Possess a minimum of 10 years of experience in naval architecture within the last 15 years prior to bid closing.	
			The Bidder must provide a copy of the certificate or diploma and accreditation required in a. and b., in addition to the CV for the proposed Senior Naval Architect Engineer which demonstrates compliance with the requirement found in c. by identifying the experienced gained, and providing, as a minimum, the following information: • Place of work; • Period of work (month, year); • Description of tasks including projects worked on, role and responsibilities.	

The top box identifies the requirements to be demonstrated in the bid

The bottom box details the supporting documents to be submitted with the bid proposal; these documents must demonstrate that the requirements, above, are met by the proposed individual.
For example - Canada will read the CV content to confirm the individual has 10 years of experience (in the last 15 years)

324	Solicitation Amendment No. 28 issued 13 April 2022 updated the RFP at Part 6 and Section 7.5. ADDS the requirement for the bidders to include among other things a cost of $300k in their bid for cost of towing insurance and vessel valuation as well as all other towing costs such as engineering work. Storage and restorage, undocking and docking. It appears as if this addition is in an effort to assist other potential bidders who may not have the capacity to complete the work in their shipyard and therefore Canada is requesting that ALL bidders include the additional costs for towing in their bid to complete alongside work. The assumption is that this is to evaluate all bids against the same criteria, however, for those bidders who have the capacity to complete the work in their shipyard this is considered to put one bidder at a disadvantage over others. For those who intend to complete all work in their shipyard, there should be no requirement to add in these additional costs. Will the bidders who intend on towing the vessel to another yard to conduct alongside work be required to submit proof that the facility the vessel will be towed to meet the mandatory requirements for the vessel docking? Will Canada remove this additional requirement for those bidders who have no intention of towing the vessel maintaining the integrity of the bidding process for those bidders who wholly meet the facility requirements?	Canada does not require all bidders to include the additional costs for towing. Only bidders who intend to relocate the vessel from the Contractor's drydocking facility to a different Contractor facility (to carry our alongside work) are required to include the $300k (among other things) in the bid price. The language in amendment 27 (not 28), section 2.7.3 (not Part 6) states these stipulations only if: ***'In the event that*** *the vessel requires to be towed from the Contractor's drydocking facility to a different Contractor facility to carry out alongside work during the VWP:'...etc.* This is furthermore stressed in the insurance section, Annex D, where D6 and D7 only apply, as required. Each of these is presented as follows: *'D6 Marine Liability Insurance (* ***only required if towing from one Contractor Facility to another Contractor Facility)****';* *and* *'D7 Marine Hull Insurance (* ***only required if towing from one Contractor Facility to another Contractor Facility)****'.* Do not add include tow costs if the tow is NOT planned. Since the work at a 'different Contractor facility' is indicated as being for alongside work, only, the drydocking mandatory requirements for the 'alongside' facility are not required. Canada will not remove the requirement.

325	11.19 AFT BULWARK REPLACEMENT After reviewing Drawing #20066-210-S-045 Rev 1- Aft Bulwark Stanchion Renewal and Bulwark Plating Stiffening, the Drawing Calls out the [Existing Rail], in the SOW it calls out "Replacement of the bulwark top rail". Please clarify if the extent of the rail replacement is to be interpreted as the Bulwark Top Rail is to be completely replaced OR the Bulwark Top Rail is to be replaced in way of damaged areas? If it is the second interpretation can CCG provide an estimate of damaged top rail?	The entire top rail is to be replaced (Refer to question ref 305 response).
326	Can Canada, please supply details of the vessel load distribution curve, usually found in the ship stability book? This will be required to understand the loads being applied to the dock blocks during the docked period.	The stability book is available in TDP Update 22.02.11. No additional information is presently available.
327	Ref Q&A #268: In relation to UK Chartered Engineers, an education and competency assessment are conducted as part of the certification process, similar to those conducted by Canadian provincial associations; details can be found on the Institute of Mechanical Engineers website. Can CANADA confirm, based upon the supplied information, if UK Chartered Engineer certification will be accepted as equivalent to a provincial, state or federal (national) licence to practice as a professional engineer for the purposes of the mandatory criteria assessment?	Yes a UK Chartered engineer is acceptable.
328	11.5 SEA BAYS & SEA CHESTS 3.1.2.2. The grit blasting and coating requirements specified below must be completed by the Contractor without adverse impact on adjoining compartments to the spaces being dealt with. Blasting grit and dust must not be permitted to enter adjoining spaces to the sea bays and sea chests and tank manhole covers must be installed and sealed during blasting operations. Is Mechanical Preparation to SSPC SP11 approved for this situation instead of Grit Blasting?	No, it is not approved. This work must be completed as specified.

329	SOW Part B SOW item 12.4 - Section 3.1.1.2 States - Each containment cofferdam is to come complete with the necessary …., and inspection cover to allow access and inspections of the bubbler piping located within each cofferdam's interior. Can Canada confirm our assumption that the inspection cover(s) are just for inspection and not for access/entry?	Canada confirms that the inspection cover(s) are just for inspection and not for access/entry. Refer to Item 2 of this amendment for related SOW edits.
330	SOW Part B SOW item 12.1 - Can Canada provide datasheets on 1) Four new Alpha Laval P615 LO purifiers (to get the heater data) 2) Four Wajax LO heaters. Can you also provide additional details about the operation of the four existing LO heaters and the required hot stand-by status. Below is the statement from 12.1 SOW; Do you currently use the LO purifiers with heaters and the Wajax LO heaters at the same time to achieve the status? 3.5.3.6 The existing ME pre-lubrication and LO heating hardware must be replaced in its entirety with one pre-lube pump and one lube oil heater provided for each engine. Lube oil heating capacity must be sufficient to allow the engine to be placed on hot standby status wherein start up and load application can be accommodated in as short a time frame as possible, fifteen (15) minutes or less	Stand alone lube oil heaters are to be retained, as specified. Achieving hot standby status must not rely on the availability of a lube oil purifier system.

331	In clarification Question ref 263, CCG stated that the standards listed in GR 01, 5.12.2.1 and 5.13.1.1 are "to be applied to the various SOW requirements, as applicable." Since these standards are not explicitly called out in the SOW, we assume they apply wherever they may have bearing on the work described in the SOW. However, can CCG please confirm that these standards will be applied only to the elements/areas of ship directly affected by the SOW? For example, ASTM F1166 includes dimensional criteria for clear access within spaces and around equipment. Based on the TDP data and 3D scans, it appears that many locations on the existing vessel do not meet these criteria. Contractors can apply F1166 in areas where arrangements are being revised (e.g., in way of the new main engines, in the bubbler compressor room, and in storerooms). Does CCG accept that areas where the work being done does not change arrangements (such as around the AH and towing winches, around the 40 T crane pedestal, or around piping manifolds in machinery spaces) may continue not to comply with F1166?	Yes, these standards are to apply only to the elements/areas of ship directly affected by the SOW.
332	Factory Acceptance Training: While Canada is requesting a special FAT program, such a program is not readily available from any engine OEM. Would a standard, Class-approved testing program be acceptable to Canada, as it would be sufficient to demonstrate compliance?	Factory Acceptance *Testing* is required as specified.
333	Factory Training as requested by Canada: Factory training is usually reserved for OEM technicians and factory workers as it delivers no value to the end user. End users normally receive 1st, 2nd and 3rd level maintenance training, while factory training is more complex and delves into component manufacturing processes. As all OEMs have well-established end-user training programs which the Canadian Coast Guard and Royal Canadian Navy currently employ, will Canada accept standard maintenance training in place of factory training?	Factory training is required as specified.

334	SOW Part A GR 06 - Can Canada please clarify what is meant by the following statement: 2.1.1.2. The Contractor must revise all existing vessel drawings to reflect all modification to the vessel completed in the execution of this SOW… How is "all" to be interpreted?	Basic drawing update requirements are defined in individual SOW items. The intent of the clause in question is to expand the overall drawing requirement to include documentation of all work not directly specified but developed by the Contractor as part of their delivery of full solutions to specified work. Drawings must be provided to reflect all scopes of work undertaken in completion of the SOW either by supply of new drawings that reflect the full scope of installation of new systems, hardware and structure or revision of existing drawings to reflect the installation and/or modification of systems, hardware or structure. Where existing drawings are revised, they must replace, in entirety, the content of original drawings on which affected systems, hardware or structure are included. The requirement is to have a an up to date drawing set that reflects the vessel's as fitted arrangement, in all respects, on completion of the project in which new drawings replace original drawings, as required. The need to refer to both new and original drawings for any particular system, item of hardware, or structure is to be avoided. The cost of providing up dated drawings associated with work defined through the PWGSC 1379 process will be negotiated and included in the final cost of the related 1379. Original drawings that remain unaffected by work defined in the SOW or by 1379 requirements need not be updated.

335	The Bidder has engaged the marine industry's leading and most capable engine manufacturer in its solution for this RFP. However, we cannot meet the mandatory requirement of providing the Woodward actuator/governor with ball head mechanical back up specified by CCG, but can meet the redundancy requirement intended by the use of a Woodward actuator that will provide more reliable and safer operation. This has been the subject of several questions (the most recent being Q247). However, without some flexibility and further careful consideration by Canada, will result in our inability to meet this requirement. Therefore, In order to ensure competition and avoid a restrictive source of supply for the replacement propulsion system, will Canada re-consider revising this requirement to a desirable as opposed to a mandatory requirement and allow for other solutions which meet the intent of this requirement, that will also ensure control redundancy?	If a bidder deems it impossible to provide the specified governing arrangement, then the mandatory requirement may be waived. If waived, the bidder must provide a detailed explanation of why the specified requirement is not possible and how any alternate system achieves the same level of operational redundancy as the specified system (this was the intention of the the response provided for question ref 247 and provides the flexibility requested). The operational profile and requirement of the CCGS Terry Fox is unique and outside marine industry operational norms. Emergency back up support arrangements available for main engine governing systems are of critical importance to the operators and these systems must be clearly described with any bid submission that does not include the specified arrangement (detailed operational instructions for all levels of governing redundancy must be included with the bid submission).

336	Spares: Canada has requested an extraordinary amount of spares for the engines and gearboxes. As the requested engines are medium-speed, commercial off-the-shelf products, we do not believe require that so many spares are required. For example, while having many spare crankshafts may seem like a good approach to mitigate operational risks, we believe it would actually do little in real terms to improve vessel availability. This is because spare crankshafts need to be stored under strict environmental conditions and undergo regular checks and verifications, with any discovered rust or other damage rendering then unusable. Further, crankshafts, camshafts and a lot of the other components requested by Canada would not need replacement over the lifetime of a medium speed engine, barring a catastrophic failure. Based on this analysis of your requirements, would Canada accept the offer of just a Class spares package at this stage, with any additional spares to be decided upon after further discussions and agreement on the Canadian Coast Guard's actual needs? This alternative approach would optimize the project budget and preclude Canada from purchasing equipment it would not need. Such an approach has been used successfully on other Canadian Coast Guard and Royal Canadian Navy programs.	In regards to SOW item 12.1 spare parts for engines (section 5.3.1) and gearboxes (section 5.3.2): Minimum Class spares requirement is not acceptable. Spares are to be provided as specified. Only one spare crankshaft, one spare camshaft etc., have been specified for all four engines. Quantities noted for items (b) to (zz) are to be provided as stated; these quantities are not required for each of the four engines. All major spares must be supplied fully prepared for long term storage.
337	As part of TDP Update 22.02.25 Bidders were provided with a copy of report J21077-R01 by Lengkeek Vessels Engineering for Cactus Ship Repair, itself dated 17.03.22 (17th March 2022). The existence of this report raises a number of critical contractual issues, as further presented below. The first question is based on the fact that the work presented in the report was being actively conducted during the RFP period for the Terry Fox. What other work has been or is currently being undertaken in parallel with this RFP? Have bidders been provided with all materials related to such work?	Note that the document was provided in TDP Update 22.04.13; there is no TDP Update 22.02.25. There is no other work in progress for the Terry Fox VLE and the bidders have been provided with all Terry Fox VLE documentation.

338	More generally, in Q313 a Bidder has noted that it is unreasonable for Canada to expect Bidders to “sign off” on Canada’s statement of no conflict of interest without the ability to review the full technical and IP information involved. In A313 Canada rejected this request; however the reality of this report shows the absolute validity of Q313. Will Canada therefore reconsider its A313 and ensure that Bidders are pro-actively informed of the scope of other parties’ previous work? We further note here that the 10 day limitation on acceptance is particularly unreasonable, given that in cases such as this no indication is provided in Amendment 25 of how and where supporting materials may be found.	The Allowable Party List in Amendment 025 identified the J21077-R01 report work contribution of LengKeek Vessel Engineering Inc., as 'FEA developed for different loads' for SOW item 17.1. Canada reviewed and included the report as part of the TDP in Amendment 027 on April 13, 2022, and as described in Amendment 025. The 10 day limitation to provide written representation for LengKeek, only, will therefore begin on publication of this Amendment. Otherwise, the response to question ref 313 still stands.
339	The following question has been reformulated from written representations submitted in response to Amendment 025. It is presented to provide information to all bidders: The production of a comparable report to J21077 is required to be undertaken by other bidders at their cost following contract award. Does this offer an unfair financial advantage to the author of J21077-R01?	In order to eliminate any financial advantage in the pricing evaluation, Canada has amended the SOW (refer to Item 4 of this amendment). Also of note is that the geometry used to develop the model for report J21077-R01 was provided by CCG and was also included in the TDP with the report.
340	SOW Part B SOW item 17.1- Can the additional structure assessment as described below be a 1379, inline with installation of the additional structure (c) Determination of extent of additional structure required to carry a new, articulated boom crane capable of offering the same lifting capabilities as the existing crane and rated for safe operation at Beaufort Sea State 4. As the SOW is currently written, the contractor needs to include cost for assessing the current structure (a and b) AND any additional structure (c) even if the existing structure is deemed sufficient.	The contractor must include an allowance cost of $40,000 in their bid, to complete section 3.1.2.1 an initial FEA of existing structure and to be adjusted based on actual costs (Work referenced in 1.1.1.2 (a) and (b) and 3.1.2.1). As per response to Q162, should the existing structure be determined to be insufficient to support the new crane, any additional engineering and FEA effort required to define the required structure will be dealt with via the PSWG 1379 process (Work referenced in 1.1.1.2 part (c) and 3.1.2.2). Refer to Item 4 of this amendment for related SOW edits.

341	The following question has been reformulated from written representations submitted in response to Amendment 025. It is presented to provide information to all bidders: Report J21077-R01 references new Crane A and Crane B. Are these cranes identified or accepted by CCG as being candidates? The particulars for these cranes have not been provided to all Bidders. Do the companies involved in the report's production gain insight into CCG preferences that are not available to other bidders?	The J21077-R01 report assumed different load estimates using typical crane weights and arrangements for the purposes of an initial analysis on the existing supporting deck structure, in order to validate the SOW requirements. The values for the typical crane weights and arrangements were provided by CCG to the companies involved with the report's production, and are included of the report. The particulars with any associated cranes' makes and model numbers were not provided. CCG has no preferences with respect to crane selection. Any crane that meets the requirements set out in the SOW will be acceptable.
342	The following question has been reformulated from written representations submitted in response to Amendment 025. It is presented to provide information to all bidders: J21077-R01 notes that all IP in the report is the property of Lengkeek. Is its distribution restricted?	Intellectual Property rights are addressed by limiting TDP access to those who sign the NDA, which restricts TDP content use for Terry Fox VLE bid submission preparation and subsequent work post award, only.
AMENDMENT 030 - ref 343 to 357		
343	SOW Part B SOW item 17.5 - The minimum breaking strength of the selected mooring rope (592 kN) is higher than the required one (293 kN). From class point of view, we are still good to follow the original design in terms of selecting mooring equipment and foundation analysis. However, CCG requested to upgrade the equipment based on the new mooring winch and rope. Pls confirm if this is the intention.	The Contractor must supply and install two mooring winches capable of providing a 24000lb line pull.
344	SOW Part B SOW item 17.5 - The minimum required length of the mooring rope (as per initial design) is longer that what CCG has requested (180 m vs 350 ft). Can Canada clarify the requirement please.	The requirement for supply of 350 feet of 28mm Amsteel Blue mooring rope is cancelled. Refer to Item 3 of this amendment for related SOW edits.
345	SOW Part B SOW item 17.5 - What is the required Brake holdi	Brake holding capacity must be sized in accordance with rules to suit specified line pull of 24000 lbs.

346	SOW item 16.3: There is a requirement from SOW item 16.3 to maintain the ballast connection to Tank #3, which is the tank being converted from a SW ballast tank to a domestic water tank (see below). The requirement in this section should point to SOW item 15.2 for Bilge and Ballast System Piping, however there is no reference in that SOW item to maintaining/servicing the ballast line to tank #3 (wing tank no. 1 STBD). According to SOW item 15.2, all ballast main piping and hardware between pump suction and discharge manifolds through to all tank connections are to be removed and replaced with new. The intent here is a little unclear. Is the intention to replace the tank #3 with new piping just to have the pipe run blanked at a new valve? Does the CCG have an intended purpose for the replaced SW Ballast piping even though the tank is to be converted into a Domestic Water Tank? 3.4.2.7. **Ballast Main Connection** a) The existing ballast main connection to tank #3 must be maintained and serviced as per scope defined in SOW item # 15.1 Bilge and Ballast System Piping. b) The Contractor must install a blank at the inboard flange connection of the ballast main suction/discharge valve to tank #3. The blank must be of ¼" stainless steel plate and must extend proud of the respective flanges. The blank must be clearly and permanently labelled to reflect its presence.	Yes, the reference should be 15.2 Bilge and Ballast System Piping not 15.1. The SOW for 15.2 section 3.2.1.2 d): *'d)All ballast main piping and hardware between pump suction and discharge manifolds through to all tank connections, including tank valves.'* is correct. For more clarity, the following sentence is added to 3.2.1.2 d), above: 'Refer to SOW item 16.3 section 3.4.2.7b for additional details regarding the ballast line to tank #3 (wing tank no. 1 STBD).' Refer to Item 4 of this amendment for related SOW edits. Yes. CCG have an intended purpose for the replaced SW Ballast piping, even though the tank is to be converted into a Domestic Water Tank.
347	SOW ITEM 11.5: For SOW Item 11.5 can Canada please provide the surface areas in square meters for the sea bays and sea chests?	No, surface areas will not be provided. Bidders must determine the areas from the structural drawings provided in the TDP. Refer, also, to the responses provided for Question ref 91 (ballast tank areas) and Question ref 93 (fuel tank areas).
348	SOW ITEM 11.13: For SOW Item 11.13 can Canada please provide the total surface areas of the superstructure and fixtures for which the coatings are to be removed and new coatings to be applied?	No, surface areas will not be provided. Bidders must determine the areas from the structural drawings provided in the TDP. Refer, also, to the responses provided for Question ref 100 (superstructure area).

349	SOW ITEM 11.15: For SOW Item 11.15 can Canada please provide the surface areas of the void tanks and shaft tunnels? Also on this spec, the pricing data sheet requests a unit price for preparing 10 square meters for each of the shaft tunnels, but not the other areas of the spec, is it Canada's intention to use the same unit price to adjust the prep and coat pricing for the other void tanks?	No, surface areas will not be provided. Bidders must determine the areas from the structural drawings provided in the TDP. The Unit cost for surface preparation adjustment in the shaft tunnels is intended to apply only for the shaft tunnels. 100% of the area of the void tanks is to be dealt with (per the SOW, hence no adjustment is required).
350	SOW ITEM 15.3: For SOW Item 15.3 Canada has provided the volumes of the ballast tanks, however to accurately estimate the preparation and painting the surface area in square meters is required, can Canada please provide the surface areas for all the tanks in 15.3?	No, surface areas will not be provided. Bidders must determine the areas from the structural drawings provided in the TDP. Refer, also, to the response provided for Question ref 91 (ballast tank areas).
351	SOW ITEM 15.10: For SOW item 15.10, the pricing data sheet unit cost "units" is m3, but 3.4.1.4 is asking for a unit price per square meter	The pricing data sheet will be corrected to m^2 in the next amendment (REV2 of PDS).
352	If Canada is unable to provide the surface areas for the above questions (#347-#351) could Canada include an assumed quantity and add unit pricing for adjustment, as per other specs?	Unit pricing for adjustment purposes will not be applied, other than as defined in the SOW. Bidders/Contractors are responsible for determining and addressing all other areas, as specified. The unit cost for adjustment purposes is only to be applied to areas of disturbed, damaged or missing coating in the shaft tunnels. Refer to Item 5 of this amendment for related SOW edits.

353	As the CCGS Terry Fox is enrolled in DSIP and the TDP is lacking content and accuracy, we assume that ABS will require that the TDP be updated to a minimum standard to suit approval requirements. Presumably, as they are representing the CCG, ABS have not been able to address our queries regarding the extent of TDP updates required for plan approval. Considering this can CCG/PSPC please answer the following questions: 1. Besides drawings identified in individual specifications, can the CCG please identify which other drawings within the TDP will need to be updated to achieve ABS approval? 2. Can the CCG provide permission to ABS to discuss the workscope with contractors?	1. No, CCG can not identify all of the drawings that will need to be updated in order to achieve ABS approval. Refer, also, to the response to Question ref 334. 2. No, CCG can not offer such permission. The Contractor is responsible for providing approved technical solutions to satisfy the SOW. The Contractor must determine which drawings, amended or new, must be submitted to ABS for approval. Costs for ABS approval of drawings, amended and new, associated with technical solutions provided by the Contractor, will be beared by Canada, per GR 01, Section 1.5.
354	Section 2.1.1.2 of GR 6 states “The Contractor must revise all existing vessel drawings to reflect all modification to the vessel completed in the execution of this SOW and as the result of all Work Arising.” To date, more than 1000 drawings have been provided as part of the TDP, with many of these being multi sheet drawings. If we are to understand the requirement of GR 6 2.1.1.2 all these drawings will have to be updated. Considering this can CCG/PSPC please answer the following questions: 1. Can the CCG please confirm that all drawings within the TDP provided to contractors will need to be updated? 2. If Question 1 is false, can the CCG please identify what drawings within the TDP that are required to be updated?	Refer to the response to Question ref 334.
355	SOW Item: 11.25 Logistics Office: Is Dexotex A70 correct for the underlayment or should it be VLW IMO Epoxy underlayment and at what thickness?	Bids must be based on the specified flooring system; refer, also. to the response to Question ref 272. The underlayment thickness is to be 10mm, minimum, per drawing #35-00-01, and per the response to Question ref 290.
356	SOW Item 11.27 Passageway decks: Is Dexotex A70 correct for the underlayment or should it be VLW IMO Epoxy underlayment and at what thickness? Is the Terrazo M the top-coat (old way of doing epoxy flooring I have not used this in about 15 years)? It is more cost efficient to go with the Colour Flakes and two coats of T/M Clear seal.	Bids must be based on the specified flooring system; refer, also. to the response to Question ref 272. The underlayment thickness is to be 10mm, minimum, per drawing #35-00-01, and per the response to Question ref 290.

357	REGARDING FLOORING (SOW items 11.25 and 11.27): May we ask for a NEW flooring NEW Drawing to Scale and measurement required for each area?	New drawings are not available. Areas are to be determined from the General Arrangement drawings offered in the TDP. Refer to the ACAD drawing package offered in TDP Update 22.01.14.
AMENDMENT 031 - ref 358 to 375		
358	11.19 AFT BULWARK REPLACEMENT There appears to be a discrepancy between the SOW and the Pricing Data Sheet Annex H as far as to the amount of Bulwark Plate being replaced, The SOW calls out 10m^2 and the ANNEX H calls for 5m^2 of plate replacement. After reviewing Drawing #20066-210-S-045 Rev 1- Aft Bulwark Stanchion Renewal and Bulwark Plating Stiffening, the answer is still not clear. Which Quantity of bulwark plate Replacement should be carried in the estimate 10m^2 or 5m^2?	The quantity was edited to 10 to match the SOW. Refer to the REV 2 version of the PDS (announced in item 2 of this amendment).
359	This is a request for clarification on Q&A 320. Can Canada confirm, or clarify, that the pricing to be presented in the top line for 11.14 needs to cover the entire scope of work as presented in the SOW including the steel work identified in Amendment 20, and that the unit prices (multiplied by 20m.sq for each type of steel and each location on the PDS) will only be used for adjustment via 1379 should additional steel repairs be identified during the docking period. If this is correct, it seems Canada will be significantly overstating the amount of steelwork in the Pricing Data Sheet as the total for the known work is around 20 sq.m but the PDS totals at 360 sq.m. Is Canada expecting an additional 340 sq.m of growth on this spec? This question also applies to the pricing of Part B SOW item 11.3.	Refer to the REV 2 version of the PDS for clarifications (PDS announced in item 2 of this amendment).

360	The pricing for SOW item 18.1 requests the total cost for the quantities as per the spec and also the unit price for adjustment. However the Pricing Data Sheet takes the total of both lines into the subtotal. The top line for the spec states to “include everything not included in the lines below”, therefore taken literally and with the unit priced being multiplied and added into the subtotal this causes double counting. For example, on 18.1, paragraph 3.5.1.18 states, “The Contractor must supply and install sixteen (16) S 4x1 ROXTEC primed frames complete with 36 RM20 Roxtec modules per frame, one wedge kit stainless steel per frame and six (6) stainless steel stay plates per frame. Contractor may substitute RM20’s with RM15’s or any mixture thereof.” This line is not split out in the PDS, so is to be included in the Top Line. However Para 3.5.1.19 states “For the purpose of adjustments, the Contractor must include a unit cost for the supply and install for one (1) S 4x1 Roxtec primed frame complete with 36 RM20 Roxtec modules per frame, one wedge kit stainless steel and stainless steel stay plates per frame.” These lines are included in the PDS for the Contractor to add their unit prices, however the PDS then multiplies this through by 16 and 10 respectively. As the Top line explicitly states to include all costs not in the line items below, the cost for paragraph 3.5.1.18 should be included in that total, including the 16 Roxtec modules and 6 wedge kits are include in this line as per the spec, however the pricing data sheet includes a further 16x the unit price for the Roxtec and 10x stay plate into the total price for this spec, therefore double counting these. Can Canada please clarify if the items for which unit prices are included in the PDS these should be omitted from the Top line, or whether this double counting will be rectified in the Rev 2 of the Pricing Data Sheet?	Refer to the REV 2 version of the PDS for clarifications (PDS announced in item 2 of this amendment).

361	On SOW Item 18.1 paragraph 3.5.1.20 of the spec states to allow for supply and install of approximately 6,000 meters of Cat6A cable, then on the following paragraph, para 3.5.1.21, the spec requests a unit price for supply and install of 10 meters. The Pricing Data sheet shows only para 3.5.1.20, not 3.5.1.21 as a unit cost. Should the Contractor assume the unit cost is to be based on the total for 6000m or will the PDS be adjusted to match the spec? This also applies to paragraphs 3.5.1.22/23,3.5.1.30/31, 3.5.1.32/33, 3.5.1.35/36.	Refer to the REV 2 version of the PDS for edits and clarifications (PDS announced in item 2 of this amendment).
362	On SOW Item 18.2 paragraph 3.3.1.3 requests a unit price for the installation of 5 meters of each type of cable in Table 3, however this is not included in the Pricing Data Sheet. Will Canada correct the PDS to include these unit prices?	Refer to the REV 2 version of the PDS for edits and clarifications (PDS announced in item 2 of this amendment).
363	On SOW item 18.4 paragraph 3.3.1.2 requests a unit price for the installation of 5 meters of each type of cable in Table 3, however this is not included in the Pricing Data Sheet. Also, in the spec the cable list for installation is Table 3.3, not Table 3. Will Canada correct the spec and the PDS to reflect these unit prices?	Refer to the REV 2 version of the PDS for edits and clarifications (PDS announced in item 2 of this amendment). Refer to item 4 of this amendment for edits to the SOW.
364	On SOW item 18.6 paragraph 3.3.1.2 requests a unit price for the installation of 5 meters of each type of cable in Table 3.1, however this is not included in the Pricing Data Sheet. Also, in the spec the cable list for installation is Table 3.3, not Table 3.1. Will Canada correct the spec and the PDS to reflect these unit prices?	Refer to the REV 2 version of the PDS for edits and clarifications (PDS announced in item 2 of this amendment). Refer to item 5 of this amendment for edits to the SOW.
365	SOW, Part B, Item 17.12 - Will Canada be adding Mechanical Package 17.12 to Annex H – Appendix 2 -Milestones (Price and Delivery) now that it is included in scope?	Yes. Refer to the REV 2 version of the PDS (announced in item 2 of this amendment).

366	ANNEX P: In Annex P section M19 Canada is asking for very specific information for the Propulsion Machinery Equipment (PME) which has raised several questions on what exactly Canada is requesting to be included by the bidder in this proposal. We respectfully ask Canada to answer the following questions. Canada is defining in M19b the PME component parts within the “evaluation criteria” for this mandatory requirement, however many of these “components” do not fall under 12.1. -The four main engines and clutches 12.1 -The two gearboxes 12.1 -any intermediate connections 12.1 -shaft generator 13.1 -switchboards 14.2A/B -associated control system 19.1 -alarm and monitoring system 19.2 Does Canada require the bidder to provide the guarantee of provision defined in M19b, the references for each component manufacturer defined in M19c and support requirements defined in M19d, for all the components listed above, despite many of these being outside the referenced Annex “A”, Part B, item 12.1?	Yes. The contractor must provide the required assurances for each of the listed components. The references will be corrected in Annex P, Rev 4 for items M19b, M19c, M19d, M19e and M19h (Refer to item 11 of this amendment). The 'PME' equipment components listed are intended to apply to each of these mandatory criteria. PME : -The four main engines and clutches 12.1 -The two gearboxes 12.1 -any intermediate connections 12.1 -shaft generator 13.1 -switchboards 14.2A/B -associated control system 19.1 -alarm and monitoring system 19.2
367	ANNEX P: M19b states that the above components “must all have their mechanical parts available for a minimum of 15 years”. Can Canada please list the “mechanical parts” that Canada wishes the serviceability commitment for? Can Canada also define what “available” means in this context, as it is possible to interpret this in a number of ways?	The contractor must provide confirmation that all mechanacal components defined in M19b are in current production and that the manufacturer of these components assures that parts for these components will be available for purchase by Canada for 15 years.

368	ANNEX P: In the M19c requirement Canada seems to use “manufacturer and supplier” interchangeably. This is confusing as the supplier may be the integrator, but not the manufacturer of the components. The supplier may select manufacturers using the supplier’s experience in the selection process and use the supplier’s engineers to design the system. The supplier will assume all risks for the supply. Therefore can the supplier’s experience satisfy this requirement? Also, for M19c can Canada please list out the PME components where this experience requirement is applicable?	The intent was to specify the manufacturer. The correction is completed in Rev 4 of Annex P (Refer to item 11 of this amendment). Refer to question ref 366 for the PME list.
369	ANNEX P: M19d, can Canada please list for which components this requirement applies?	Refer to question ref 366 for the PME list.
370	ANNEX P: M19f and M19g Canada requests the bidder provide similar information for the proposed Auxiliary Machinery (AM) Systems components or instruments, defining these as any new pumps, compressors, prefabricated tanks, receivers, filters, general valves, regulators, relief valves, and general instrumentation. Can Canada confirm this request applies only to 12.1 and not to any of the other sections of the Annex “A” SOW? Can Canada please list specifically which components Canada would like a service commitment letter for?	This only applies for SOW item 12.1. It applies to the auxilliary systems that are required to run the propulsion drive trains.
371	ANNEX P (M19f and g): Does Canada acknowledge that many of these AM System components will not be fully defined until the Critical Design Review is completed post contract-award, and therefore it will not be possible to provide the information for each and every AM System component at the time of bidding? Will Canada confirm that missing information in this section will not result in the bidder being found non-responsive?	The list has been edited to avoid gaps from the bidders (Refer to item 11 of this amendment). Canada acknowledges that not all components of the AM system will be fully defined at the time of bid closing. Canada is asking for general model numbers without exact part numbers. The evaluation process also allows Canada to seek clarification, as required, without immediately disqualifying bidders (refer to RFP article 4.1.1 Phased Bid Compliance Process for details).

372	“Annex P – Engineering Team (M17) requires the bidder to provide “one example of a Classification Society Approved vessel integration and installation package” spanning 5 specific criteria. Would it be acceptable for Bidders to provide multiple Classification Society Approved packages, provided that collectively the evidence meets the itemized requirements listed for these mandatory criteria?” The rationale behind our question is that we have projects that meet the criteria but given the ambiguity around what evidence needs to be submitted we want to make sure that we submit the project for which we have the best evidence possible.	A bidder can submit up to two complete packages of a Classification Society Approved vessel integration and installation package.
373	Can we request the following document please. 287478 CCGS Terry Fox Noise Monitoring Report, NL, March 5, 2021	The document is added to TDP Update 22.05.13. Refer to Item 3 of this Amendment.
374	GR 07, section 6.7. ICE TRIALS Paragraph 6.7.1.9 states an ice trial period is to be assumed as 1 to 15 November 2024 for planning purposes, however, as the Vessel Work Period is now confirmed to end 16 April 2025, what should the bidder assume for the Ice Trials period now?	~~For planning purposes, assume the dates from June 22 to July 5, 2025.~~ ~~Refer to Item 10 of this Amendmen~~t. ***Refer to the response in Amendment 36, question 412, and to Amendment 36 item 2 (edits to the SOW).***
375	Revison 1 of the Pricing Data Sheet includes now 2 lines for the Engineering costs, one for pre-PDR work, and one for pre-CDR work. Where should we indicate the engineering costs post CDR, for example Production Engineering, 3D modelling efforts?	The 2 separate lines have been combined as one total for PDR and CDR preparation work. Refer to the REV 2 version of the PDS for edits (PDS announced in item 2 of this amendment).
AMENDMENT 032 - ref 376 to 395		
376	Reference Part B SOW item 18.1, section 3.3.5.2 b) can CCG please confirm that the Navigation Bridge area is the area internal to the navigation bridge and excludes the bridge wings, external areas accessible through the spray doors and external access passageway to the bridge front and bridge aft windows.	Yes, CCG confirms that the Navigation Bridge area is the area internal to the navigation bridge and excludes the bridge wings, external areas accessible through the spray doors and external access passageway to the bridge front and bridge aft windows.

377	SOW ITEM 16.10: Section 5.1.1.1 h) states that the following drawings must be updated to reflect the final as-fitted arrangement. 2 drawings do not seem to be relevant to this SOW item. Could Canada please confirm? - Drawing #71-01-01 / Diagram of Central FW and SW Circulating Systems - Drawing 71-01-06 / Arrangement of FW Circulating System	The noted drawings must be updated to reflect relocation of the fresh water expansion tank, refer to section 3.4.3 and related clauses. Also, these drawings must be updated under SOW 12.1, refer to sections 3.2.12, 3.11.3.4, 5.1.1.1, reference document package 12.1-11 and response to question 234.
378	SOW ITEM 15.8: Section 3.3.2.1 - Transfer Pumps - "Piping modifications must not be required to accommodate the new pump units" but the new pump units are specifically called out in the SOW. If the pump specified by Canada is not a drop in replacement (which seems likely given that it comes from a different manufacturer) would local piping modifications be acceptable?	The specified pumps (part of RFP Annex U no-substitute list) should not require piping modifications. Pricing within the bid submission should be determined as such.
379	Question ref 174: Several drawings in the TDP are PDFs that appear to have been generated from AutoCAD files, but the Drawing Index only lists PDF as their format. Examples include the Tank Capacity Plan T131027001R8, Lifesaving Plan 78-1003, Lube Oil System Diagram 71-03-01, all MM692xxx series electronic drawings, and most drawings of proposed modifications prepared by third parties under contract to Canada. Noting Canada's previous response to question 174, we request that Canada identify the drawings in the TDP that will be provided to the contractor in AutoCAD format following contract award. Without this information, bidders must assume that all PDF drawings need to be regenerated in useable CAD format, which will increase offered prices.	•Three drawings noted in the question – Capacity Plan, Lifesaving Plan, LO System Diagram were made available 22.05.13 update. •All referenced MM692xxx drawings will be made available after award. •Third party drawings will not be made available in ACAD.

380	GR 07, section 6.7. ICE TRIALS 6.7.1.1. The Contractor must arrange for and complete vessel sea trials in ice covered waters. Question: Ice covered waters exist closer than Iqaluit, Nunavut, CANADA, could we consider Ice covered waters closer to the Contractor shipyard?	~~The shipyard portion of the VLE is scheduled for completion in April 2025. At that time, ice is not anticipated to be available south of Iqaluit. Bidders are to bid on performing the trials near Iqaluit. If the schedule changes, adjustments will be made. See the response to question ref 381.~~ ***Refer to the response in Amendment 36, question 412, and to Amendment 36 item 2 (edits to the SOW).***
381	GR 07, section 6.7. ICE TRIALS 6.7.1.3. Ice trials must involve FSR's from all principal machinery OEMs (main engines, clutches, gear boxes, propulsion control, electrical, CCAMS). FSR's must be equipped for and capable of monitoring and adjusting all vessel propulsion and control systems to optimize all integrated systems to achieve the most effective and reliable ice breaking performance possible. Question: Does this include SSSI, all OEM's, and all FSR's on the project? Is CANADA providing living quarters and meals aboard the vessel during the Ice trials? Is the OEM's expected to provide unit price per day as well as FSR's for the Ice Trail period?	~~The vessel work will be completed in the Spring 2025, so the only ice present will be in the North.~~ ~~The Contractor must determine which FSRs to provide, recognizing that there is limited accommodation on the vessel; a maximum of 5 berths is available for the Contractor's determined ice trials participants.~~ ~~The Contractor must include for a period of 10 days (at 8 hours per day), and for 5 individuals:~~ ~~1) the daily cost of any required FSRs;~~ ~~2) the cost of travel to and from St John's, NL; and~~ ~~3) accommodation and living expenses (assuming St John's, NL rates).~~ ~~Any additional travel required to or from the actual ice trial area will be covered by PWGSC 1379, as well as any supported increase or decrease in costs for accommodations and living expenses.~~ ~~Refer to item 2 of this amendment for related SOW edits.~~ ~~This Cost is to be included on PDS (pricing data sheet) line referenced 6.7.1.10 (see snippet).~~

GR 07 QUALITY CONTROL, INSPECTIONS, TESTS AND TRIALS								
All material, equipment and labour to complete the requirement of this sub-section, that is not covered by the line items listed below, for this sub-section		$ -	$ -	$ -	$ -			
6.7.1.10, 6.7.1.3, AMD 032, question ref 381	*Cost and Unit price per day for provision of the ice trials personnel; include for a period of 10 days (at 8 hours per day), and for 5 individuals: 1) the daily cost of any required FSRs; 2) the cost of travel to and from St John's, NL; and 3) accommodation and living expenses (assuming St John's, NL rates). Any additional travel required to or from the actual ice trial area will be covered by PWGSC 1379, as well as any supported increase or decrease in costs for accommodations and living expenses.*	*This line is for costing and unit price entry; the Bidder should include this cost in the line item presented under the title header, above the GR 07 QUALITY CONTROL, INSPECTIONS, TESTS AND TRIALS.*					10	day of Ice Trials personnel $

		Refer to the response in Amendment 36, question 412, and to Amendment 36 item 2 (edits to the SOW).

382	GR 07, section 6.7. ICE TRIALS 6.7.1.7. On completion of ice trials, the Contractor must arrange for an underwater video inspection of the vessel. Question: Can this be an allowance as the duration and date of underwater video inspection is not known?	~~The requirement for the underwater video is deleted. CCG will provide an ROV and operator to conduct this survey.~~ ~~Refer to item 2 of this amendment for related SOW modification.~~ ***Refer to the response in Amendment 36, question 412, and to Amendment 36 item 2 (edits to the SOW).***
383	GR 07, section 6.7. ICE TRIALS 6.7.1.10. The Contractor must quote separately, a unit price per day for provision of the Ice Trials personnel for adjustment purposes. Question: This cost includes flying to meet vessel, housing, meals of all contractor staff and OEM's and FSR's contracted by the shipyard?	~~See the response to question ref 381.~~ ***Refer to the response in Amendment 36, question 412, and to Amendment 36 item 2 (edits to the SOW).***
384	GR 07, section 6.7. ICE TRIALS 6.7.1.11. The Contractor must be responsible for coordinating and arranging all participants other than Canada's staff. Question: Does the unit rate ONLY include flying to Nunavut CANADA plus 8 hours per day?	~~See the response to question ref 381.~~ ***Refer to the response in Amendment 36, question 412, and to Amendment 36 item 2 (edits to the SOW).***
385	GR 07, section 6.7. ICE TRIALS 6.7.1.12. The Contractor must attend the Ice Trials. Question: How many contractor personnel are required to be onboard for Ice trails, or can an allowance be provided?	~~See the response to question ref 381.~~ ***Refer to the response in Amendment 36, question 412, and to Amendment 36 item 2 (edits to the SOW).***
386	SOW, Part A, GR 02, Section 1 provides additional environmental condition requirements which in some cases are higher than the requirements defined in each individual equipment section. Can you please confirm whether these conditions only apply to transit cases (equipment stowed and non-operational) and whether all new equipment has to adhere to the most stringent requirements?	The environmental conditions in SOW, Part A, must be met at all times (when operational or non-operational), and meet any additional environmental requirements stated by the Manufacturer.. If there is a discrepancy between SOW, Part A GR 02 and a condition in a specific SOW item, then the most stringent condition must be met.

387	SOW, Part B, Item 17.12 - Currently the TDP contains a feasibility study for installation of the towing pin, but no study for the shark jaw was supplied. With Canada share this study prior to bid closing?	No such study was conducted..
388	SOW, Part B, Item 17.12 - Will the 3D model created for tow pin/ shark jaw analysis be supplied?	The 3D model was added to TDP Update 22.05.13.
389	SOW, Part B, Item 17.12 - Please provide a typical towing procedure for gear set-up. With the stag horns on the rails used to restrain the tow wire, it appears that the wire it not restricted from hitting the crane's hydraulic cylinder. Would you be able to clarify the procedure for towing, please?	No towing procedure is available. The bidders must price, as specified.
390	SOW, Part B, Item 17.12 - Where is the control panel to be located?	The panel is to be located on the aft end of the wheelhouse, in the same area as the winch controls. The location to be approved by the technical authority.
391	SOW, Part B, Item 17.12 - Do you require preliminary drawings of crash rail modifications as part of bid support?	No, they are not required.
392	SOW, Part B, Item 17.12 - Regarding response 319 to 17.12 – the last sentence states “it remains the contractors responsibility to deliver a fully class approved installation in all regards.” Typical Class processes include Design Approval (DAD), Fabrication Oversight (With certificate and stamp applied to the structure) and Final Approval after FAT Will Canada require the vendor to share Class fabrication oversight? This is particularly potent as Machinery built in North America under AWS and CWB rules which do not meet the standard welding and NDT requirements of Class. Can the less stringent rules such as AWS or CWB be incorporated into the work?	The Contractor must meet all the requirements of Class.

393	SOW, Part B, Item 17.1 - PSPC response 159 Canada appear to be backing away from an established design, opening the door to a manufacturer who has not previously built a crane with class compliance in this frame size. There is nothing custom about this crane, it is merely a selection of equipment used in various configuration. The term “custom” would only apply to the selection of peripheral devices on standard crane frames. We do have crane designs in prototype version which are in field testing but until the 5 year inspections are done, the results are unproven. Does Canada maintain the crane must be in current production of its load bearing frame size (structure) as a minimum and how will Canada establish confidence the design offered is proven as there is no mandatory requirement to share production data.	The crane must be based on a crane in current prooduction, at its load bearing frame size. The crane may require customization to meet the requirements of the SOW.
394	SOW, Part B, Item 17.1– PSPC response 159, Canada responded that the crane must be “a similar” crane. Please define similar.	A crane of comparable size, lift capacity, boom extension, and Class certification will be considered 'similar'.
395	SOW, Part B, Item 17.1 – In section 3.6.1.4 there is a requirement for the FAT to be signed by Class and in Section 4.2.1.2 it is stipulated that all capabilities of the crane be demonstrated . The test stand for this size crane is in high demand and may affect schedule, can a partial FAT be completed, or do all specifications need to be fully to Class and client prior to Factory departure?	The Contractor will be fully responsible to deliver an installed crane that meets the requirement of the SOW. The crane's capabilities must be demonstrared and accepted by Class prior to installation on the vessel.
AMENDMENT 033- ref 396 to 398		

396	The indices proposed by Canada in Amendment 28 for Economic Price Adjustment do not cover the risk of commodity price volatility, particularly around oils, steel, copper, etc. This is a high risk as Canada are asking for 90% capacity for all bulk oils to be supplied by the Contractor and a significant amount of steel and electrical cabling is also to be provided. (1) Will Canada consider using the Raw Materials Pricing Index (Table 18-10-0268-01 Raw materials price index, monthly) to adjust these elements in the same way as the overall pricing EPA? (2) Furthermore, will Canada extend the EPA across all spec items in Rev 2 of the PDS, not just equipment items shown in the Annex H Appendix 1 example provided?	(1) Canada proposes using the Industrial product price index (Table 8-10-0265-01, updated monthly) to adjust these elements (steel, electrical cabling, copper piping, lubricants, fuel), instead of the Raw Materials Pricing Index (Table 18-10-0268-01,updated monthly). The awarded Contractor will purchase these elements from secondary processors, who further refine and/or fabricate primary raw material products that they purchase from primary suppliers. An increase in primary raw processing costs directly affects secondary product processing costs, thus affecting the Industrial Product Price Index. (2) Canada has expanded the EPA Table across the SOW items that include the elements noted in the question; steel, electrical cabling, copper piping, lubricants, and fuel. The forms are presented in a file (ANNEX H_Terry Fox App 1 ECON Forms ENG); refer to Item 2 of this amendment. This file and the pricing data sheet file (ANNEX H_Terry Fox_ ENG_REV 2) should be kept in the same electronic folder; the original file names must be kept. Refer to items 3 and 4 of this amendment for edits to the RFP.

397	We have reviewed the RFP format and the RFP Addendum Bullet 2 and 3. It is noted that the Stats Canada table 18-10-0265-01 is a North American Biased table, drawing references from North American Manufacturing. The table specifically excludes the impacts of Capital Budget and transportation beyond the factory gate. Because this table does not address the Supply and demand aspect of sub-component purchasing in today's marketplace. We have reviewed the table with sample benchmarks from previous projects and find the table does not represent the actual escalations currently occurring. The RFP format requires contractor to establish Fixed Firm Price which will be contractually sealed when the Contract is signed. This will be months after Tender is submitted to Canada. Executing Engineering during the SOW will eventually establish a suitable package that the Contractor can purchase from an OEM. Any changes that were not in the original specification requirements would be captured during this process, however, supply Chain escalations are currently frequent and absurdly high, meaning Fixed Firm Pricing to PSPC at the point of initial quotation will have to carry an enormous buffer. A) Can Canada consider a mechanism such as making the mechanical packages of this RFP an "Option" such that once the engineering proves itself and is acceptable to PSPC, Canada may Exercise the Option. This would reduce risk and would allow the price to be refreshed and thus the price overall price can be reduced. B) Can Canada direct RFP Proponents to a mechanism in this RFP that defines a method to allow the Proponent to transparently share the risk with Canada?	A) Canada is not open to changing the mechanism. The mechanical package will not be an option. The resulting contract will be determined using a fixed firm price, subject to escalation, where identified. Refer, also, to question ref 396. B) The economic price adjustment will be based on the prices of the identified equipment/purchases at bid close and adjusted at the time of purchase using the identified indices. Shipping or transportation costs for Annex H Milestones (items 1 to 30 listed in Annex H Appendix 2 Milestones, Rev2) will not be required to be included in the evaluation price. These costs will be dealt with using the PWGSC 1379 process. Refer to item 5 of this amendment for edits to the RFP.
398	When downloading files added to the TDP mentioned in Amendment 31, the Section 17 file is in a compressed file format that we are unable to open. Is it possible to get it in a .ZIP version?	The file in Section 17 is a 3D model file (.scdoc for SpaceClaim software). The 3D model "T013-CCGS Terry Fox Partial Geometry Rhino 3D Model.3dm" file (included in TDP Update 22.01.18, General Requirements/Documents) can, alternatively, be used.
AMENDMENT 034- ref 399 to 408		

399	With respect to the Question 386 Answer: “If there is a discrepancy between SOW, Part A GR 02 and a condition in a specific SOW item, then the most stringent condition must be met." e) Vessel inclination of up to 35 degrees roll on either side, with a cycle frequency of 10 seconds, and 10 degrees pitch with a cycle frequency of 5 seconds and maximum linear acceleration of 1.0g f) Permanent list of 22.5 degrees port or starboard, and permanent trim of 10 degrees fore and aft We believe that the response is tailored to propulsion, tanks and mechanical systems. We do not believe that a Crane (such as 17.1, 17.6) or mooring winches would be designed to operate in sea state 6 at 22.5 degrees in accordance with statement in GR 02 1.1.1.1. d), e) and f). Please review the question, considering lifting appliances and confirm / alter the response.	The requirements of GR 02, section 1.1, General Conditions, must apply to all equipment and material required to allow the vessel to operate safely at sea, per the conditions defined under this section (GR 02, 1.1). In the case of the crane defined in SOW 17.1, the crane is not expected to be operational under the conditions defined by GR 02, section 1.1. Environmental conditions under which the crane must operate are defined in SOW 17.1 section 3.3.9.1 and 3.3.9.2. When stowed and secured, the crane defined in SOW 17.1 must withstand conditions defined by SOW 17.1, section 3.3.9.4 and/or conditions defined by GR 02, section 1.1. The more stringent of these requirements must apply. Response to quesiton 293 must apply to the crane defined in SOW 17.1 (angle of heel and trim under which crane must operate). The crane defined in SOW 17.6 does not need to operate in all conditions defined by GR 02 but must withstand such conditions when stowed and secured. The outside air temperature range defined in GR 02 must apply. Mooring winches defined in SOW 17.5 must be capable of developing and maintaining rated pull capacity under all environmental conditions defined in GR 02, section 1.1.
400	Regarding the response to Question 395, We agree the Contractor is fully responsible. Please be clear on the Cranes' capacities, must they be fully demonstrated during FAT.	The bid cost for SOW 17.1 must include factory acceptance testing that is both acceptable to Class and that demonstrates all crane functions at a minimum of rated safe working load.

401	The following question has been reformulated: We have the following question/request for clarification regarding Amendment 29: Are parties identified on the Allowable Party or Non-Allowable list only potential Bidders for the Terry Fox VLE?	No. Please refer to Amendments 025 and 029, in particular, section 2.1, subsections 4 and 5 of the RFP, as amended.
402	The following question has been reformulated from written representations submitted in response to Amendment 025 and 029. It is presented to provide information to all bidders: Can Canada provide images of the Main Switch Board?	CCG Images of the Main Switch Board sections 1 to 8 are provided in a the latest TDP Update (refer to item 2 of this amendment). These images support the content of drawings that were previously provided in TDP Update 21.12.20.
403	The following question has been reformulated from written representations submitted in response to Amendment 025 and 029. It is presented to provide information to all bidders: Can Canada make measurements available for the new doors and backplates of the Main Switch Board to all bidders?	These measurements can be extracted from the drawings provided in TDP 21.12.20.
404	The following question has been reformulated from written representations submitted in response to Amendment 025 and 029. It is presented to provide information to all bidders: Why was IGBT technology used versus newer technology such as IGCT (for the Power bridge)?	CCG included the IGBT requirement as it is current, proven technology used in power conversion. Also, products with IGBT modules are offered by many manufacturers of power conversion equipment.
405	The following question has been reformulated from written representations submitted in response to Amendment 025 and 029. It is presented to provide information to all bidders: What is the rationale for selecting 460V for the propulsion alternators and 750V for the DC bus?	The voltages in question (460V and 750V) were originally shown in Figure 1 of section 13.1 and intended, only, for illustrative purposes. Figure 1 was updated by CCG in amendment 018; the references to AC and DC voltages were removed. The voltages for the power bridge were clarified in the response to Question 56 of Amendment 010.

406	The following question has been reformulated from written representations submitted in response to Amendment 025 and 029. It is presented to provide information to all bidders: Does the TDP contain the latest electrical studies (short circuit analysis, load study) that must be updated per the contract Work conducted during the VLE?	Yes. The most recent studies completed by CCG were included in the TDP.
407	The following question has been reformulated from written representations submitted in response to Amendment 025 and 029. It is presented to provide information to all bidders: Why did CCG include the use of "PT Power Transformers" versus protective relays that read primary voltages directly without intermediate components?	The use of PTs (Potential Transformers) to step down the bus voltage of 460V to 120V for measuring and protective devices is a CCG operational requirement for inter-operability between vessels; recently built CCG vessels are still equipped with PTs.
408	Regarding the pre-arrival sea trials (GR 07): Section 2.7.3 of the RFP states: “The vessel will be unmanned from the Vessel Work Period (VWP) commencement date up to approximately one month prior to sea trials…” SOW Part A, GR 07, 2.1.1.9 states: “The Pre-Arrival Sea Trial must be completed between October 15 and October 31, 2023 and must be conducted with the vessel available out of St. John’s Newfoundland.” The dates specified for the trials fall within the Vessel Work Period. Assuming that the vessel must be manned for the pre-arrival sea trials, should they not be concluded prior to the VWP? It also seems logical to consider the time required to deliver the vessel to Contractor’s facility before the VWP commencement.	The pre-arrival sea trials will be conducted at the awarded shipyard site, just prior to the start of the Vessel Work Period. Refer to item 5 of this amendment for related edits.
AMENDMENT 035 ref 409 to 410		
409	Can you extend the closing date by one month?	Canada will extend the bid closing date by 4 weeks, to July 12, 2022.

410	The RFP section 6 updates regarding Economic Price and Exchange Rate Adjustments do not cover professional services. Would it be possible to add Professional Services in Annex H Appendix 1 and provide their respective index?	No, an Index for Professional Services will not be added to the Economic Price Adjustments and Exchange Rate Adjustments.
AMENDMENT 036 ref 411 to 418		
411	How does the bidding process for the crane work? Do we have to send a proposal to you or other shipyards?	All information regarding the bidding process for the Terry Fox VLE, including the crane is at buyandsell.gc.ca with the following solicitation number: F7049-200041/B. Do not send your proposal to Canada. Send your proposal to those who have requested the information.

412	"Q&A 380 to 385 refer to the post-refit ice trials. Amendment 32 notes that only 5 berths will be available for Contractor participants, and a total time onboard is expected to be 10 days, including (presumably) sailing time from St. John's to and from northern Baffin Bay. This level of participation and timeframe appear to be completely incompatible with SOW Part A, as follows: a)GR07 6.7 requires that at least two of the ice trials participants meet the very specialized requirements of 6.7.1.4 for "a service provider experienced in.. .. strain gauge alignment" and 6.7.1.8 for "A noise level assessment". The Contractor is also required to be aboard, leaving a maximum of two berths for all other personnel. b)GR01 1.2.1.3.m requires "testing of all new hardware and systems, and the vessel itself, at sea both in open and ice covered waters". This appears to require a full repeat of all sea trials activities while the vessel is actually in ice. In light of this, will Canada please confirm that: 1.All work required to define ice conditions during the trials, including on-ice sampling, will be undertaken by Canada, and suitably processed results provided to the Contractor; 2.Trials in ice will be extended as necessary under the 1379 process to allow sufficient time to address GR01 1.2.1.3.m; 3.Operation of hardware and systems will in general be undertaken by ship staff, with remote support from OEMs; 4.Support for the bubbler system trials will be arranged separately as part of the separate supply contract for this system."	An allowance of $300,000 for the total cost of the ice trials will be added to the Pricing Data Sheet (PDS rev 3 to come; refer to item 3 of this amendment). These trials will be carried out during the one year warranty period after the vessel's delivery. The final price will be adjusted (PWGSC 1379 process) upon determination of the site for the trials, and the time required for their completion. Refer to item 2 of this amendment for related SOW edits.

413	A) The noise report by Pinchin Ltd was provided as part of the TDP update on 13 May. We note that this directly contradicts the statement made in Amendment 29 on April 28th as part of A 337 that “bidders have been provided with all Terry Fox VLE documentation”. We therefore request again that CCG provides confirmation that all bidders have been provided with all technical documentation, and in particular that all bidders have been provided with all materials generated by companies listed in RFP section 2.1.1 subsection 6. B) As there is no requirement to conduct noise surveys in the pre-refit trials, can bidders take the noise levels from the Pinchin report to define the noise baseline for the VLE? C) If so, is more information available for actual measurement locations, noting the wide variance in (e.g.) engine room noise levels? D) The Pinchin report notes that the survey was undertaken during vessel sea trials. Will Canada please provide copies of the sea trials report; including vessel condition (drafts, etc), environmental conditions and performance data?	A) Yes, the bidders have been provided with all relevant Terry Fox VLE documentation. B) Yes, bidders can use the Pinchin report as a baseline for noise levels. C) The contractor must ensure that the noise level in any machinery space does not exceed 110 dB. D) There was no sea trials report; these conditions are not relevant as the requirement for noise is not to exceed 110 dB at any operational condition.
414	In ANNEX P Mandatory requirements M19d, there’s a requirement for the manufacturer to provide other spare parts (outside IACS spares) within 30 days after order. This request is hard / near impossible to meet. The way it is stated currently it would include engine blocks, crankshafts, complete pumps, automations systems, turbochargers etc. Major non wear parts are typically not kept in service stocks. We would therefore like to request Canada to change the requirement to: Provide all maintenance spare parts, not stored, within 30 days after order.	The mandatory requirement has been modified. Refer to item 6 of this amendment.
415	Can Canada please provide REV2 of the SOW	Yes, SOW REV 2 will be released shortly after the deadline for questions submission (2pm ET on June 14, 2022) for the Q and A period.

416	In response of Q410, Canada responded that "an Index for Professional Services will not be added to the Economic Price Adjustments and Exchange Rate Adjustments". However, Canada already provided such indexed based adjustment on other contracts for similar work (ESS contract as an example). Would therefore Canada reconsider this request?	Canada maintains its original position.
417	Q81, engine sizes. Canada has provided an answer that “for bidding purposes the engines “are to be” (this is interpreted as “shall be”) of certain power range and provide certain power. While the reasoning for this is well understood and will make evaluations easier, it does not necessarily mean that these engine sizes, which will be provided for bidding purposes, are the best option based on the actual operational profiles and may not provide the best life cycle values. Will Canada entertain and/or does Canada have the capacity to evaluate, at this stage, other engine configurations or it prefers to maintain the answer in Q81?	Canada prefers to maintain it's response to Q81.

418	SOW Part A, GR 12, 2.1.1.7 states that in all scenarios – normal operation; Power delivered to propellors must not exceed rated propellor power (defined as 8088 kW, ref: A111582 CPP Propellor, and Part B, Section 12, 3.4.2.5), and Main Engines must not be overloaded. In addition, Part B, Section 12, 3.4.2.9, states that MEs must be capable of 10% overload output for two hours, in each 12 hour period. Further, based on the response to Q81 (Amendment 013), for bidding purposes MEs are to be sized to provide rated propellor power, plus an allowance of 1200kW per side (Port and STBD). Lastly, Part B, Section 12, 3.4.2.10 prohibits engines being de-rated by more than 10% below MCR. Based on the above requirements, the proposed ME sizing will be such that the engines cannot run at 100% MCR simultaneously at any time (because Q81 requires much larger engines than required for rated propellor power). Therefore, would Canada consider revaluating or removing requirement 3.4.2.9, i.e. suggest that standard 110% overload is applied as per class requirements (Part B, Section 12), as it appears to contradict other requirements (not to exceed power/torque to propellor) and may result in proposed engine configurations which are not optimal for the vessel operational profiles (i.e. are bigger) and may prohibit more cost effective and economically viable solutions being proposed (i.e. adverse effect on life cycle costs).	No. Bidders are requested to refer to the response to Q81.
AMENDMENT 037 ref 419 to 422		
419	17.1 FORTY (40) TONNE DECK CRANE REPLACEMENT 3.3.1.4. The crane being proposed must be capable of meeting the following parameters and requirements: d) Crane to be cable of operation, whilst being supplied by shore power. For the operation of the crane during shore power and at sea, are there any combination of motions that are required (hoisting, luffing, slewing etc)? Or can the crane operate one motion at a time?	When operated on ship's electrical supply, all crane functions must be available simultaneously. The requirement for operation on shore power is removed. Refer to item 2 of this amendment for related SOW edits.

420	17.1 FORTY (40) TONNE DECK CRANE REPLACEMENT 3.4.1.6. The crane being offered must be capable of performing the following: a) Recovering a crew barge from either the port or starboard side of the vessel. b) Recovering a fifteen (15) tonne environmental response barge from the port side of the vessel. c) Capable of performing a man lift whilst the vessel is at sea or in harbour. d) Capable of lifting a minimum seventeen (17.0) tonne lift, at an extension of twenty (20) metres. e) Capable of lifting a forty (40.0) tonne lift, at an extension of 8.5 metres. f) Capable of positioning deck loads over the majority of the working area of the deck. g) Loading and discharging of stores, containers, palletized goods and equipment from vessel to shore. There is no mention of any buoying tending requirement for this crane, will buoying tending be required? Will the crane be required to lift d) and e) lifting requirement above in Sea State 4? Or are reduced loads acceptable for Sea State 4?	The crane must be capable of delivering all defined functions at Sea State 4.

421	17.1 FORTY (40) TONNE DECK CRANE REPLACEMENT 2.3.1.1. Existing Crane is: •NOV-BLM 40T Telescoping Crane o Model 40T/8.5M o Weight 24.7 tonnes o Capacity, Fully Extended (20.0 m) 17 tonnes o Capacity Fully Retracted (8.5 m) 40 tonnes o Maximum Overturning Moment 340 tonne-metres The Maximum Overturning Moment 340 tonne-metres is from 40 tonnes @ 8.5 Meter reach. Can you please confirm that the maximum overturning moment with the addition of the boom weight is acceptable and would be greater than 340 tonne-metres?	It is understood that the maximum overturning moment with additional boom weight will be greater than 340 tonne-meters. Crane support structure must be assessed, and modified, if required, to accommodate the increased over turning moment.
422	With reference to Q&A 411 of amendment 036 received yesterday, is it possible to have the coordinates of this crane supplier?	No, bidders must directly contact suppliers.