seaspan SHIPYARDS

SUPPLY CHAIN CONFERENCE

NATIONAL SHIPBUILDING PROGRAM

HALIFAX SEPTEMBER 5TH 2017

- **Presentation Introduction**
- **Housekeeping**
- **Who's been here before?**
- **Schedule of Events**

12:30 – 13:00	Registration
13:00 – 13:30	Introduction and Seaspan Overview
13:30 – 14:30	Program Overview (OFSV, OOSV, JSS)
14:30 – 14:50	Break
14:50 – 16:30	Procurement Presentation & Model Contract Pack
16:30 – 16:45	IRB Presentation
16:45 – 17:00	Q&A

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INTRODUCTION & SEASPAN OVERVIEW

Jamie McKinnon
Manager – Procurement, New Construction
jmckinnon@seaspan.com

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WHO WE ARE

- A privately-owned Canadian integrated marine company, with roots on the West Coast that trace back to 1886
- Nearly 3,000 employees passionately delivering the best marine solutions from the West Coast – safely, efficiently and with care for our customers and communities
- Contributing to a rebirth of Canada's shipbuilding, ship repair and marine industrial sector
- Actively engaged within our communities
- Fostering strong and sustainable relationships with aboriginal communities
- Contributing to the long-term conservation of Canada's marine habitat and the environment
- We are proud to have won the opportunity to build vessels for the Canadian Coast Guard and the Royal Canadian Navy under NSS

SEASPAN: A FULL-SERVICE MARINE PROVIDER

Seaspan Transportation — CEO: Frank Butzelaar

Seaspan Marine

Marine Petrobulk

Seaspan Ferries

Seaspan Shipyards — President & CEO: Brian Carter

Ship Repair, Overhaul, Maintenance: Public ferries, cruise ships, military, Coast Guard, commercial

Shipbuilding: Commercial, BC Ferries, military, Coast Guard

Vancouver Shipyards

Victoria Shipyards

Vancouver Drydock

VICTORIA SHIPYARDS (VSL)

VICTORIA SHIPYARDS (VSL)

Building on Success

Built and delivered 29 Motor Life Boats to CCG

Designed and built 8 Orca Class vessels for the RCN

Ongoing RCN Work

Victoria In-Service Support Contract (VISSC)

Halifax Class Frigate Life Extension (HCM) Program

Upcoming Int'l Work

New Zealand Frigate System Upgrade (FSU)

"Te Kaha" and "Te Mana"

VANCOUVER DRYDOCK (VDC)

VANCOUVER SHIPYARDS (VSY)

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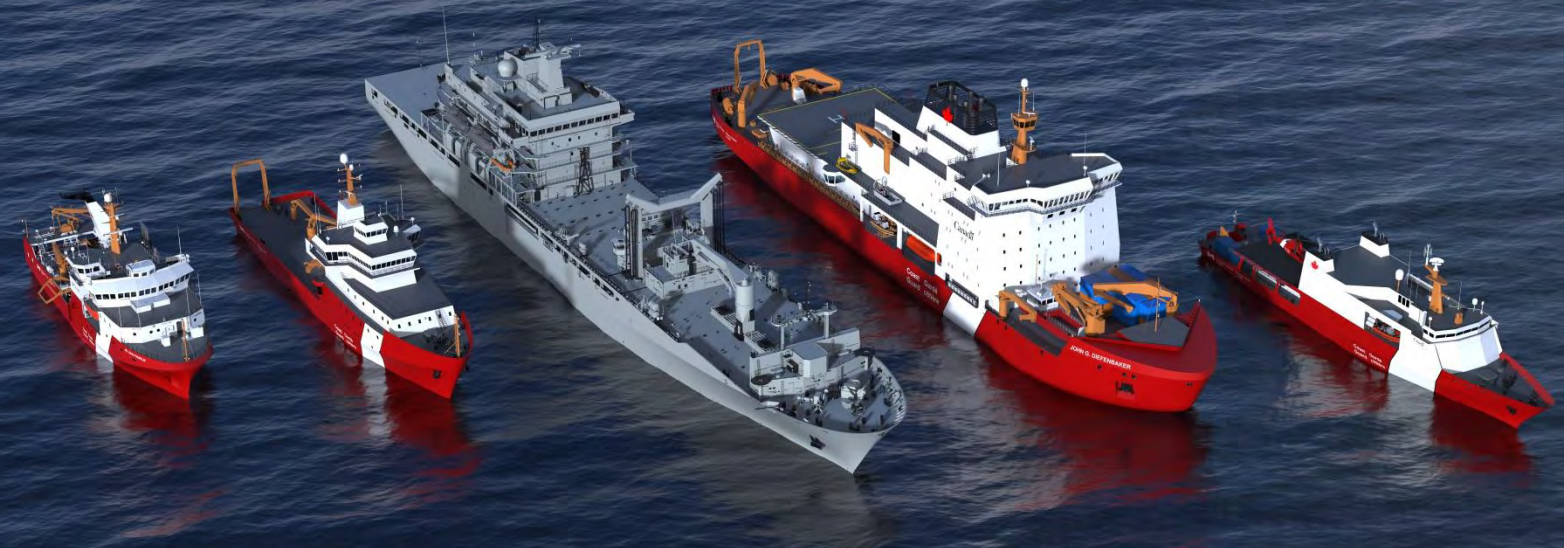
PROUDLY BUILDING SHIPS FOR CANADA'S COAST GUARD AND NAVY



OFSV 3

OFFSHORE FISHERIES SCIENCE VESSELS
Length: 63.4 m
Displaces: 3,212 MT

OOSV 1

OFFSHORE OCEANOGRAPHIC SCIENCE VESSEL
Length: 85.9 m
Displaces: 4,490 MT

JSS 2

JOINT SUPPORT SHIPS
Length: 173.7 m
Displaces: 20,720 MT

POLAR 1

POLAR CLASS ICEBREAKER
Length: 150.1 m
Displaces: 23,700 MT

OPV / MEMTV

OFFSHORE PATROL VESSELS & MEDIUM ENDURANCE MULTI TASKED VESSELS

UP TO **10** VESSELS

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NSS IMPACTS TO THE CANADIAN ECONOMY 2012-2022

2,300

FTEs

One FTE is equivalent to one person-year of employment

$600M

Annual Output

Total gross value of goods and services generated

$290M

Annual GDP

Net value of goods or services over the cost of inputs used to produce them

Source: MNP Non-Combat Economic Impact Study 2016

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PROGRAM OVERVIEW

OFFSHORE FISHERIES SCIENCE VESSEL (OFSV)

Jamie McKinnon
Manager – Procurement, New Construction
jmckinnon@seaspan.com

WHY OFSV?

To Replace:

CCGS WE Ricker
(1978 - 2013)

CCGS Alfred Needler
(1982 - 2014)

CCGS Teleost
(1988 - 2014)

Primary Role = Fisheries Science

Secondary Roles = Mission Readiness, Maritime Security, Aids to Navigation, Environmental Response, and Search & Rescue

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SHIP SPECIFICATIONS

Length:	63 m
Breadth:	16 m
Draft:	6 m
Tonnage	3,247
Speed:	12 knots
Crew:	> 21
Range:	6,400 nm
Endurance:	31 Days
Design Life:	30 Years


Canada
CCGS OFSV
Coast Garde
Guard Côtière

OFSV 1: SIR JOHN FRANKLIN BREAKOUT

KEY STAKEHOLDERS

Canada: (CCG, PSPC, ISEDC)

Tier 1 Sub-Contractors

Vard Marine	Platform Design Services Provider
Thales Canada	Electronic Systems Integrator (Design & Supply)
Computer Science Canada	Integrated Logistics Support
Lloyds Register	Classification Society
Bronswerk Marine	HVAC (Design, Supply & Install)
Joiner Systems	Joinery (Design, Supply & Install)
L3 Communications MAPPs	Propulsion Integrator
Techsol Marine	SCMS

DIRECT-BUY PROCUREMENT STATUS

- Long Lead Items for the OFSV Program have been procured.

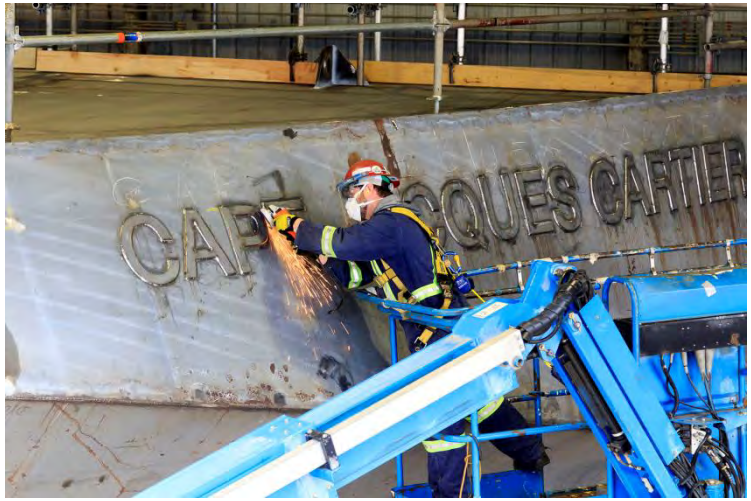
Examples of Long Lead Item Equipment	
Anchor Handling Equipment	Distribution Panels / Motor Control
Bow Thruster / Propulsion Systems	Electrical Switchboards
Boat & Handling Equipment	Fire Extinguishing (FM200) System
Closure Systems (Incl. Shipside Door)	Refrigeration Equipment (Incl. Science Freezers)
Diesel Generators	Trawl Deck Machinery Equipment

- As the first vessel is nearing launch, the following “Field Run” components are those remaining from a Procurement standpoint:

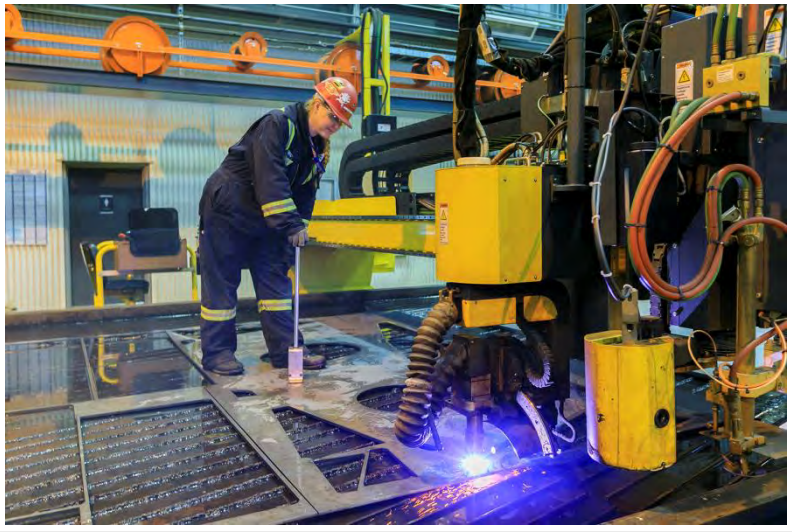
Examples of Long Lead Item Equipment	
Anchor Handling Equipment	Distribution Panels / Motor Control
Bow Thruster / Propulsion Systems	Electrical Switchboards
Boat & Handling Equipment	Fire Extinguishing (FM200) System

CONSTRUCTION PROGRESS – OFSV 1

CONSTRUCTION PROGRESS – OFSV 2



CONSTRUCTION PROGRESS – OFSV 3



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PROGRAM OVERVIEW

OFFSHORE OCEANOGRAPHIC SCIENCE VESSEL (OOSV)

Jo-Anne Thomas
Supply Chain Lead - OOSV
jthomas@seaspan.com

WHY OOSV?

To replace:

CCGS Hudson

Built – 1963
Length – 90.4m
Displacement – 3,740 tonnes
Range – 23,100 nm
Endurance – 105 days

Primary Role = Oceanographic Science

Secondary Roles = Mission Readiness, Environmental Response, SAR, Aids to Navigation & Maritime Security

SHIP SPECIFICATIONS

- LR 100A1 Oceanographic Research Vessel, IACS PC6 Ice Class
- Length 86 m
- Beam 16m
- Draught 6m
- Displacement 4,500 tonnes
- Diesel electric with Azimuthing Thrusters and single bow thruster
- Installed power 4,000 KW
- Speed 13 knots
- Range 12,000 nm @ 12 Knots
- Endurance of 84 days (resupply of perishables after 42 days)
- Accommodation for 56
- Fuel capacity 650 m3
- Fresh water 100 m3
- Water ballast 650 m3

OOSV UPDATE

- **Basic Design Assessment - *complete***
  - Assessment of the contract design package provided by Canada is complete
  - Output of the design assessment informs the focus of work during the follow-on phases
- **Basic Design Development - *underway***
  - Selection of propulsion and electrical system, HVAC, principal auxiliaries and major equipment that drive space and power requirements
- **Long Lead Items – *to begin Q4 2017***
  - Shipyard technical procurement specifications will be drafted beginning in Oct 17; RFP's to follow
- **Functional / Production Design**
  - System design complete during FD
  - Detailed design, 3D production model complete during PD
- **Build**
  - Negotiations underway with Canada
  - Contract award and start of construction scheduled for 2019
  - Under the Build contract there will be opportunity to supply non-LLI equipment, such as Commercial-off-the-Shelf (COTS) items.

PROCUREMENT STRATEGY DESIGN / BUILD

- The **primary design team** is similar to OFSV, namely:
  - VARD Marine
  - Thales Canada
  - CSC
  - Lloyd's Register

- **Single System Integrators** (SSI) will be engaged to either (a) design, supply & support installation, or (b) design, supply and install
  - HVAC – Proposals received and under evaluation
  - Power Generation & Propulsion – Proposals received and under evaluation
  - Science & Deck Machinery – RFP issued to selected Proponents
  - Outfitting & Furniture – RFP being prepared
  - IPMS – RFP to be issued by Q4 of 2017
  - Aluminum Superstructure – Requests for Interest to be issued by mid-Sept 2017.

- **Installation Subcontracts** will be issued during Production Design for various Project requirements such as Insulation, Pipe flushing etc.

PROCUREMENT STRATEGY EQUIPMENT

- In order to achieve as much design efficiency as possible, and to provide Coast Guard a **level of standardization** between the Science vessels, where appropriate, VSY will integrate equipment common to the OFSV in the OOSV design

- **Single System Integrators** will be responsible for selection and procurement of equipment within their areas of design responsibility. The principle of best value to Canada will be applied to all procurements

- VSY will be responsible for selection and procurement of all other equipment and material. This will be carried out through our **standard competitive bidding process**.

Examples of OOSV Long Lead Items and Materials

Long Lead Items	
Propulsion and Ship Service Generators	Command and Control Systems
Azimuth Drives	Deck Equipment Cranes and A-Frames
Z-Drives and control systems	Anchor windlass
Bow Thruster	Scientific Systems – Sounders, Dynamic Positioning systems, etc.
Science winches and Launch and Recovery System	Various Pumps
Fuel Purifiers	Reverse Osmosis Desalination Plant
Sewage Treatment System	Boat handling equipment
Urea System – Tier III Environmental rules	Refrigeration Systems
Fire Suppression Systems	High Pressure Air System (25,000 psi)
Oily Water Separator	Doors, windows, hatches
Ballast Water Management System	Batteries, Switchboards
Fire Suppression Systems	Hydraulic Systems
Deck Equipment	Steering
Environmental Systems	Waste Management System

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PROGRAM OVERVIEW

JOINT SUPPORT SHIP (JSS)

Judy Blundon
Deputy Program Manager - JSS
jblundon@seaspan.com

VESSEL UPDATE: JOINT SUPPORT SHIPS (JSS)

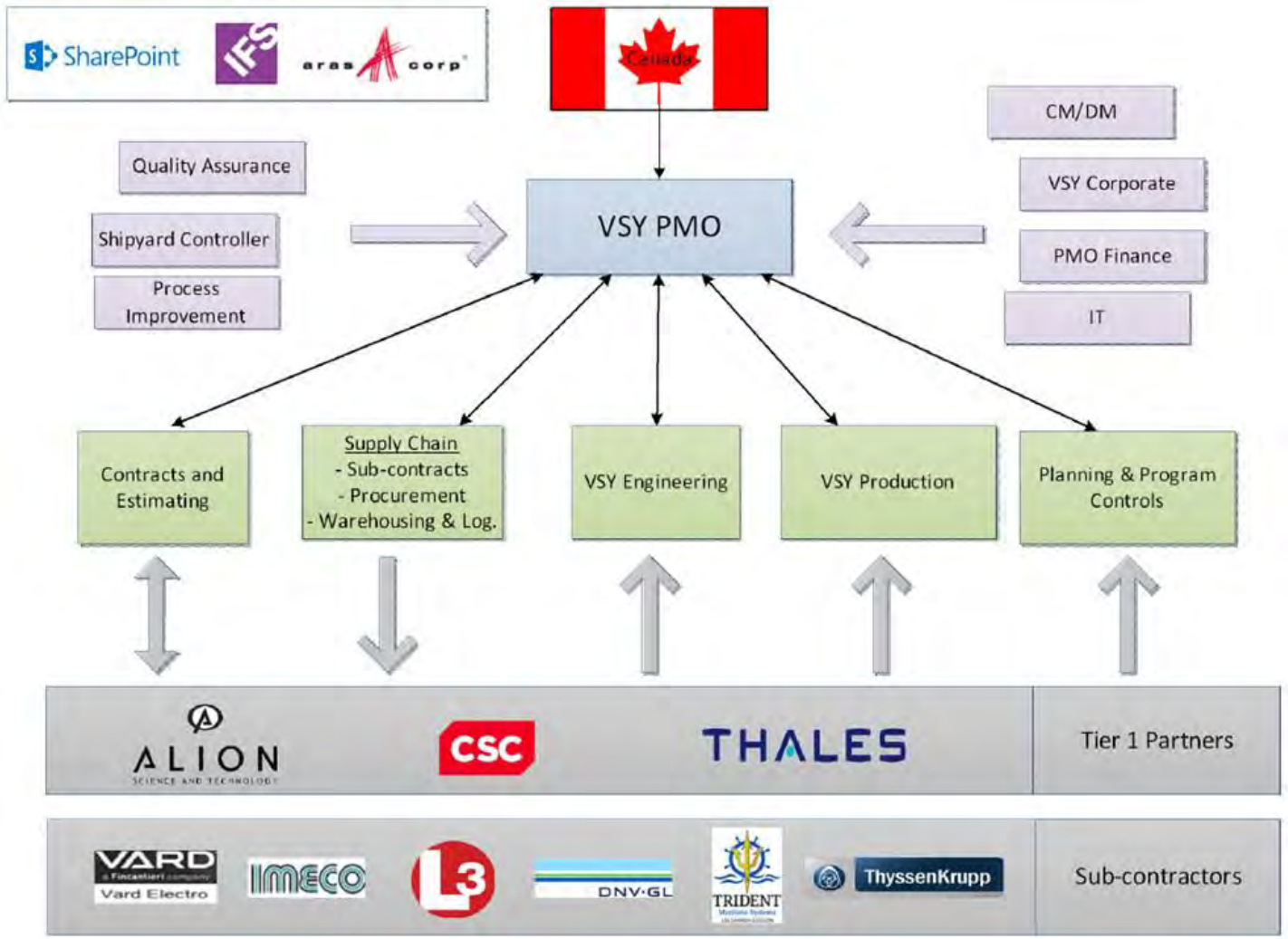
- **WHY JSS?** To Replace: RCN Protecteur Class Replenishment Oilers

- HMCS Protecteur (1969 - 2015)
- Primary Role Core replenishment capability:
- Provision of fuel, ammunition, spare parts, food, and water, and other supplies; modern medical and dental care facilities, including an operating room;
- Repair facilities and expertise to keep helicopters and other equipment functioning;
- Basic self-defence functions

SHIP SPECIFICATIONS

Length:	173.3 m
Breadth:	24 m
Draft:	7.6 m
Displacement:	20,240 tonnes
Speed:	20 knots
Crew:	239
Range:	16,000 km
Endurance:	45 days

KEY STAKEHOLDERS



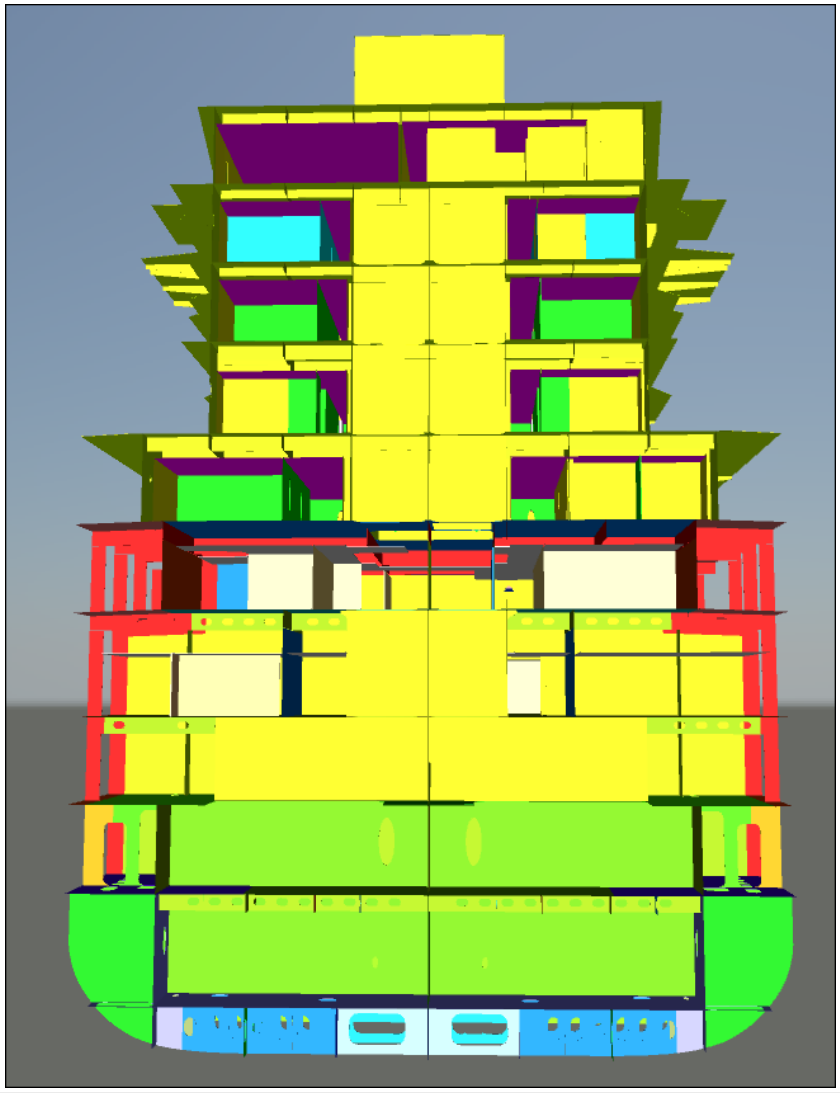
JSS UPDATE

- Initial Design Review was completed Jan 2017
- Basic Design work was completed in Contract Design Completion (CDC) task:
  - System drawing development and submission to Client and Classification Society (DNV-GL) for appraisal
  - Development of Contract Design Specification from Canada-provided Design & Build Specification
- Design team ramped up to over 200 FTEs
- Preliminary Design Review completed in December 2016
- 3D modelling effort is underway

3D Model Work Continues

- Advances in primary structure completed in CDC
- Compartmentalisation completed
- Major plate structural elements captured
- Secondary Structure work underway under Functional Design since December 2016

Cross-section through the Superstructure



JSS UPDATE

- Long Lead Items
  - Shipyard currently sourcing the various long lead items to procure Vendor Furnished Information
  - Propulsion System Integrator selection complete; onboarding expected Fall 2017
  - Canada will seek additional authorities to make commitments to purchase the long lead items in Fall 2017
- Design and Production Engineering (Functional Design & Production Design)
  - Contract awarded Dec 2016
  - Functional Design Task well underway including 3D Modelling activities
  - Production Design will commence in 2018
  - Working towards Critical Design Reviews (CDR)
- Build
  - Negotiations underway with Canada
  - Contract award and start of construction scheduled for 2019
  - Under the Build contract there will be opportunity to supply non-LLI equipment, such as Commercial-off-the-Shelf (COTS) items.

JSS PROJECT PROCUREMENT

- Procurement activities for the JSS began in September 2014 with one of the objectives of developing and delivering to Canada a Material Readiness Report

- The MRR identified:

  - Long Lead Items (LLI)
  - Potential Suppliers
  - Lead times and estimated purchase prices for
  - VFI and LLI acquisition strategy for the Design & Production Engineering (D&PE) phase to support the construction and delivery of the JSS

- Requests for Information (RFI) for LLI were sent out up to obtain:

  - Material lead times
  - Preliminary Final VFI
  - Pricing estimate/indication
  - Classification Society compliance confirmation

- RFPs for LLIs presently being issued

UPDATE ON STATUS OF SELECTION OF LONG LEAD ITEMS

Seaspan will be going to market for the following LLI items in the near future:

1. Hatch covers
2. Scissor Lifts
3. Watertight Doors
4. Sea Rescue Equipment
5. Electrically operated Sliding WT Doors & Hydraulically Operated Side Portal Doors
6. Helicopter Refueling System

EXAMPLE OF JSS LONG LEAD ITEMS AND MATERIALS

Long Lead Items	
Diesel Engines	Miscellaneous System Pumps
Propulsion Shafting and Propeller	Reduction Gears
Replenishment at Sea and Sea Rescue Equipment	Overhead Cranes
Bow Thruster	Lifts and Elevators
Rudder and Steering Gear System	Compressors
Diesel Generators	Fuel Oil Purifier
Anchor Windlass	Waste Management System
Reverse Osmosis Desalination Plant	Command and Control systems
MAFO doors, Aircraft Hangar doors	Visual Landing Aids
Ballast Water Treatment System	Propulsion Gear Boxes
Consumables and Shop Supplies	Helicopter Support Systems
Fire Suppression Systems	Machinery and Auxiliary Equipment (Filters and oil separators)
Doors and Hatches	Mooring winches

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PROCUREMENT OVERVIEW

Jamie McKinnon

Manager – Procurement, New Construction

jmckinnon@seaspan.com

OVERALL PROCUREMENT STRATEGY

- Default position: run a competitive selection based on ‘best value’
- Promote commonality of design and equipment solutions across the NSS Program where permitted by Canada:
  - Reduces technical and schedule risk
  - Permits early collection of verifiable vendor furnished information (VFI)
  - Permits early production of equipment
  - Reduces lifecycle costs
- Use ‘system integrators’ in an Integrated Project Team (IPT) to execute the design and sometimes supply and install (e.g. Thales Canada, Vard Marine, CSC, Alion Canada, Vard Electro Canada, IMECO, Bronswerk, Joiner Systems, Techsol, Hawboldt, L3 MAPPS, etc.)

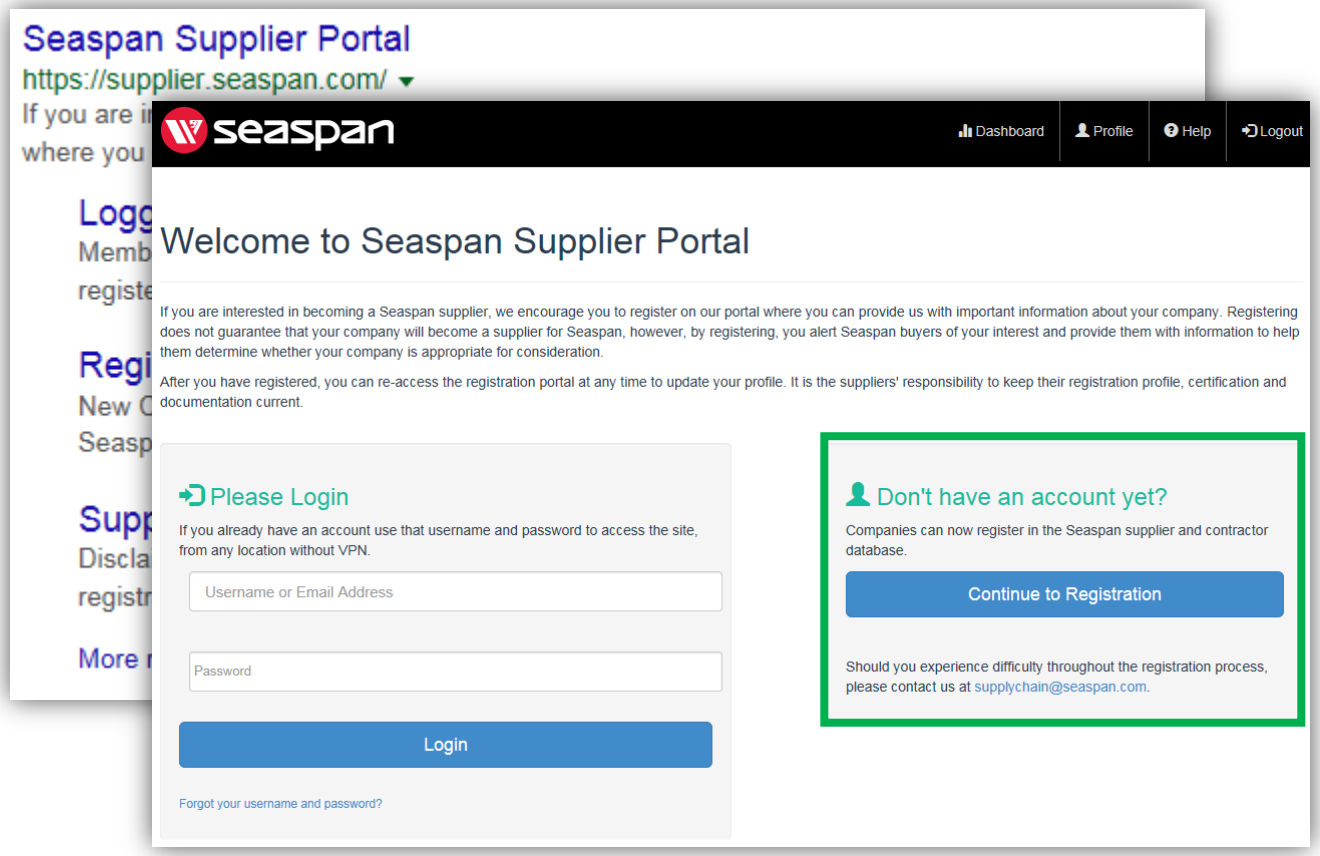
OVERALL PROCUREMENT STRATEGY (CONT.)

- Maximize Canadian content to grow and sustain the marine industry sector by procuring, as often as possible, from current suppliers provided they are:
  - Technically compliant
  - Price competitive
  - Demonstrate performance once under contract
  - Provide high Canadian content
- Accept unsolicited proposals that offer innovative solutions, high Canadian content and competitive pricing
- Significant progress made in the creation and execution of long-term supply and service agreements with local suppliers to leverage favorable pricing and performance, whilst building strategic longstanding relationships.
- Make sure potential suppliers know about upcoming procurement opportunities, know who our existing suppliers and systems integrators are so you can become sub-suppliers to them, and encourage registration on the *Seaspan Supplier Portal*.

HOW CAN YOU GET ONBOARD?

- Register on our Supplier Portal to become an approved supplier to Seaspan. (>2500 suppliers contained with varying degrees of registration completion)
- Become registered under the PWGSC Controlled Goods program (Required for the JSS program)
- Classification Societies for Shipbuilding
  - Material and equipment certification (ABS)
  - Lloyds – Coast Guard
  - DNV GL – Royal Canadian Navy
- Consider becoming ISO Certified

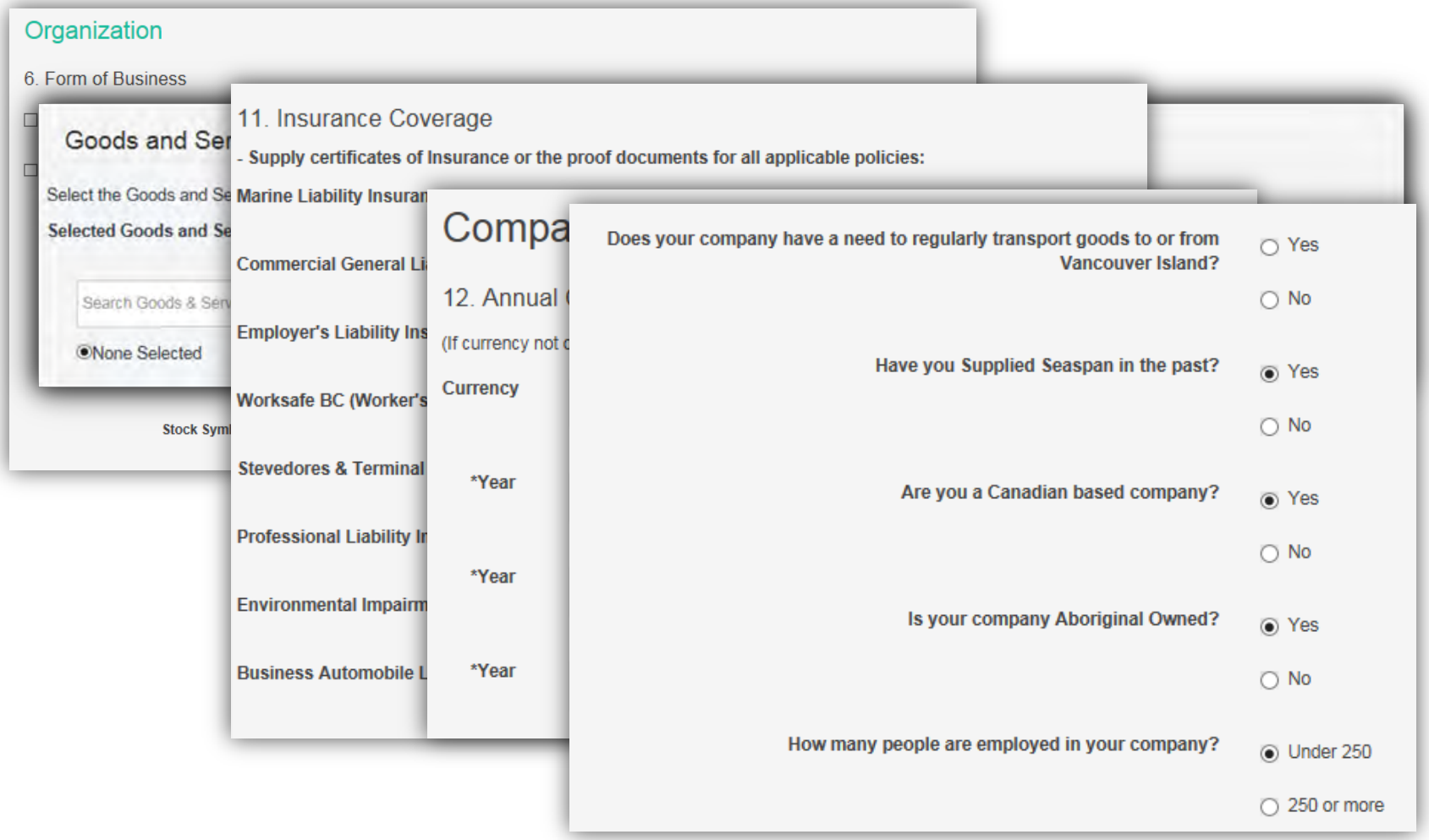
THE SEASPAN SUPPLIER PORTAL



Four Sections:

- Base Information
- QMS
- H&S
- Environmental

BASE INFORMATION QUESTIONNAIRE



QUALITY MANAGEMENT SYSTEMS QUESTIONNAIRE

1. What is the status of your company's QMS?

- ○ No formal QMS
- ○ Established, Documented & Implemented, but not registered
- ○ Experience with Classification Societies (ie: LR/DNV/ABS) ○ System Is Registered & Certified (please provide copy of current ISO 9001 QMS registration certificate)
- ○ Intend to establish a system

2. Please attach all of the following supporting documents or any additional records

QMS Manual	Add Document
QMS Certification	Add Document
Quality Policy	Add Document

3. Will you accept a visit by QA Personnel to review and observe your company processes?

○ Yes ○ No

HEALTH & SAFETY QUESTIONNAIRE

* 2. Is your organization registered under OHSAS 18001 or CORE?

○ OHSAS 18001 ○ CORE ○ Both ○ N/A

Identify and attach any Certificates for the Organizations listed above

+ Attach Document

* 6. Do you track Health and Safety audit documentation?

○ Yes ○ No ○ N/A

* 7. Have you received any Occupational Health & Safety Directives, Sanctions, Citations, Stop Work Orders, or other penalties in the last three years?

○ Yes ○ No ○ N/A

If yes, provide details. Identify and attach documents

+ Attach Document ☐ Not Applicable

* 9. Provide the Labor and Industry Grouping (ex: Worksafe BC Industry Grouping) your company is assigned to.

Please attach a clearance letter stating your membership/coverage as Appendix #

+ Attach Document

Industry Grouping:

ENVIRONMENTAL QUESTIONNAIRE

Please complete this brief questionnaire regarding your organizations' degree of compliance and commitment to environmental issues:

PART A. Environmental Regulatory Compliance

Seaspan ULC (Seaspan) does not intend to do business with any company that does not comply with all applicable regulatory requirements (local, provincial, national and/or international). Therefore any supplier who answers "NO" to any of the Part A Questions 1 – 7 will require further review by Seaspan.

PART B. Environmental Management Systems

PART C. Product Stewardship & Sustainable Practices

Product Stewardship Considerations (1-3 below):

*1. Does your product/service have beneficial environmental attributes? (i.e.,Non-toxic, biodegradable, minimal packaging, recyclable, designed to minimize resource consumption, etc.)

○ Yes ○ No ○ N/A

*2. Does your product have Third Party Product Certification? (i.e., Eco Logo, Green Seal, Energy Star, Forest Stewardship Council (FSC), Ecolabel (EU)

○ Yes ○ No ○ N/A

*3. Will your business accept back expired product(s)?

○ Yes ○ No ○ N/A

APPROVED SUPPLIER STATUS

- **How long does the approval process take?**
  - Five cross functional approvals – 5/10 business days.
- **What happens when I become approved?**
  - A member of the procurement team will be in touch to make you aware of any upcoming RFP activities pertaining to the Goods/Services listed in your profile.
  - Introductory meetings enabled.
  - Assigned a commodity buyer to the account.
- **What if I need to get in contact with someone about my registration?**
  - Please contact one of the following, who will ensure your query is resolved:

Agnes Raj	Senior Procurement Clerk	araj@seaspan.com
Grant Langley	Procurement Specialist	glangley@seaspan.com

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THE MODEL CONTRACT PACK

Jo-Anne Thomas

Supply Chain Lead - OOSV

jthomas@seaspan.com

Before We Begin

- **What this is not**
  - This is NOT restricted to a single Project
  - No controlled data will be disclosed
  - RFPs for the JSS LLI are already on the street
  - RFPs for the OOSV LLI are already on the street
- **What this is**
  - Introduction to Seaspan's Model Contract Pack (the 'Resulting Subcontract')
  - Introduction to Seaspan's Model RFP
  - How to complete your Proposal
- **Evaluation Criteria**
  - Set out in the RFP

Topics

1. Anatomy of the Model Contract Pack (on Seaspan website)

2. Anatomy of the Model RFP (on Seaspan website)

3. Proposals
   - Schedule B's (Requirements)
   - Schedule E (Goods)
   - Price Analysis Sheets
   - Schedule
   - Compliance Matrices
   - Questionnaires

4. Industrial and Regional Benefits

Anatomy of the Model Contract Pack

Anatomy of the Model Contract Pack

Model Contract Pack	
Articles of Agreement	
Schedule A	General Conditions
Schedules B1 to B5	Technical Requirements
Schedule C	Supplier's Solution
Schedules D1 to D3	SOWs, SDRLs and DIDs
Schedule E	Goods and Deliverable Software
Schedule F	Supplier's Schedule
Schedule G1 & G2	Financial Arrangements
Schedule H	Forms
Schedule I	Definitions

Articles of Agreement

- Collates and defines the variables
- Explains the parts of the Subcontract
- Sets out any Special Conditions
- Appendices
  - Appendix A - Describes the structure of the Subcontract
  - Appendix B - Defines the ‘Authorities’ and Representative of the Supplier
  - Appendix C - Provides a ‘High Level Summary of the Statement of Requirements’
  - Appendix D - Defines the documents making up the Subcontract

Articles of Agreement – Collates and defines the variables

Call-Off Instruction Period for the Goods means [* insert number of calendar days];

Call-Off Instruction Period for the Services means [* insert number of calendar days];

Composite Lead Time means [*insert the number of calendar days] (see Schedule E);

Guarantor means [*insert the full legal name of the Supplier's guarantor];

HAT Duration is [*insert number] days (see Appendix C (Supplier's Requirements));

Location of the FAT means [* insert municipal address of the location where the FAT of the Equipment will take place];

Maturity of the Solution means the Supplier's Solution set out in Schedule C meets [* insert numeric value in words] percent ([* insert percentage value] %) of the Purchaser's Technical Requirements;

Performance Bond Value means [* insert $ value];

Point of Pick Up means, with respect to the Goods, the municipal address or addresses from which the Purchaser may pick up the Goods from the Supplier's plant, namely: [* insert Supplier's municipal address];

Representative of the Supplier means [* insert name, title and email address];

SAT Duration is [* insert number] days (see Appendix C (Supplier's Requirements));

Scheduled Ship Delivery Date means [* insert date];

System means the [* insert name] system for the Ship, composed of the Goods set out in Schedule E (as may be amended in accordance with this Subcontract); and

Articles of Agreement – **Explains the parts**

1.1 The Subcontract structure is illustrated in Appendix A (Subcontract Structure and Order of Precedence), namely:

1.1.1 the **Articles of Agreement**, which, together with Appendices A to D inclusive and **Schedule A (General Conditions)**, contain the commercial terms and conditions of the Subcontract;

1.1.2 **Schedule B1 (End User's Requirements, VCRI and Compliance Matrix)**, which sets out the End User's technical and operational requirements relating to the System, Goods and Software Deliverables, together with the Supplier's verification method and compliance statement to each of the End User's performance statements;

1.1.3 **Schedule B2 (Purchaser's Requirements, VCRI and Compliance Matrix)**, which sets out the Purchaser's technical and operational requirements relating to the System, Goods and Software Deliverables, together with the Supplier's verification method and compliance statement to each of the Purchaser's performance statements;

1.1.4 **Schedule B3 (General Technical Requirements, VCRI and Compliance Matrix)**, which sets out the Purchaser's transverse technical requirements relating to the Ship as a whole, together with the Supplier's verification method and compliance statement to each of the Purchaser's general technical requirements;

Articles of Agreement - Structure of the Subcontract

Appendix A
Subcontract Structure and Order of Precedence

			Order of Precedence
Articles of Agreement			
Change Orders			1
Article 14.0 Special Conditions			2
Articles 1.0 to 13.0			2
Appendices			-
A	Subcontract Structure and Order of Precedence		2
B	Purchaser's Authorities		2
C	Supplier's Requirements		19
D	Documents Forming the Subcontract		2
Schedules		Commercial	-
A	General Conditions		3
	Annex A – General Conditions 2030, as amended		6
	Annex B – General Conditions 1031-2, as amended		7
	Annex C – Supplemental General Conditions 4007, as amended		4
	Attachment 1 – Supplemental General Conditions 4003 – Licensed Software, as amended		4
	Attachment 2 – Custom Software, as amended		4
	Annex D – Supplemental General Conditions 1028 (2010-08-16) Ship Construction, as amended		5
	Annex E – IRB Terms and Conditions (if IRB Proposal required)		3
B1	End User's Requirements, VCRI and Compliance Matrix		8
B2	Purchaser's Requirements, VCRI and Compliance Matrix		9
B3	General Technical Requirements, VCRI and Compliance Matrix	Purchaser's Technical Requirements	10
B4	Interface Requirements, VCRI and Compliance Matrix		11
B5	ILS Requirements and Compliance Matrix		12
C	Supplier's Specifications	Supplier's Solution	17
			-
D1	Statement of Work		13
D2	Supplier Data Requirements List	Tasks and Documents	14
D3	Data Item Descriptions		15
E	Goods, On Loan Items, SPT, Software Deliverables and Spares (as may amended in accordance with Article 8.0)	Physical Items	14
			-
F	Supplier's Level 0 Schedule	High Level Project Schedule of Activities	16
			-
G	Financial Arrangements	Finance	3
H	Purchaser's Forms	Commercial	18
I	Definitions and Interpretation	Commercial	2

Articles of Agreement – Supplier's Requirements (1)

Appendix F
Supplier's Requirements

A. Issued Property

1 At the written request of the Supplier, the Purchaser has provided the Issued Property listed below in support of the Work or to be incorporated into the Equipment:

	Description	Serial #	Ver. #	Date	Value $CAD	Location	Special Instructions
1	[*]	[*]	[*]	[*DDMMMYY]	[*]	[*]	[*]

Articles of Agreement – Supplier's Requirements (2)

B. On Site Requirements for Each Ship

1	2	3	4	5	6	7	8	9
			Number of Supplier Personnel					
	Description of Activity	Duration	Number of personnel:	# personnel on site	Storage space	Weight Kilos	Workshop Space	Utilities
1	Installation of the Equipment on board a Ship (if required)	[*]	[*]	[*]	[*]	[*]	[*]	[*]
2	Setting the Equipment to Work (if required)	[*]	[*]	[*]	[*]	[*]	[*]	[*]
3	HAT(E)	[*]	[*]	[*]	[*]	[*]	[*]	[*]
4	HAT(S) (if required)	[*]	[*]	[*]	[*]	[*]	[*]	[*]
5	SAT(E)	[*]	[*]	[*]	[*]	[*]	[*]	[*]
6	SAT(S) (if required)	[*]	[*]	[*]	[*]	[*]	[*]	[*]
7	Demonstration at Sea	[*]	[*]	[*]	[*]	[*]	[*]	[*]
8	Other tests and trials	[*]	[*]	[*]	[*]	[*]	[*]	[*]

Articles of Agreement – Background Intellectual Property

Appendix G
Supplier's Background IP Rights

1 1 The Supplier declares the following IP Rights relating to the Equipment and Deliverable Software as of the EDS. The declaration must also include Background Information and Background IP Rights owned, controlled or licensed by the Supplier's lower tier suppliers (i.e. Sub-subcontractors).

#	Title / Description	Serial #	Artefact Type	Originator of Artefact	Format of Artefact	IP Designation	IP Rights	Description of Rights	Export Approval	Further Info
[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]

Articles of Agreement – Documents forming the Subcontract

Appendix I
Documents Forming the Subcontract

1 The following documents form a part of the Subcontract.

2 If a document is invoked without limitation within one of the documents listed below, that referenced document is applicable in its entirety.

3 The Supplier shall not substitute or replace a referenced document with an issue date and/or revision date that is different to that invoked unless first approved, in writing, by the Purchaser's Subcontract Authority.

4 In the event of a conflict between a document listed below and an invoked document, the Supplier shall promptly Notify the Purchaser in accordance with Part 2 (Project Management) of Schedule D1 (SOW) requesting clarification of the potential conflict and direction if appropriate.

	Rev	Document reference
Articles of Agreement (including Annexes A to K inclusive)	1	[*]
Schedule A: General Conditions	1	[*]
Schedule B1: End User's Requirements, VCRI and Compliance Matrix	1	[*]
Schedule B2: Purchaser's Requirements, VCRI and Compliance Matrix	1	[*]
Schedule B3: General Technical Requirements, VCRI and Compliance Matrix	1	[*]
Schedule B4: Interface Requirements, VCRI and Compliance Matrix	1	[*]
Schedule B5: ILS Requirements and Compliance Matrix	1	[*]
Schedule C: Supplier's Specifications and VCRI	[*]	[*]
Schedule D1: Statement of Work	NA	[*]
Part 1: Introduction	1	[*]
Part 2: Project Management	1	[*]
Part 3: Engineering	1	[*]
Part 4: Integrated Logistics Support	1	[*]
Part 5: Quality Assurance	1	[*]
Part 6: Operations	1	[*]
Part 7: Commissioning, Test & Trials	1	[*]
Part 8: Finance	1	[*]
Part 9: Security	1	[*]
Part 10: HSE	1	[*]
Part 11: Industrial and Regional Benefits	1	[*]
Part 12: Logistics	1	[*]
Part 13: IT/IM	1	[*]
Schedule D2: SDRLs	NA	NA

Schedule A (General Conditions)

Schedule A

- General Conditions of the Project (Canada)

  Plus

  - Definitions
  - Canada's General Conditions 2030
  - Canada's 1031-2 Cost Principles
  - Supplemental General Conditions 4007
  - Supplemental General Conditions 4003

B1 – End User's Technical Requirements

1	2	3	4	5	6		7	8	9	10	11	12	13	14	15	16	17	18	19	20
Line Item #	Ship's Specifications Ref	Sect	Para	Performance/ Requirement Statement	Compliant		Noted	Acceptance Events							Criteria	Condition	Remarks Comments	Reqd By	Test Type	Customer Approval
					Yes	No		D/R	FAT	ET	SBT	HAT	SAT	CT						
B1-1	HBA2_en_3242		1.1.1.1	The propulsion system must consist of the following major components: Two (2) Propulsion Engine Systems	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]

B2 – Purchaser's Technical Requirements

1	2	3	4	5	6		7	8	9	10	11	12	13	14	15	16	17	18	19	20
Line Item #	Ship's Specifications Ref	Sect	Para	Performance/ Requirement Statement	Compliant		Noted	Acceptance Events							Criteria	Condition	Remarks Comments	Reqd By	Test Type	Customer Approval
					Yes	No		D/R	FAT	ET	SBT	HAT	SAT	CT						
B2-71	-		1.2.3.4	Two options for propeller shaft bearings and stern tubes are under consideration. One is oil lubricated bearings with an oil filled external stern tube and the other is water lubricated bearings with or without an external stern tube.	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]

B3 THROUGH B5 TECHNICAL REQUIREMENTS

- Schedules B3 through B5 consist of the following:

- Schedule B3 General Technical Requirements, VCRI and CM
- Schedule B4 Interface Requirements, VCRI and CM
- Schedule B5 ILS Requirements and CM

Schedule C – Supplier's Solution

Supplier's Solution to the Technical Requirements

- Provided in the Supplier's format

Schedule D1 (SOW), D2 (SDRL) and Schedule D3 (DIDs)

Example: Operations SOW

SECTION A – GENERAL

D1.P6.2 General

This SOW defines specific tasks to be performed by the Supplier relating to: (a) supporting the Purchaser installing the Equipment or Items of the Equipment on a Ship; or (b) manufacturing, apply, installing, etc... the Equipment or Items of the Equipment on the Ship (if required by this SOW); (c) touch-up, repair and/or replacement of the Equipment or Items of the Equipment damaged or lost by the Purchaser; and (d) supporting the Purchaser to install the Equipment into systems and sub-systems supplied by other suppliers to the Purchaser.

D1.P6.3 Security

The Supplier's obligations regarding security clearance of its employees, contract labour, Sub-subcontractors, representatives, consultants and/or agents are covered in Part 9 (Security) of Schedule D1 (SOW).

D1.P6.4 Attendance on Site

The Supplier's obligations regarding attendance on site by its employees, contract labour, Sub-subcontractors, consultants, representatives and/or agents are covered in Part 2 (Project Management) of Schedule D1 (SOW).

D1.P6.5 Health, Safety and the Environment

The Supplier's obligations regarding Health, Safety and the Environment while its employees, contract labour, Sub-subcontractors, representatives, consultants and/or agents attend the Purchaser's Premises, a Ship or a Government establishment are covered in Part 10 (HSE) of Schedule D1 (SOW).

D1.P6.6 to 49 Reserved

SECTION B – THE DESIGN PHASE

D1.P6.50 Installation Instructions

The Supplier shall prepare and deliver Installation Instructions in accordance with SDRL OPS201 and DID OPS201.

D1.P6.51 to 99 Reserved

SECTION C – THE BUILD PHASE

D1.P6.100 Take On Meetings

1 Prior to commencing Work at the Purchaser's Premises or on board a Ship, the Supplier shall attend a Take On Meeting to present to all stakeholders in attendance (e.g. the Purchaser, the Supplier, any third parties providing other equipment and services to the Purchaser, etc...):

SOWs, SDRLs and DIDs (Cont.)

Example: Operations SDRL

Schedule D2 – Subcontract Data Requirements List

Part 6 – Operations

1 This SDRL table must be read with Part 1 (Introduction) of the SOW and Part 1 (Introduction) of the SDRL.

Item #	SDRL ID #	DID ID #	Data Item Title	SOW Ref	Review Period	Freq	First Delivery	Subsequent Delivery	Media/ Qty		PpD	Purchaser's Ref #	Remarks
									xH	S			
SECTION A - GENERAL													
1-49	Reserved	-	-	-	-	-	-	-	-	-	-	-	-
SECTION B – THE DESIGN PHASE													
50	OPS201	OPS201	Installation Instructions	D1.P6.50	30	-	3MEDS	-	-	-	DC	VSY-[*]	-
51-99	Reserved	-	-	-	-	-	-	-	-	-	-	-	-
SECTION C – THE BUILD PHASE													
100	OPS202	OPS202	Installation Certificate	D1.P6.105	30	-	First COI	Each COI	1H	S	DC	VSY-[*]	-
101	OPS203	OPS203	Test Report	D1.P6.106	30	-	AR	AR	-	S	DC	VSY-[*]	-

SOW, SDRL and DIDs (Cont.)

EXAMPLE: Operations DID

Installation Instructions **OPS201**

Purpose

The purpose of the Installations Instructions is to describe to the Purchaser the preparation, processes and tools needed for the Purchaser to carry out installation.

References

This DID must be read in conjunction with Schedule A (General Conditions) and the corresponding SOW reference.

Preparation Instructions

This Data Item shall comply with the general format, content and preparation instructions set out in Part 1 (Introduction) of Schedule D1 (SOW) and Part 1 of Schedule D2 (SDRL).

Format and Content

The Installation Instructions shall contain, as a minimum, the following:

1 Hardware

- (a) assembly instructions;
- (b) preparation of seatings;
- (c) installation procedure;
- (d) alignment procedures; and
- (e) listing of special tools, jigs, installation aids, handling and lifting arrangement.

2 Electrical

- (a) cable data connection and termination
- (b) listing of termination and crimping tools and connector tool kits

3 precautions;

4 lifting and transit warnings; and

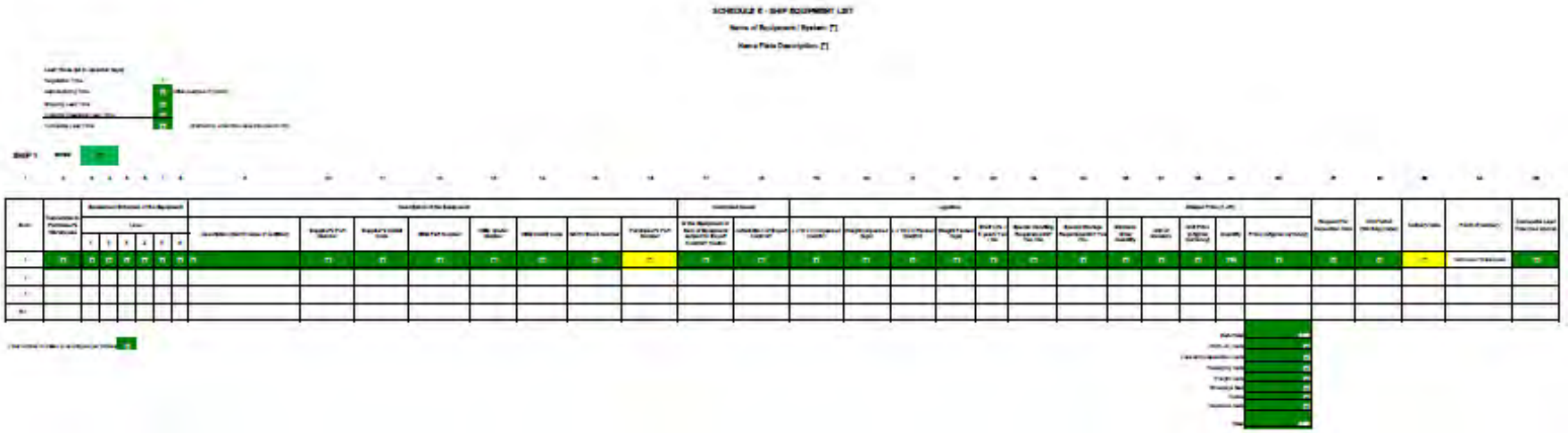
5 safety notices and warnings.

Schedule E – Initial Goods & Updated Goods

PART A - LLIs

	SWBS:	591 / 596									
1	2	3	4	5	6	7	10	11	12	13	16
SLIN	Description of LLIs that make up the System	LLI Procurement Strategy		LLI Financials							Lead Time
		Make / Buy?	Open Competition, Limited Competition, Sole Source from third party, Affiliate or subsidiary?	Cost of LLI per SLIN	Quanity of units required	Extended Cost per SLIN (Column 5 x Column 6)	Shipping / Freight / Customs for Columns 6, 8 and 9	Total Costs of the LLIs, Spares and shipping, freight and customs (Column 7, 8, 9 and 10)	LLI Mark-up % applied to Column 11 for each SLIN	Ceiling Price for each SLIN	Composite Lead Time
1		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
2		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
3		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
4		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
5		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
6		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
7		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
8		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
9		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
10		[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]

Schedule E – Initial Goods & Updated Goods



Schedule F – High Level Supplier's Schedule

SUPPLIER'S SCHEDULE

Please provide an updated ***Supplier's Schedule*** as follows:

Phases 1 – 2: A Supplier's Schedule which communicates the execution of the deliverables for each of the Supplier and Sub-Supplier(s) and resource types. This schedule should provide enough detail to identify critical activities and enable Critical Path Analysis. Schedule activities should also provide enough granularity and detail to enable accurate progress and applied effort collection in support of Earned Value reporting as part of the Resulting Subcontract. Where this level of detail cannot be applied due to immaturity of data, scheduling should be defined at a Level equal to that of Phases 3 – 4 below.

Phases 3 – 4: A Supplier's Schedule which represents the schedule by its major components. It should capture actual and forecasted contract milestones and key deliverables for each phase that will be used to establish initial program execution target dates and will in turn inform future schedule development to a level equal to Phases 1 - 2 before work can commence.

Schedule G - Financial Arrangements (Milestone Example)

G1.1 Basis of Payment

1 The Supplier shall be paid a Fixed Firm Price for the performance of the Work and the achievement of the Milestones.

G1.2 Milestone Description and Payment Plan

1 The Design Phase

Milestone Number	Milestone Description	Comments	Milestone Date	Value
THE DESIGN PHASE				
1	All Work completed to the date of the Milestone		DDMMMYY	[*]
2	All Work completed to the date of the Milestone		DDMMMYY	[*]
Etc..				
			Price	0.00

Note 1: All Milestones Descriptions in The Design Phase are described as "All Work completed to the date of the Milestone."

Note 2: Milestone numbers 11 to 49 Reserved.

2 The Build Phase

Milestone Number	Milestone Description	Comments	Milestone Date	Value
THE BUILD PHASE				
50	All Work completed to the date of the Milestone		DDMMMYY	[*]
51	All Work completed to the date of the Milestone		DDMMMYY	[*]
Etc..				
			Price	0.00

Note 3: All Milestones Descriptions in The Build Phase are described as "All Work completed to the date of the Milestone."

Schedule G - Financial Arrangements (Milestone Breakdown)

G7.4 Milestone Breakdown

Milestone Description	Sub-elements of Milestone Description	Option - Milestone %
All work to be completed to the date of the milestone	Upon Release for Manufacture (RFM) by VSY for Production as per the agreed schedule. (Supplier needs to work closely and provide requested documentation for Production, FAT schedule, Order materials, including receipt of details of the production timeline).	20%
All work to be completed to the date of the milestone	Upon submission and approval of all VFI, including remaining design data requirements, as stipulated in SDRLs Schedule D2 and as per the agreed schedule and VSY's approval.	10%
All work to be completed to the date of the milestone	Upon completion of 100% of the production process. Supplier to provide documentation as evidence of manufacturing progress at 100% complete and VSY's approval. Upon completion and receipt of successful Factory Acceptance Test (FAT) Certificates (including FAT reports, pictures) and VSY's Approval.	30%
All work to be completed to the date of the milestone	Upon Receipt & Acceptance by VSY of all Equipment and final VFI (Classification Society Certificates), at VSY's location.	30%
All work to be completed to the date of the milestone	Upon completion of Commissioning and VSY's Approval.	10%
All work to be completed to the date of the milestone	Freight, Brokerage, Duties, Insurance and Packaging costs for all equipment and spares payable upon delivery at VSY's location and approval by VSY.	100%

Schedule G – Price Itemization, etc…

Section B - Charge Out Rates, Travel and Escalation

G2.50 Charge Out Rates

1 The Supplier is required to submit ALL INCLUSIVE fixed firm prices for all potential grades of labour required to complete the Work for the period beginning at the EDS and expiring two (2) years thereafter.

RATE TABLE

Item #	Grade of Labour	Charge Out Rates				Validity Expiry Date
		Hourly Rate	Daily Rate	Weekly Rate	Monthly Rate	
1	[* insert description of labour grade]	[*]	[*	[*]	[*]	Second anniversary of EDS
2	[* insert grade]	[*]	[*]	[*]	[*]	Second anniversary of EDS
[*]	*[* n]*	[*]	[*]	[*]	[*]	Second anniversary of EDS

Where:

Charge Out Rate means all-inclusive fixed firm prices for the each labour category in the original currency of payment;

Daily Rate means eight (8) consecutive hours on a Working Day;

Weekly Rate means five (5) consecutive Working Days;

Monthly Rate means the total number of Working Days in a single calendar month less any holidays and days not worked (e.g. vacation, illness, training, etc…); and

Validity Expiry Date means the Daily Rate, Weekly Rate and the Monthly Rate that must remain fixed and firm until the second anniversary of the EDS. i.e. the Charge Out Rates expire two (2) years following the EDS.

[ ] Greyed are – Not used

2 The Supplier represents that the Charge Out Rates set out in above table are consistent with General Conditions 1031-2 (Contract Cost Principles) (see Annex C of Scheduled A (General Conditions)).

3 The Charge Out Rates set out in the table above are subject to audit by Canada (see Schedule A (General Conditions)).

4 Following the expiry of the Validity Expiry Date, the Charge Out Rates shall be adjusted (upwards or downwards) in accordance with the following indices:

[* Supplier to propose indices that will be inserted in this position prior to EDS].

Schedule G – Price Itemization, etc…

Section C – Options

G2.100 Options

1 One or more of the Options listed below may be exercised by Canada or the Purchaser by Notification to the Supplier before the expiry of the indicated Validity Dates - Options

2 Options are to be stated in original currencies. If mixed currencies are used, the Supplier shall indicate percentages of each currency for each Option.

Option	Description	Option Price	Validity Date - Options 17:00 hrs. Pacific Time
Phase 1 The Design Phase	Fixed Firm Price (**FFP**) in original currencies for: 1. the Licensing of the Supplier's IP rights as described in Schedule A (General Conditions) for the Design Phase and Build Phase; 2. Services as described in each Part of Schedule D1 (SOW) under the titles: Section A – General, and Section B – The Design Phase; 3. Data Items as described in each Part of Schedule D1 (SOW), Schedule D2 (SDRL) and Schedule D3 (DIDs) under the titles in each Part: Section A – General, and Section B - The Design Phase; 4. Deliverable Software (if any) as set out in Schedule E (Ship Equipment, On Loan Items, SPT, Deliverable Software and Spares); 5. Build Slots to support delivery of the Equipment, Deliverable Software and Spares listed in Schedule E (Ship Equipment, On Loan Items, SPT, Deliverable Software and Spares) by the following Delivery Dates: (a) for Ship 1: [* DDMMMYY]; (b) for Ship 2: [* DDMMMYY]; and (c) for Ship 3: [* DDMMMYY]; 6. Warranty, as described in Schedule A (General Conditions) for the Services performed and Deliverable Software and Data Items delivered under Phase 1 for the Warranty Period defined in section 1 of the Articles of Agreement; 7. unconditional, legally binding, irrevocable Options open for acceptance by the Purchaser, in writing, up to 17:00 hrs. Pacific Time on the following dates: **Option 1**: Phase 2 - The Build Phase for Ship 1: [* DDMMMYY]; **Option 2**: Phase 3 - The Build Phase for Ship 1 and Ship 2: [* DDMMMYY] and [DDMMMYY]; **Option 3**: Phase 4 - The Build Phase for Ship 3: [* DDMMMYY]; 8. sections 1 to 7 above are to be Priced and proposed on the basis of the terms and conditions set out in the Articles of Agreement and Schedule A (General Conditions); 9. Supplier's Level 1 Schedule (Schedule F) for Phases 1 to 4 inclusive; and 10. the Proposal shall be irrevocable and remain open for acceptance by the Purchaser for a period not less than one hundred and twenty (120) calendar days following the Proposal Closing Date and Time	-	-

Anatomy of the Request for Proposal

The RFP

The RFP provides the Bidder with instructions on what System, Goods and/or Services VSY is going to market for.

- The focus here is on the main areas:
  - Conditions
  - Attachments
  - Instructions to Bidders
  - How to complete the Proposal

Attachments

The RFP consist of the following:

- **Conditions**
  - Section 1 – Introduction and Statement of Requirements
  - Section 2 – Proposal Preparation
  - Section 3 – Competitive Selection Process
  - Section 4 – Instructions
    - Attachment A - Statement of Requirements
    - Attachment B – Form of Proposal
    - Attachment C – RFP Participation Agreement
    - Attachment D – Certificate of Good Conduct
    - Attachment E – General Questionnaire
    - Attachment F – Software Questionnaire
    - Attachment G - Integrated Logistic Support Capabilities Questionnaire
    - Attachment H – IRB Proposal
- **Bidder's Form of Proposal**
  - Price Analysis Sheet
  - Schedule E
  - Compliance Matrices
  - Completed Questionnaires

Instructions to Bidders

Instructions for the completion of the RFP

SECTION 4 – INSTRUCTIONS

42. General

42.1 The Bidder is reminded:

42.1.1 to complete and return the RFP Acknowledgment Form;

42.1.2 at this stage, the RFP is intended to lead to the placement of the Resulting Subcontract for Phase 1 – The Design Phase only (see Attachment A to this RFP (Statement of Requirements for the RFP)) (however, to support the Proposal evaluation process, pricing data, and completed VCRIs, compliance matrices and questionnaires must also be provided for any Build Phase that may be awarded subsequently under the same Resulting Subcontract);

42.1.3 in the event that the Bidder is required to disclose the Technical Requirements to its lower tier suppliers in order to support its Proposal, it must, prior to any disclosure, comply with section 3.4.

42.1.4 in the event that the Proposal contains any classified or restricted data, the Bidder must comply with section 15; and

42.1.5 all pricing information provided may be subject to audit by the Government of Canada (see section 14.2 of the Resulting Subcontract).

42.2 The Proposal must be made strictly in accordance with this RFP, the composition and format of which is detailed in these instructions. Failure to observe these requirements may result in the Proposal or part thereof being excluded from consideration by the Purchaser.

42.3 With the exception of the Bidder's covering letter and to the greatest extent possible, the Bidder's company logo, name or identification relating to employees, agents, lower tier suppliers, companies or similar shall not be included in its response to this RFP.

Proposal

How to complete the Proposal documents

The Form of Proposal lays out how the Proposal is to be submitted.

Volume 1 Summary Documents	1. Proponent's covering letter and executive summary; 2. Supporting Documents (a) any supporting documents Proponent feels will support its Proposal.
Volume 2 Technical / Engineering	1. Completed Documents (a) a completed General Questionnaire, Attachment E of RFP; including declaration as to Maturity of the Solution; (b) a completed Software Questionnaire, Attachment F of RFP; (c) a completed ILS Support Capabilities Questionnaire, Attachment G of RFP; (d) completed compliance matrices and VCRIs for Schedules B1 to B5; (e) completed compliance matrices for each Part 3, 4 and 7 of Schedule D1; and (f) a completed General Questionnaire, Schedule E without pricing; and (g) a completed Software Questionnaire, Schedule F. 2. Supporting Documents (a) inclusion of Proponent's 'Supplier's Specifications'; and (b) any supporting technical documentation Proponent feels will support its Proposal. 3. Alternative Proposal
Volume 3 Non-Technical and Schedule	1. Completed Documents (a) completed compliance matrices for each Part other than Parts 3, 4 & 7 of Schedule D1. (b) a completed Schedule F; (c) any supporting documentation Proponent feels will support its Proposal.
Volume 4 IRB	1. Completed Documents (a) A completed compliance matrix to Part 11 (IRB) of Schedules D1; (b) IRB Proposal; and (c) Any supporting documentation Proponent feels will support its Proposal.
Volume 5 Commercial	1. Completed Documents (a) a completed General Questionnaire; (b) a completed Software Questionnaire; and (c) a completed compliance matrix for the Articles of Agreement and General Conditions
Volume 6 Finance	1. Completed Documents (a) completed Estimate Summary; (b) completed Schedule G3, (Estimate Input Sheets); (c) completed Schedule E; and (d) completed Schedule G.

Schedule E – Lists of Equipment, Software and Spares

Lead Times (all in calendar days)		
Negotiation Time	0	
Manufacturing Time	[*]	(After exercise of Option)
Shipping Lead Time	[*]	
Customs Clearance Lead Time	[*]	
Composite Lead Time	[*]	(Instruction: enter this value into column 35)

SHIP 1	SWBS:	[*]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
SLIN	Deliverable to Purchaser's Warehouse	Breakdown Structure of the Equipment						Description of the Equipment						
		Level						Description (NATO name if codified)	Supplier's Part Number	Supplier's CAGE Code	OEM Part Number	OEM Model Number	OEM CAGE Code	NATO Stock Number
		1	2	3	4	5	6							
1	Winch, General Purpose	X	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
2	GP Winch Fixed Sheave,		X											
3	GP Winch Flagging Sheave,			X										

PRICE ANALYSIS SHEETS

The Pricing Analysis Sheet is broken up between a Design and Build Phase

Price Analysis Sheet - Phase 1 - The Design Phase SOW

Equipment: [* Description of the Equipment]

SWBS # [*]

PRICE BASIS: Fixed Firm Price (original currencies)

SUPPLIER N [*]
QUOTE DATI [*]
QUOTE REF: [*]

INSTRUCTION: If more than one person works at a task, then multiple man hour rates must be recorded. Please add columns as required see example E, F, G and H items highlighted in blue. (You can alter the Headings for these columns and add columns as required). The rates must reflect the Rate Table set out in section B of Schedule G2 of the Subcontract. Note no blended rates are allowed.
The Travel hours cost and travel cots are the costs for all parties traveling. VSY

			Year	2016		2017									
				$ 100.00	$ 120.00	$ 110.00	$ 125.00	1	2	3	4	5	6	7	8	9
SWBS #	SOW Reference	Activity		Senior Engineer (example)	Engineer (example)	Senior Engineer (example)	Engineer (example)	Manhours	Labour Costs	Other Direct Costs	Travel Hours	Travel Hours Cost	Travel Costs	Total Costs	Profit/Fee	Total
				Hrs	Hrs	Hrs	Hrs									
[* Name of Equipment] [* SWBS number]																
	Part 1	Introduction SOW, SDRLs and DIDs														
		Section A General and Section B - The Design Phase														
SWBS	D1.P1.2	Example Scope		10	15	10	10	105 hrs	$12,350.00	$ -	20 hrs	$ 2,000.00	$ 15,000.00	$ 29,350.00	10%	$ 32,285.00
SWBS	D1.P1.2	Scope		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.3	Data Items		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.4	General Requirements for Data Items		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.5	Control Instructions		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.6	Use of Existing Data		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.7	Data Item Cover Sheet		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.8	Data Item Review		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.9	Assessment of Data Items		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.10	Point of Delivery		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.11	Data Items Delivered Under Subsequent Change Orders		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!
SWBS	D1.P1.12	Data Item Updates		[*]	[*]	[*]	[*]			[*]	[*]	[*]	[*]	#VALUE!	[*]	#VALUE!

Compliance Matrices

Compliance Matrix SOW - Phase 1 - The Design Phase

Equipment:	[* Description of the Equipment]
SWBS #	[* insert SWBS number]

SWBS #	SOW Reference	Activity	Compliance Matrix		Comments
	Part 2	Project Management SOW, SDRLs and DIDs	[*]	[*]	
		Section A General and Section B - The Design Phase	[*]	[*]	
SWBS #	D1.P2.2	Project Management	[*]	[*]	
SWBS #	D1.P2.3	Representative of the Supplier	[*]	[*]	
SWBS #	D1.P2.4	Change to Representative of the Supplier	[*]	[*]	
SWBS #	D1.P2.5	Correspondence	[*]	[*]	
SWBS #	D1.P2.6	Parent Company Guarantee	[*]	[*]	
SWBS #	D1.P2.7	Proof of Insurnace	[*]	[*]	
SWBS #	D1.P2.8	Ambiguities, Inconsistancies or Conflits Advice	[*]	[*]	
SWBS #	D1.P2.9	Direction or Instruction	[*]	[*]	
SWBS #	D1.P2.10	PFX and CFX	[*]	[*]	
SWBS #	D1.P2.11	Obsolescence Advise	[*]	[*]	
SWBS #	D1.P2.12	Discontinuance Advice	[*]	[*]	
SWBS #	D1.P2.13	Hold, Witness and Review Point Advice	[*]	[*]	

Software Questionnaire

Section A – Equipment Software Questionnaire

Item #	Question	Response Yes/No
Q1	**Does your Equipment contain embedded Software?**	[* Insert Yes or No]
	If 'No', the questionnaire is complete. Please sign below.	
	If 'Yes', please complete the rest of the questionnaire:	
Q2	Is the Software Off the Shelf (OTS)?	[* Insert Yes or No]
	If 'Yes', go to Q3.	
	If 'No', go to Q5	
	Off the Shelf Software	
Q3	Provide a detailed description:	[* Insert detailed description]
Q4	What validation and verification was carried out on the Software?	[* Insert validation and verification activities]
Q5	How much tailoring would be required, in % terms to satisfy the Technical Requirements?	[*]%
	If 0%, then go to Q9	
	If > than 1%, please give brief description of what is required:	[* Insert brief description]
	Bespoke and Modified OTS Software	
Q6	What is the estimated number of lines of code required to complete the Software to satisfy the Technical Requirements?	[* Insert number of lines of code]
Q7	Provide a description of the intended Software life cycle including validation and verification?	[* Insert description]
Q8	What experiences have you in writing Software in this arena? Provide examples:	[* Insert experience and examples]
	General	
Q9	Is the Software implementing any safety functions?	[* Insert Yes or No]
	If 'Yes', please describe what is being implemented and how:	[* Insert description]
Q10	What interfaces does the Software have? Give full name and release for all interfaces:	[* Insert description of interfaces]
Q11	Are you ISO 9001 accredited?	[* Insert Yes or No]
Q12	What is your CMMI level?	[* Insert level]
Q13	Provide any other relevant information:	[* Insert other relevant information]

seaspan SHIPYARDS

INDUSTRIAL AND REGIONAL BENEFITS (IRB)

Susan Jin

Manager - IRB and VP

sjin@seaspan.com

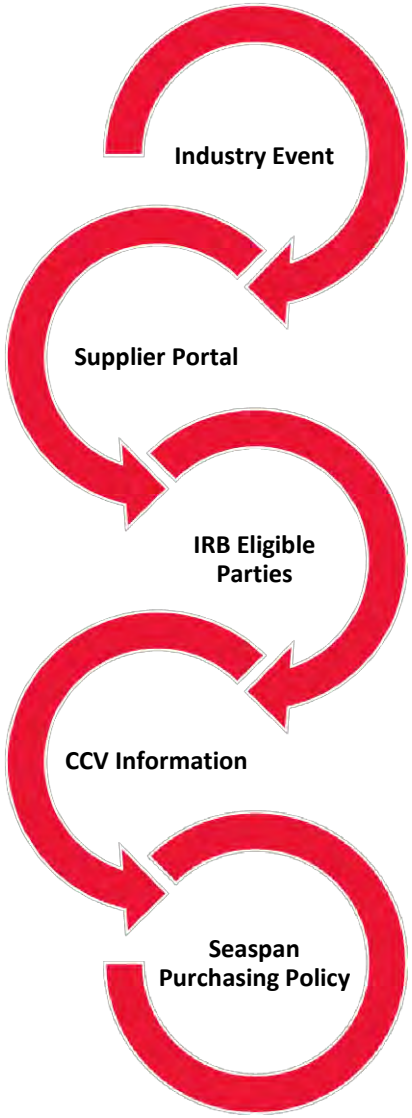
What is IRB?

- Canada's Industrial and Regional Benefits (IRB) Policy ensures that Canadian industry **benefits** from Government defence and security procurement. The IRB Policy requires companies to undertake business activities in Canada **valued at minimum 100 percent of the value of the defence or security contract** they have been awarded by the Government of Canada. The IRB obligation is a **contractual commitment** and part of the **overall** government procurement contract. IRB policies are a common part of global defence and security procurements and are practiced in one form or another in **48** countries around the world.

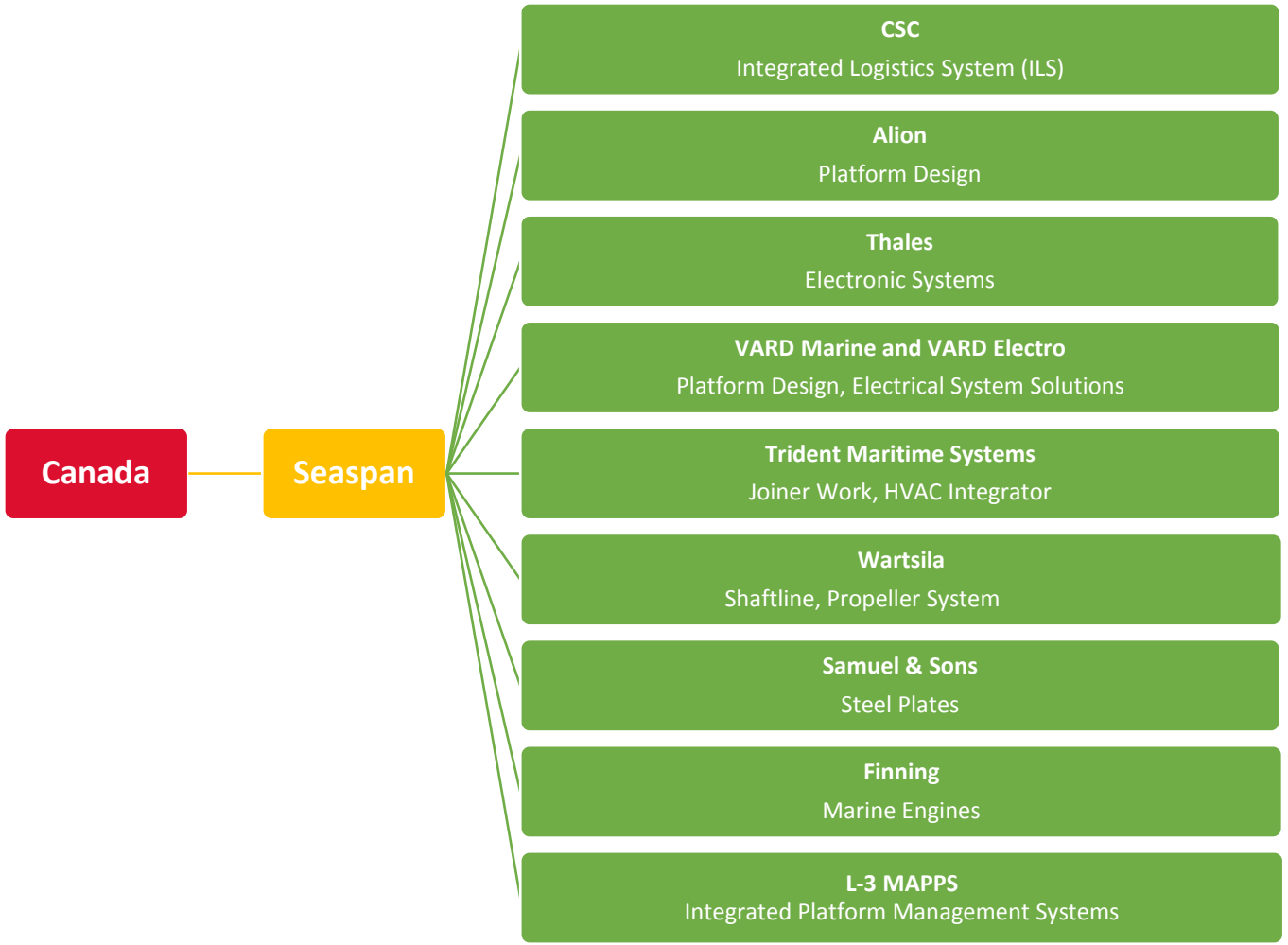
- The IRB Policy was transformed into the Industrial Technological Benefits (**ITB**) Policy in 2014. However, Seaspan's current projects and programs are **governed by the IRB policy**.

Seaspan IRB Programs Overview

- Seaspan currently has IRB obligations under the **NSS** projects at Vancouver Shipyards (VSY), **FELEX** and **VISSC** projects at Victoria Shipyards (VSL) with an average achievement rate of **100%**;
- Seaspan IRB function oversees IRB programs at the corporate level with system and processes in place to ensure the success of Canada's IRB policy.
- Industrial and Regional Benefits requirements are incorporated in the Model Contract Pack.
- Depends on the supply scope, you may be required to: 1) accept Canada's IRB terms and conditions flow down and all the reporting duties, or 2) provide your Canadian Content Value information



IRB Eligible Parties



CONTACTS

ISED team for NSS Non-Combat Package:	Seaspan IRB Team:
Nathalie Couture, Deputy Director, Nathalie.Couture@ic.gc.ca Richard Lincoln, IRB Manager, Richard.Lincoln@ic.gc.ca	Susan Jin, IRB Manager, sjin@seaspan.com Calum MacLeod, IRB Analyst, cmacleod@seaspan.com
Regional Development Agencies:	**Eligible Party IRB Contacts:**
ACOA (Atlantic): Kyle Tucker kyle.tucker@canada.ca CED-Q (Quebec): Marmion, Vincent, vincent.marmion3@canada.ca FedDev (S. Ontario): Jennifer Leng, jennifer.leng@Feddevontario.gc.ca FedNor (N. Ontario): Natalie Brabant, natalie.brabant@ic.gc.ca WD (Western): Peter Hoek, Peter.Hoek@wd-deo.gc.ca	CSC: Peter Nutt, pnutt@csc.com Alion: Russell Peters, RPeters@alionscience.com Thales: Karen Chase, karen.chase@ca.thalesgroup.com Vard: Geoff McAllister, Geoff.McAllister@vard.com Trident Maritime Systems: Zack Papachristou, zpapachristou@joinersystems.com Wartsila: Mark Keneford, mark.keneford@wartsila.com Samuel Sons: Rob Whitmore, Rob.Whitmore@samuel.com Finning: Ryan Kisko, rkisko@finning.com L-3 MAPPS: Jean St-Pierre, jean.st-pierre@l-3com.com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- CANADA'S -
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SIR JOHN FRANKLIN