

RESPONSE PACKAGE

PSPC responses to Questions Taken on Notice Standing Committee on Government Operations & Estimates (OGGO) National Shipbuilding Strategy (NSS) March 25, 2022

Question 1 – Regarding benchmarking and shipyard productivity

Response:

Design remains a complex phase within the shipbuilding spectrum of activities and various ways of producing designs exist. Seven different large ships design efforts have either been completed or are in progress since the commencement of the NSS.

For most of the NSS large ship projects to date, Canada has contracted separately for a design (e.g. offshore fisheries science vessel) or purchased an existing design (e.g. joint support ship) and then provided that design, often referred to as the contract design, to the NSS shipyard. The shipyard must then perform design engineering in order to address new requirements, design changes from the client, updates, updated regulations, and adapt to Canadian supply chains which are subject to the economic benefits and value proposition policy. Construction or production engineering design efforts will follow in order to determine how a specific design will be built in a specific shipyard. This step is complex and can be challenging for new shipyards.

More recently, learning from these lessons, for the Canadian Coast Guard (CCG) Multi Purpose Vessels project, Canada has tasked the shipyard with developing or contracting for the design thereby enabling early exposure and influence and eliminating a contractual hand-off. In addition, in other cases such as the CCG Polar Icebreaker project, the shipyard has teamed with experts in the field in order assist in the design efforts, particularly in areas where in-house knowledge is limited.

Introduction of effective program-level performance management, inclusive of specific performance based efforts, is a tool that is being strengthened across the NSS to drive this forward looking approach.

As a primary means to ensure NSS shipyards are equipped to achieve productivity in line with international standards and continuously improve, across all areas of shipbuilding, inclusive of design, engineering and production engineering, each shipyard has committed to the introduction of the level of capability and technologies, “Target State”, to enable the build of the specific work package at a reasonable level of economy and efficiency. Since the award of the first contracts under the NSS, progress towards Target State has been reported and tracked by Canada’s Third Party agent, First Marine International (FMI). FMI provides impartial and objective benchmarking of each NSS shipyard by assessing their key processes and practices and comparing

them in an international context. At this time, each shipyard is currently addressing any remaining outstanding elements.

The resulting continuous cycle of measurement and assessment is one of the principles of continuous performance improvement aspects of the NSS. In addition to providing a focus for improvement initiatives, the cycle will support the shipyards' ability to plan and execute project work with better predictability, as it will track and help forecast overall performance. It will also provide insight into the effect of lessons learned and can highlight opportunities for improvement. To support the cycle, a number of reporting tools (such as shipyard-produced integrated project schedules), approaches (including earned value management), and targeted shipyard performance metric analysis will be further matured to ensure that cost and schedule are properly managed and overseen by governance committees at all levels.

Question 2 – Regarding hours lost due to COVID

Response:

The shipyards individually managed the pandemic and its impacts. The situations across provinces were different.

Irving Shipbuilding Inc. completely shut down its operations for a three week period starting in mid-March 2020. Impacts were more prevalent at the outset of the pandemic and fluctuated in relation to the evolving situation of the pandemic. For Irving Shipbuilding Inc., Canada does not track data, such as lost hours by month, specifically attributable to COVID.

Vancouver Shipyards Co. Ltd remained open. The data gathering for Vancouver Shipyards Co. Ltd. did not include a methodology that differentiated between Covid and non-Covid data. Consequently for Vancouver Shipyards Co. Ltd, Canada does not have data, such as lost hours by month, specifically attributable to COVID.