Lockheed Martin Australia Pty Ltd,
ACN 008 425 509 (Incorporated in Australian Capital Territory),
8 Brisbane Avenue, Barton ACT 2600,
Phone: (02) 6150 6500

PUBLIC AIC STRATEGY

Company Details

Company Name : Lockheed Martin Australia Pty Ltd (ACN 008 425 509)
Location : 8 Brisbane Avenue, Barton ACT 2600
Website Details : www.lockheedmartin.com.au

Executive Summary

The Future Submarine Program- Combat System Integrator (FSP-CSI) Program will deliver a submarine combat system which is the basis for the warfighting capability of the Royal Australian Navy (RAN) for the next 40 years with Attack and Collins classes operating in parallel for at least 15 years. LMA as the FSP-CSI, is a key partner to the Commonwealth of Australia (the Commonwealth) in this endeavour, working as the combat system design authority collaboratively with all Future Submarine (FSM) and FSP-CSI stakeholders to realise a regionally superior combat system design to meet the warfighting requirements of the RAN Submarine Force.

This is a long-term Program broken into phases, as shown in Figure 1 which shows both the top-level Platform System Integrator (PSI) and CSI activities and key milestones from design to delivery of FSM#2. The timeline shows only approved program milestones through to June 2023. All future cardinal and program milestones post June 2023 are still under evaluation.

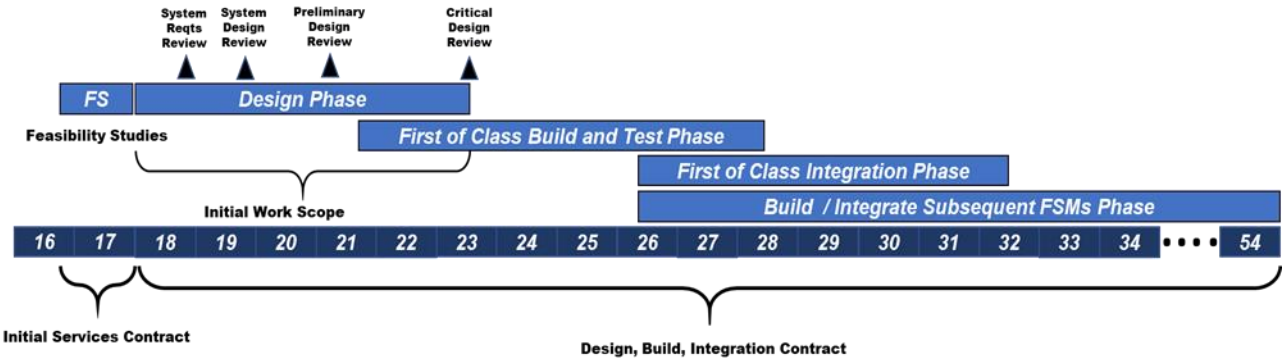

Figure 1: Future Submarine Program Phases

LMA's role as the CSI for the FSP is to integrate together component subsystems, sensors and weapons into a regionally superior Australian submarine combat system ensuring that the various subsystems operate seamlessly. This involves working closely with subsystem vendors to ensure contractor allocated systems are tested and verified prior to delivery to the desired integration facilities.

LMA's strategy in establishing itself in Australia as the Design Authority (DA) for the Combat System will ensure the skills, training, processes, tools and combat system engineering expertise will be transferred to a domestic team responsible for maintaining and upgrading the system for the life of the Program. Preparations are underway internally to prepare LMA to undertake the CSI DA role and through its industry development activities is also developing a further pool of Australian companies to support the CSI with engineering services and to also provide knowledge transfer to Australian Industry for the interfacing of tactical applications and sensors to the ACSM combat system architecture.

FSP Objectives

The Commonwealth has declared the following strategic objectives for the FSP:

a. to deliver to the Commonwealth a regionally superior submarine capability that provides the Commonwealth with enduring sovereign control over the operation and sustainment of the FSM capability (including combat system elements)

b. to address Australian regulatory safety and environmental obligations in the submarine design and through developing a sound Mission System Seaworthiness Case

c. to deliver an affordable FSM capability within the required timeframes and with the knowledge and skills to understand and control sustainment cost drivers for the life of the class

d. to maximise Australian industry participation through all phases of the FSP without unduly compromising capability, cost and schedule.

LMA will expect industry engaged for the FSP-CSI Program to adhere to and uphold these values in pursuit of achievement of the Commonwealth strategic objectives. The Commonwealth objectives will be formally flowed down to all combat system Supplier subcontracts.

The industry infrastructure for the DA and Engineering Authority for the overall Attack class combat system will be a mix of CSI capabilities as the combat system DA which will be augmented as required by local industry infrastructure for individual contracted Supplier equipment and subsystems. The CSI will identify the in-country industrial capabilities and Transfer of Technology (ToT) required to augment the CSI DA capabilities to achieve sovereign sustainment and the supporting Supplier engineering management infrastructure for each element. That is, what is required to sustain the Attack class submarine CS elements in-country and completely independent of an overseas original designer. The requirement for identified levels of sovereign capability will be decided on the merits for each subsystem and piece of equipment and will not be decided on the basis of cost.

The list of sovereignty requirements will be reflected in Australian Industry Capability (AIC) Plans and ToT Strategy and Plans and in the broader Sovereign Sustainment Assurance Plan and other documents in order to further define sovereign sustainment.

The AIC Strategy details LMA's approach and commitment to the FSP Objectives and Australian industry during the execution of the FSP-CSI Program, an anticipated multi-decade partnership with the Commonwealth. The strategy specifies the approach and principles LMA will use for the duration of the Program to engage Australian industry and deliver contract outcomes. It is expected to apply for the life of the FSP and will be updated regularly in accordance with contract provisions.

Subsystem tender submissions will be required to demonstrate through the AIC Strategy how the solution being offered complies with AIC Policy and how sovereign operation, upkeep, update and upgrade will be achieved. Guidance on AIC is available in the Defence Industry Capability Plan 2018, refer http://www.defence.gov.au/SPI/Industry/CapabilityPlan/.

Scope of Future Work Opportunities

The FSM Combat System is comprised of 12 subsystems. As shown below, these subsystems are connected via the FSM Combat System network. When the word 'subsystem' is used it refers to one or more of the subsystems shown below. When the term 'FSM Combat System' is used it is referring to the entire combat system, being a 'system of subsystems'. Each subsystem is made of multiple components (ie Outboard Sensors, Inboard Processing, etc). The following Figure 2 also shows the major components within each subsystem, which have common components such as hardware enclosures, common processing/network hardware and cabling.

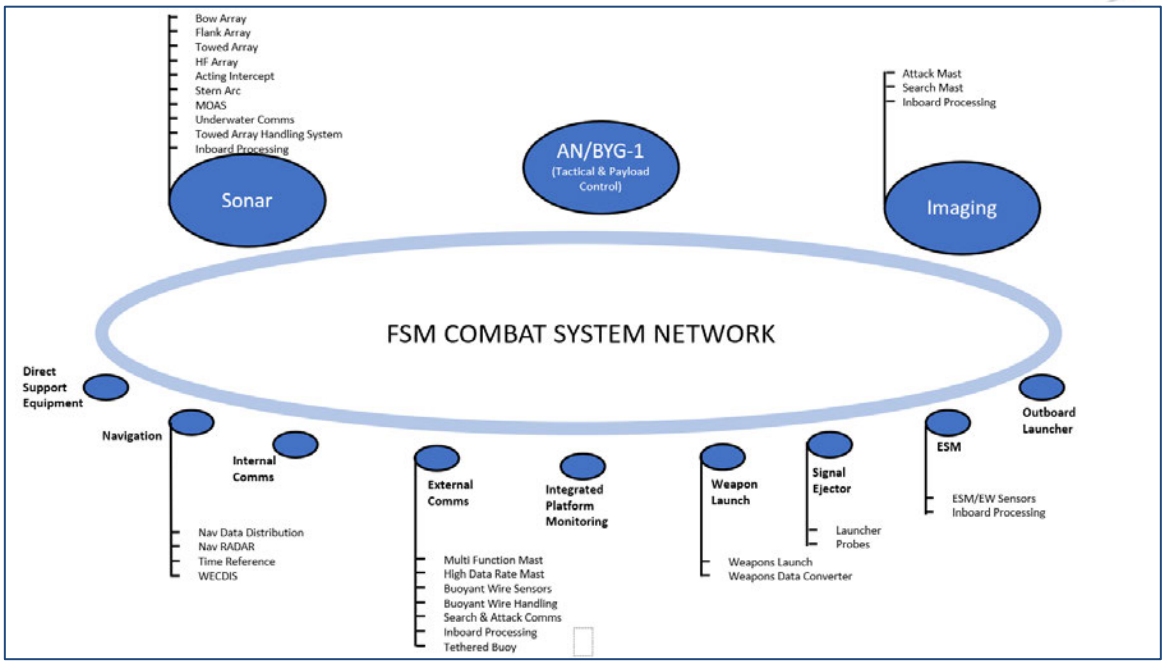

Figure 2: Major Components within each Subsystem

Excluding the AN/BYG-1 Tactical and Weapon Control System and Mk48 ADCAP Heavyweight Torpedo, which will be provided as Government Furnished Material, LMA will be approaching the market for the initial design of the various subsystems in 2018 and with additional procurement activity potentially occurring in 2019 and 2020 for the subsequent design of the various combat subsystems.

Due to the classified nature of the combat system, invitations to participate in RFQs will be limited to industry with a demonstrated capacity to design and build the subsystem being procured; and an ability to adhere to the information security handling requirements for data classified to SECRET.

Subsystem work can be performed at the contractors' location in Australia, but integration, facilities and laboratory activities associated with the combat system will be performed centrally at LMA facilities in Mawson Lakes, South Australia or the Techport building shipyard at Osborne in South Australia.

Any organisation wishing to enter discussions with the FSP Team, will be required to sign a Lockheed Martin Australia Non-Disclosure Agreement (NDA) and a Confidentiality Deed in favour of the Commonwealth of Australia. These forms will allow discussions of a sensitive nature to take place (being proprietary or consisting of protected, program sensitive information).

LMA supports teaming and collaboration between suppliers to provide integrated products and services to the Program. Original Equipment Manufacturers (OEMs) who wish to engage with either a) its Australian business entity in country or b) collaborate with other providers; must ensure a multi-party NDA is implemented. Multi-party NDAs must include LMA and all desired parties, partners or business entity with whom the OEM wishes to engage to conduct business, prior to any discussions of a sensitive nature (being proprietary or consisting of protected, program sensitive information) taking place.

Organisations, particularly SMEs, looking for opportunities to partner or engage with Key Approved Suppliers (KAS)/ Approved Suppliers (AS) for FSP Combat System opportunities are encouraged to remind the KAS/AS to instigate the multi-party NDA with Lockheed Martin Australia prior to any technical discussions.

Future Opportunities Industry Engagement

Maximising opportunities for Australian industry participation will be an ongoing activity for the FSP-CSI Program. LMA's preference in achieving Australian industry participation is to adopt a 'lean thinking' approach where the pursuit of perfection drives continuous improvement. Similarly, LMA will continually strive to increase Australian industry's participation in the Program, continually looking for increased opportunities for Australian industry participation through all phases of the Program, including the ongoing upkeep, update and upgrade of the FSM. This will be achieved through ongoing market testing, investment in R&D and industry development activities.

LMA will facilitate access to global markets for competitive Australian SMEs through its Global Supply Chain Program. LMA's approach to the maximisation of opportunities for Australian industry is not isolated to the FSP-CSI Program. Over time, LMA expects to identify and refer industry with suitable capability to compete for opportunities in LMA's global markets.

LMA will use the ICN Gateway to capture and manage industry's capability as it potentially applies for the FSP-CSI Program. Registrations can be made at any time by visiting: https://gateway.icn.org.au/project/3938/lockheed-martin-australia-future-submarine.

The capabilities being sought by the Program have been categorised into the following Work packages:

a. combat system infrastructure and architecture
b. on-board systems and training
c. navigation sensors and processing
d. underwater communications
e. acoustic sensors and processing
f. electronic warfare / electronic support measures / Optronics sensors and image processing
g. Australian tactical software applications
h. external and internal communications and sensors
i. combat system support and engineering services
j. other products/subsystems/R&D.

Organisations who may not have a demonstrated subsystem design capability but who have other capabilities of relevance to the build and installation of subsystems are encouraged to register their capability on the ICN. This information may be referred to by subsystem designers looking to engage Australian capability into their build and sustainment strategies.

LMA has established an FSP Combat System R&D Program, a joint Program between Defence and LMA involving industry and academia working collaboratively to maintain regional superiority of the combat system capability and address emergent threats.

Various levels of activities will be supported with the goal of ensuring Australian R&D Capability Insertion. Activities may include studies, proof of concept demonstrations, working together as an integrated project team in the LMA Combat System Architecture Laboratory (CSAL) for system evaluation, through to production and at-sea testing.

Official calls for R&D submissions will be made periodically throughout the Program and will be published through various channels, including LMA's ICN portal: [redacted]

Yours sincerely,

[redacted]

Joe North
Chief Executive
Lockheed Martin Australia and New Zealand

29 October 2019

Lockheed Martin Australia Pty Ltd,
ACN 008 425 509 (Incorporated in Australian Capital Territory),
8 Brisbane Avenue, Barton ACT 2600
Phone: (02) 6150 6500

PUBLIC AIC PLAN

Company Details

Company Name : Lockheed Martin Australia Pty Ltd (ACN 008 425 509)
Location : 8 Brisbane Avenue, Barton ACT 2600
Website Details : www.lockheedmartin.com.au

Executive Summary

The strategy of the Commonwealth of Australia for the Future Submarine Program (FSP) is to have separate prime contracts for the Platform System Integrator (PSI) and Combat System Integrator (CSI) roles. LMA signed the combat system Design, Build and Integration Contract (DBIC) with the Commonwealth in January 2018.

The FSP-CSI Program will deliver a submarine combat system which is the basis for the warfighting capability of the Royal Australian Navy (RAN) for the next 40 years with Attack and Collins classes operating in parallel for at least 15 years. LMA as the FSP-CSI, is a key partner to the Commonwealth in this endeavour, working collaboratively as the combat system design authority with all Future Submarine and FSP-CSI stakeholders to realise a regionally superior combat system design to meet the warfighting requirements of the RAN Submarine Force.

To achieve a regionally superior submarine capability, Australia's defence 'capability-edge' will be based on the ability to deploy, operate and sustain technologically superior capabilities. This will require acquisition of advanced technology from international partners, as well as through innovation and Sovereign capability development. The 'evolutionary' capability concepts for scheduled capability insertions into the combat system to maintain the ongoing regional capability edge will be supported a defined Technology and Capability Insertion Plan. In addition to the acquisition of technologically superior capabilities, any capability acquisition will be supported by the Transfer of Technology from equipment suppliers to address how applicable 'know-how' and 'know-why' will be transferred for sovereign sustainment, upgrade and future capability insertion purposes.

The Commonwealth has declared the following strategic objectives for the FSP:

a. to deliver to the Commonwealth a regionally superior submarine capability that provides the Commonwealth with enduring sovereign control over the operation and sustainment of the Future Submarine capability (including combat system elements)

b. to address Australian regulatory safety and environmental obligations in the submarine design and through developing a sound Mission System Seaworthiness Case

c. to deliver an affordable Future Submarine capability within the required timeframes and with the knowledge and skills to understand and control sustainment cost drivers for the life of the class

d. to maximise Australian industry involvement through all phases of the FSP without unduly compromising capability, cost and schedule.

There are some capabilities that are so important to Defence missions that they must be developed or supported by Australian industry because overseas sources do not provide the required security or assurances required by the Government. As such, it is critical that the industry base associated with these capabilities is maintained and supported by Defence as a Sovereign Industrial Capability. This means Australia must have access to, or control over the skills, technology, intellectual property, financial resources and infrastructure that underpin the designated capabilities as priorities.

The definition of sovereignty is available from the Defence Industry Capability Plan 2018, refer http://www.defence.gov.au/SPI/Industry/CapabilityPlan/.

The source selection evaluation procedure conducted by LMA is a multi-stage evaluation process. Subsystem tender submissions will be required to demonstrate how the solution being offered complies with AIC Policy and how sovereign operation, upkeep, update and upgrade will be achieved. Guidance on AIC Policy is available from http://www.defence.gov.au/dmo/Multimedia/AIC_BetterPracticeGuide-9-5956.pdf.

Evaluation of Request for Quotation responses is conducted using the following categories with the assessment criteria scores recorded against:

a. Program Management

b. Commercial and Financial

c. Technical, Design and Test

d. Industry.

This evaluation is followed by a qualitative risk assessment for each respondent to provide an overall picture of the relative risks associated with the responses. Tender responses also undergo a price assessment that looks at price affordability against budget provisions and assesses overall price as a differentiator for responses that scored similarly in non-cost factors.

Contracted Work Scope

The current nominal Core Work Scopes which are dependent upon DBIC contract terms and the program implementation strategy for the CSI program are:

a. Design Phase

b. First Article Build and Test Phase

c. First Article Submarine Integration Phase

d. Build and Integrate subsequent Submarines Phase.

LMA is currently contracted for the first five year Design Phase period for the Combat System design with a Total Contract Value of A$700M (AUD).The estimated contract Values and work packages over the LMA Contract out to 2054 are dependent upon contract terms and the program implementation strategy. The total LMA actual expenditure within Australia under DBIC was $A116.5M as at end of October 2019. This total actual DBIC expenditure is made up of subcontractor expenditure of $AUD $A50.4M and LMA expenditure in $AUD within Australia of $A66.1M.

Work location for the CSI activities is the LMA premises in Mawson Lakes in South Australia with further combat system integration activities to be conducted at a Combat System Physical Integration Facility at Techport in Outer Harbour in Adelaide.

Current combat system Subsystem design subcontracts that have been executed by December 2019 are:

Company Name	Combat System Subsystem	Work Location	AIC Plan Delivery
SAFRAN Electronics and Defense Australia Pty Ltd	1. Outboard Optronics sensors for periscopes 2. Navigation Radar 3. Navigation data distribution	Botany NSW	Yes

Scope of Future Work Opportunities

The Future Submarine (FSM) Combat System is comprised of 12 subsystems and these subsystems all linked by the Combat System network or Common Framework as the central interfacing component of the CS. The subsystem breakdown for the Attack class combat system is:

a. Combat system Common Framework or Network
b. Navigation Subsystem
c. Sonar Subsystem
d. Imaging Subsystem
e. Tactical Control System
f. Electronic Support Measures Subsystem
g. Deployables Subsystem
h. Integrated Submarine Communications Subsystem
i. Weapons Subsystem
j. Mast Raising Subsystem
k. Payload Control System
l. Direct Support Element Subsystem.

The Attack Class Submarine Combat System will be an Australian product, with overall architecture and design developed by the CSI with 'common elements' to be manufactured in Australia and integrated and tested in Australia using additional selected equipment and subsystems as 'buy elements' from Industry and Customer Furnished Material.

LMA has been approaching the market for the initial design of the various subsystems in 2018 and 2019 with the majority of the significant subsystem solicitations complete by end of 2019. Additional procurement activity for remaining subsystems will be occurring over 2020.

Due to the classified nature of the combat system, invitations to participate in Request for Quotations will be limited to industry with a demonstrated capacity to design and build the subsystem being procured; and an ability to adhere to the information security handling requirements for data classified to SECRET.

Subsystem work can be performed at the contractors' location in Australia, but integration, facilities and laboratory activities associated with the combat system will be performed centrally at LMA facilities in Mawson Lakes, South Australia or Techport Osborne building shipyard in South Australia.

Any organisation wishing to enter discussions with the FSP Team, will be required to sign a Lockheed Martin Australia Non-Disclosure Agreement (NDA) and a Confidentiality Deed in favour of the Commonwealth of Australia. These forms will allow discussions of a sensitive nature (being proprietary or consisting of protected, program sensitive information) to take place.

LMA supports teaming and collaboration between suppliers to provide integrated products and services to the Program. Original Equipment Manufacturers (OEMs) who wish to engage with either a) its Australian business entity in country or b) collaborate with other providers; must ensure a multi-party NDA is implemented. Multi-party NDAs must include LMA and all desired parties, partners or potential associates with whom the OEM wishes to engage to conduct business, prior to any discussions of a sensitive nature (being proprietary or consisting of protected, program sensitive information) taking place.

Future Opportunities Industry Engagement

Maximising opportunities for Australian industry involvement will be an ongoing activity for the FSP-CSI Program. LMA will continually strive to increase Australian industry's involvement in the Program, continually looking for increased opportunities for Australian industry involvement through all phases of the Program, including the ongoing upkeep, update and upgrade of the FSM. This will be achieved through ongoing market testing, investment in R&D and industry development activities.

LMA will facilitate access to global markets for Australian SMEs through its Global Supply Chain Program. LMA's approach to the maximisation of opportunities for Australian industry is not isolated to the FSP-CSI Program. Over time, LMA expects to identify and refer industry with suitable capability to compete for opportunities in LMA's global markets.

LMA will use the ICN Gateway to capture and manage industry's capability as it potentially applies for the FSP-CSI Program. Registrations can be made at any time by visiting: www.LMAFutureSubmarine.icn.org.au.

The combat system capabilities being sought by the Program through the ICN Gateway have been categorised into the following Work packages:

a. combat system infrastructure and architecture
b. on-board systems and training
c. navigation sensors and processing
d. underwater communications
e. acoustic sensors and processing
f. electronic warfare / electronic support measures / visual sensors and processing
g. Australian tactical software applications
h. external and internal communications and sensors
i. combat system support and engineering services
j. other products/subsystems/R&D

Organisations who may not have a demonstrated subsystem design capability but who have other capabilities of relevance to the build and installation of subsystems are encouraged to register their capability on the ICN Gateway. This information may be referred to by subsystems designers looking to engage Australian capability in to the build and sustainment strategies.

LMA has established an FSM Combat System R&D Program, a joint Program between Defence and Lockheed Martin Australia, involving industry and academia working collaboratively to maintain regional superiority of the combat system capability and to address emergent threats.

Various levels of activities will be supported with the goal of ensuring Australian R&D Capability Insertion. Activities may include studies, proof of concept demonstrations, working together as an integrated project team in the LMA Combat System Architecture Laboratory (CSAL) for system evaluation, through to production and at-sea testing.

Official calls for R&D submissions will be made periodically throughout the Program and will be published through various channels, including LMA's ICN portal: [redacted]

Point of Contact

Contact Name: Mike Gee
Position: Australian Industry Capability Manager, Lockheed Martin Australia
Address: 5 Third Ave Mawson Lakes SA 5095, Mawson Lakes, SA, 5095
Phone: [redacted]
Email: [redacted]

Authorised by:

[redacted]

Joe North
Chief Executive
Lockheed Martin Australia and New Zealand

17 December 2019