

## ANNEX C PUBLIC AUSTRALIAN INDUSTRY CAPABILITY PLAN

### COMPANY DETAILS

Company Name: Boeing Defence Australia Limited  
Address: Level 7, 150 Charlotte Street, GPO Box 767 Brisbane QLD 4001  
Location: RAAF Williamtown NSW  
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### Executive summary

Boeing Defence Australia (BDA) is the prime contractor to the Commonwealth of Australia (CoA) under Project Air 5077 (Project Wedgetail) for the provision of an AEW&C capability to the Royal Australian Air Force (RAAF).

This Public Australian Industry Capability (AIC) plan details Boeing Defence Australia's (BDA) planned arrangements and commitments for implementing and managing AIC involvement for Phase 5A at RAAF Base Williamtown. Project Air 5077 Phase 5A, E-7A Wedgetail Mandatory Interoperability Upgrades introduces modifications to the following Mission Systems and their associated support segments:

- Mode 5 Identification Friend or Foe (IFF) Transponder
- Mode 5 IFF Interrogator
- Datalink Line of Sight (LoS)
- Cryptographic Modernisation (Radios)
- Wideband Internet Protocol (IP) Communications
- Broadcast Intelligence upgrade to Common Interactive Broadcast

Modifications to the on board Mission Computing system are also necessary to meet the increased data throughput needs of the modifications and address emerging computer obsolescence issues.

The Services for Phase 5A will be provided by BDA as the prime contractor under Contract Number DMO/ASD/00361/2015 with an expiry date of 30 September 2015. The contract price for Stage 0 is approximately \$60M, of which approximately \$19.1M will be delivered by Australian Industry.

This initial contract will only include the Stage 0 scope of work. All other stages (Stage 1-4) will be contracted via Contract Change Proposal at a later date. This AIC Plan will also be updated as the Contract is extended.

Within these stages there will be a three Release process, 0.5, 1 and 2. Release 0.5 covers ADS- B-Out, Mode 5, Mode S and TCAS 7.1 IFF Transponder with release 1 focusing on achieving Mode 5 IFF Interrogator Level 1 on two aircraft in early 2019. The second release will deliver the remaining scope of work, including the retrofit of the first two aircraft. The Stage 0 Contract includes the Release 1 design activities up to Release 1 Preliminary Design Review, along with the commencement of the Release 2 design activities.

Stage 1 is planned to include:

- Release 0.5 to incorporate ADS- B-Out, Mode 5, Mode S and TCAS 7.1 IFF Transponder
- Release 1 activities to incorporate Mode 5 IFF Interrogator level 1 on two aircraft
- Release 2 design effort, up to Detail Design Review (DDR).
- Software engineering for the first four of seven Mission Computing software builds will be conducted in parallel with design, as schedule risk mitigation.

During Stages 2 & 3, modification implementation, verification and validation will occur for the remaining scope, and the retrofit of the first two aircraft. Included in the modification implementation, a further three software builds are to be completed.

Project AIC objectives are focussed on utilizing Stage 0 & 1 activities to establish capabilities transfer from Boeing Defence Space and Security (BDS) that will enable BDA to assume responsibility for leading all project segments from Stage 2 commencement.

At the completion of the program, BDA expects the project team to have established capabilities that will position the company to further participate in or lead Defence programs such as AEW&C Mid Life Upgrades, to a level and depth currently not contemplated.

In conjunction with the successful delivery of the Capability Upgrades The Boeing Company Corporate Globalization Objectives are to establish, within Australia, an overflow AEW&C engineering sustainment capability.

### **Key Offerings for Australian Industry**

The establishment of BDA as prime contractor for the Execution of Mandatory Interoperability Upgrades provides the opportunity to train Australian Industry and expand on or obtain experience in a number of fields:

- Complex project management in an International multi site environment;
- Systems engineering and systems integration in complex software development environment
- Complex systems test and evaluation

The upgrades will be performed by an integrated team led by BDA, supported by a range of subcontractors including, Boeing Defence Space and Security BDS (USA) and Northrop Grumman Systems Corporation (NGSC), and additional Australian suppliers during Stage 0 which are still being negotiated.

### **Future Work Opportunities**

BDA will assume responsibility for the core activity under the contract, along with the identified subcontractors above. BDA is committed to developing AIC and has levied the requirement to include Australian industry on the core team of subcontractors.

BDA has a demonstrated history of engaging and developing Australian Small to Medium Enterprises (SMEs); ensuring funding from programs is not exclusively held at the prime level but flowed to SMEs where appropriate. BDA undertakes a structured approach to industry engagement in Australia. Boeing's Supply Chain Management (SCM) function identifies Australian suppliers that can support BDA's Australian operations at a national level.

This is done through utilising BDA's existing Supplier Database, in addition to working with organisations such as the Australian Industry Defence Network (AIDN), Defence Industry Innovation Centre (DIIC) and the State Business Access Offices (BAO's) to identify new SME's that may have the capabilities sought by BDA and participating in capability matching events. Concurrently, each BDA site focuses on identifying local suppliers to support local BDA operations in Australia. At a global level—through the Office of Australian Industry Capability (OAIC) team—elements of Australian industry that have the capability to support the Boeing Global Supply Chain are identified. This tiered approach maximises Australian industry involvement at all levels – globally, nationally and locally.

As an Australian company, BDA at the completion of the Mandatory Interoperability Upgrades will have developed the competence, capacity and commitment to deliver complex system of systems integration projects using Australian resources. These competencies will be enhanced through:

- Establishing a Systems Integration Laboratory (SIL) and Software Engineering Development Environment (EDE) in Brisbane, implemented to support the Mandatory Interoperability Upgrades; and
- Expansion of the Airborne Early Warning and Control Support Facility (ASF) in Williamstown and associated EDE, that will provide greater capability and capacity to conduct work of a similar nature in Australia.

Infrastructure improvements, at RAAF Base Williamstown and in Brisbane will provide an environment where those capabilities may be utilised for future product upgrades.

It is anticipated the capability growth obtained through the upgrade program will position BDA to further participate in, or lead, Defence programs such as AEW&C mid Life Upgrades, to a level and depth not currently contemplated.

After completion of the Detailed Design during Stages 0 & 1, areas for additional Australian Industry Participation may be identified. It is envisaged that minor cable and rack manufacturing or resource



opportunities will be subjected to make/buy assessments and where the business case supports, this work may be made available to Australian Industry during Stage 2 & 3, design implementation.

**Point of Contact**

The Commercial Manager for Air 5077 Phase 5A, Wedgetail Mandatory Interoperability Upgrades is the point of contact for AIC Matters. For opportunities specific to this contract, suppliers should contact:

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5A Program Manager

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Date