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DEFENCE CAPABILITY PLAN 2009



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www.defence.gov.au/dmo/
www.defence.gov.au/Capability/_home/Default.asp

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FOREWORD

The projects outlined in this public version of the Defence Capability Plan (DCP) reflect the strategic requirements outlined in the 2009 Defence White Paper, *Defending Australia in the Asia Pacific Century: Force 2030* (the White Paper) and the emphasis of this Government on the development of Force 2030. In publishing this DCP, the Government provides advice to the Australian public, industry and defence commentators on the scope and scale of the future defence equipment capital program.

This DCP contains over $60 billion of projects and demonstrates the Government's commitment to funding and building Force 2030 as outlined in the 2009 Defence White Paper.

The Government recognises the vital role that defence industry plays in support of ADF capability – from the provision and maintenance of military equipment to the delivery of a wide range of support services. Growing the capacity of local defence industry is an objective of the Government and will require ongoing investment in skills development, workforce growth and improved productivity. The Government will remain closely engaged with defence industry to ensure maximum support possible to the ADF in partnership to maintain control of cost, schedule and quality.

In the White Paper, the Government has highlighted the challenges facing both the Defence Materiel Organisation and industry in delivering essential capability to the ADF.

While Defence will seek to maximise the spending in local defence industry, such expenditure must be managed within the acceptable cost, schedule and risk constraints of the strategic guidance in the White Paper. Projects must aim to provide capability which reflects operational requirements, but they need to be tempered by an understanding of cost, schedule and risk. Defence must also take into account what the market can deliver 'off-the-shelf'. The Government needs to make informed decisions about the appropriate mix of cost, risk and capability. Consequently, as highlighted in the White Paper, the Government has decided that Military-off-the-Shelf (MOTS) and Commercial-off-the–Shelf (COTS) solutions to Defence's capability requirements will be the benchmark. Decisions to modify MOTS or COTS solutions will need to be based on a conscious acknowledgement of the costs and benefits to the military outcomes, and the risks involved.

Having a conscious approach to considering MOTS and COTS solutions requires an acknowledgment of the risks this brings to sustainment, particularly overseas manufactured MOTS or COTS systems. The support and sustainment of this equipment may expose Defence to long supply chains and dispersed global manufacturing. This Government will respond to these issues by encouraging Prime companies to increase local capability by investing in Australia.

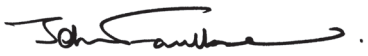
We also recognise that small and medium enterprises form a large part of Australian industry and play an important and innovative role in supporting the ADF.

The Government is committed to ensuring as much of this DCP is procured in Australia as is practical, conscious of its requirement for value for money. To that end there are several substantial new programs planned as part of the White Paper for which local acquisition or construction is likely to be the preferred option. These programs will provide opportunities for Prime companies to collaborate with Australian small and medium enterprises in the development of new capability for the ADF and enhanced Defence infrastructure.

The information contained within this DCP is designed to allow the Australian public to see how their taxes are spent on the defence of Australia; industry to undertake strategic planning; and defence commentators to understand the future shape of the ADF. We will continue to engage with industry to ensure the ongoing relevance of the DCP process to the needs of the partnership between Defence and defence industry.

In response to an understanding that such a document should remain contemporary, Defence will maintain an electronic version of the DCP that will be updated every six months to reflect Government decisions. This document will be available on the DMO and CDG websites and updates will be advised through the D+I ePortal.

Defence industry and the capability it provides to the ADF is integral to Australia's defence capacity. While both the national security and commercial implications in Defence's relationship with industry can, at times, limit the information that can properly be put in the public arena, the Government is committed to ensuring defence industry has as much certainty and security as is possible. The Defence Capability Plan, now and in the future, aims to deliver that.



Senator the Hon. John Faulkner
Minister for Defence

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ABOUT THIS PLAN

The Defence Capability Plan: Public Version 2009 (DCP) provides an account of major capital equipment proposals that are currently planned for Government consideration (either first or second pass approval) in the period 2009-2013 (the Forward Estimates period). A number of substantial programs identified in the 2009 Defence White Paper, *Defending Australia in the Asia Pacific Century: Force 2030* (the White Paper) are not included in this DCP as they will be presented for Government consideration beyond the Forward Estimates period. They are expected to be included in subsequent DCPs.

Details relating to a small number of classified and sensitive proposals have been withheld. These proposals represent less than three percent of the total value of projects.

The Government is also committed to ensuring that investment in future capability is maintained at appropriate levels. To achieve this, funding for the DCP is adjusted periodically to take account of the effects of inflation and movements in foreign exchange rates. This DCP contains over $60 billion of projects which is equivalent to around $77 billion out-turned (taking account of projected inflation rates).

Potential industry partners should note that proposals can undergo substantial changes over time. While the White Paper sets out the capability goals that the DCP is to deliver, the detailed project-level plan is subject to periodic review. Changing strategic or economic circumstances, new technologies and changed priorities will influence the specific proposals contained in the Plan as well as its overall composition. It must therefore be anticipated that changes will occur in coming years. Projects may be accelerated, deferred, enlarged or diminished as circumstances change.

In order to inform industry about the changes to projects, Defence will update the internet published version of the DCP at regular intervals. The changes made will reflect Government decisions on project budgets, scope and timing. The internet version of the Public DCP is available on the Defence Materiel Organisation (DMO) website at www.defence.gov.au/dmo under the 'Industry Resources', 'Publications' links, and on the Capability Development Group (CDG) website at www.defence.gov.au/capability.

When projects enter the DCP, the broad capability outcome sought is known, but often the specific means by which it is to be achieved is less clear. The budget provision made at this point is indicative only, often based on cost estimates of examples drawn from current technology.

The overall program is developed taking into account the available funding guidance from Government, the required delivery schedules of the capability, and the capacity of Defence and the Defence Materiel Organisation to develop and deliver the projects. There is also an element of over-programming built into the DCP. Over-programming is designed to provide flexibility and to aid in ensuring that best use is made of available funding in the event of delays to the development of individual projects. Over-programming means that a number of projects may move in timing based on their relative development maturity.

The Defence Chief Finance Officer, the Chief of Capability Development Group and the Chief Executive Officer of the Defence Materiel Organisation deem that the provisions for the individual projects in this DCP 2009 are appropriate for planning. Discounting for the over-programming mentioned above, the DCP 2009 expenditures expected over the next four years covered by this DCP are judged as affordable within Defence's portfolio allocations.

Projects are developed and refined over time. In that process a range of options are considered and explored, new approaches may become feasible, and scope and cost estimates are modified accordingly. Details provided on proposals in the DCP should be useful for planning, but industry should consult closely with Defence for specific and updated information. Contact points for individual proposals have been provided.

Proposals consist of a number of self-contained phases. Each phase will typically be reviewed and approved separately by Government.

The Government will consider projects via a tailored application of the two-pass approval process, as has been recommended by the Defence Procurement and Sustainment Review 2008 (the Mortimer review). For simple or accelerated acquisitions the Government may allow projects to undertake source selection and a single second pass approval process. For other more complex projects with high degrees of cost, complexity, significant risk, or which make significant demands on national resources, these might undertake two passes or multiple passes where necessary.

Under the traditional two-pass system at first pass the Government reviews the capability need or gap and the broad range of options that might address the gap. It is a requirement that at first pass one or more of the options presented must be 'off-the-shelf' (OTS), and those options will be the benchmark against which a rigorous cost-benefit analysis of the costs, military effects and schedule aspects of all proposals will be undertaken. At first pass approval the Government provides approval for Defence to investigate more fully a smaller set of options for further development and cost refinement, generally through the conduct of a Request for Tender (RFT). It should be noted that at this point Government has not committed to proceed with the project or with any specific capability option. Often the OTS option needs minimal modification to comply with Australian safety regulations and integrate with other ADF systems.

Considerable additional development work to refine scope and cost will continue after the first pass decision, leading to a full second pass approval decision with a defined scope and allocated budget. The key outcome of this process is that projects are approved when Defence has matured (de-risked) the project sufficiently.

In multiple pass projects, various incremental decisions may be made at each pass, with the overall intention being to reduce risk and retain flexibility as more is learnt about the overall capability and project.

The DMO will generate a Project Maturity Score for each option to assist Government in comparing the maturity of options as a measure of the relative confidence associated with them at the time they are considered. The Project Maturity Score is about quantifying the maturity of a project by way of a score at defined milestones in its capability development and acquisition phases and comparing this score with an ideal or benchmark score for that milestone.

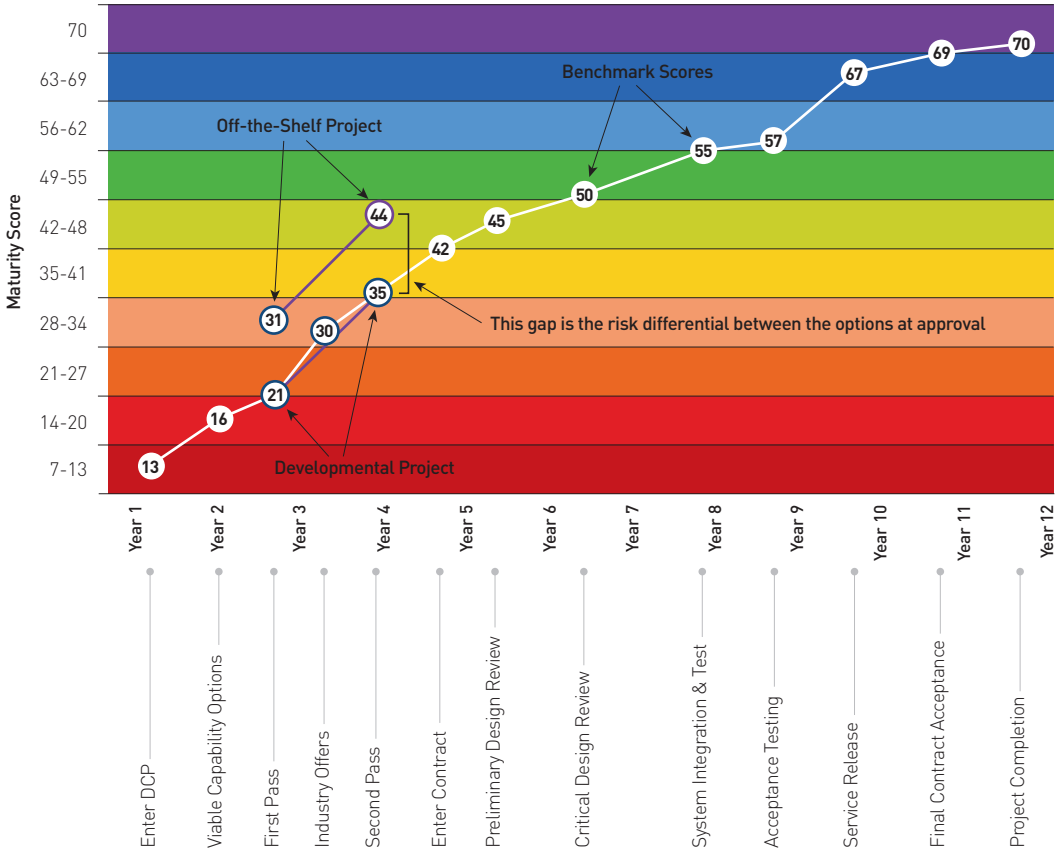
The Project Maturity Score comprises a matrix of seven attributes that are examined during the capability development phase, i.e. pre-second pass, and the acquisition phase of a project which seek to quantify a project's maturity through a set of focusing questions. In the capability development phase these are:

- **Schedule** – What confidence do we have in the schedule?
- **Cost** – What confidence do we have in the project cost estimate?
- **Requirement** – How well is the requirement defined and understood?
- **Technical Understanding** – How well do we understand the solutions?
- **Technical Difficulty** – What is the technical complexity in delivering the solution?
- **Commercial** – What confidence do we have that industry can deliver the solution?
- **Operations and Support** – Is the effect on the operating and support environment understood and planned?

A generic example of how maturity scores are presented for Government is illustrated in Figure 1. This example shows the Project Maturity Scores for an OTS option and a developmental option, at first pass and second pass (about 2 years apart). In this instance, the Government can choose the lower risk solution that is more likely to deliver the selected materiel system on time and within budget, or it can choose the higher risk developmental solution due to the expected capability benefits.

Contact with industry typically commences some time before first pass as proposal sponsors and managers undertake pre-approval study activity and prepare the necessary departmental documentation. More formal industry participation is sought during the period between first and second pass approval. Solicitation occurs through a Request for Proposal (RFP) and/or RFT, allowing projects to move quickly to contract post approval.

Figure 1: Notional Project Maturity Score at first and second pass approval



Early contact with industry in the capability definition stages is facilitated through the various Environmental Working Groups. The points of contact provided for each project can provide further information on the timing and nature of industry involvement.

Defence procurement is underpinned by the principle of value for money. Within this framework, Australian industry is expected to have a key role in the majority of proposals during both the acquisition and through-life support stages of a proposal's life cycle, in accordance with Australia's military self-reliance objectives.

In order to better inform industry of the potential opportunities arising from DCP 2009, the information contained in each proposal has been expanded from that provided in the previous version DCP 2006. The schedule details for each project now contains the anticipated first pass dates, in order to guide industry on the possible release of RFTs and RFPs. Where possible, the description of each project has been expanded to include more detail on the anticipated outcomes or intent of each project. These changes are in line with the current Government policy of providing clear identification of industry requirements early in the capability development process.

PLAN COMPOSITION

DCP 2009 contains equipment acquisition proposals planned for Government consideration (first or second pass approval) in the next four years, covering a range of Defence capabilities, including Land Forces, Air Forces, Maritime Forces (both surface and sub-surface), Strike and Network Centric Warfare. It does not include details on approved projects. Information on approved capital investment proposals can be found in the 'Projects' section of the Defence Materiel Organisation website at www.defence.gov.au/dmo.

DCP 2009 contains project specific information in the following subsets:

- **Phase Scope** – describes what is to be acquired under the indicated phases of the project.
- **Background** – details how each specific project phase relates to the overall capability requirement.
- **Australian Industry Opportunities** – identifies potential opportunities for Australian industry involvement in the acquisition and through-life support stages of the proposal. This section also identifies the Acquisition Categorisation (ACAT) level of the project, which is a measure of the scale, complexity and risk in the project.
- **Planned Schedule Highlights** – provides indicative first pass approval (if applicable), Year-of-Decision (second pass approval) and Initial Operating Capability years.
- **Points of Contact** – for both the proposal sponsor (usually Defence's Capability Systems Division) and the capability acquirer (Defence Materiel Organisation), along with website information if applicable.

Further information on the content of some of these sections is provided below.

The proposals are listed in alphanumeric order (i.e. AIR, DEF, JP, LAND and SEA proposals in number order). Indexes are also provided - these categorise proposals by Year-of-Decision and ACAT. Summary tables provide consolidated information on Australian Industry Opportunities and Points of Contact.

Australian Industry Opportunities

This is a major focus of the DCP and reflects the potential opportunities for Australian industry to participate in acquisition or through-life support activities. The Government expects Defence to ensure best value for money in Defence spending, based on open and effective competition. The Government has also stated that, consistent with the principles of value for money and the need to consider off-the-shelf solutions, its policy is to ensure that as much of the Defence budget is spent in Australia as is practical. Finally the Government seeks to improve our Defence self-reliance through maintaining a focus on the local provision of a broad set of strategic industry capabilities. Through the application of the Australian Industry Capability (AIC) program Defence seeks to ensure that Australian defence industry is given the opportunity to be part of all contracts over $50 million, or where the contract involves a designated strategic industry capability. In such contracts, the RFT will include industry requirements, and tender responses will be expected to include an AIC Plan. Through this system, Defence seeks to maximise Australian industry participation in the acquisition and sustainment of ADF capability and to achieve the required strategic industry capability outcomes where this represents value for money.

Acquisition and Through-life Support

These sections are intended to provide information that will support industry's strategic planning. A key element of that strategic planning will be to identify opportunities for participation, and to that end, where possible, the currently planned acquisition and sustainment concept has been described.

Industry Capabilities and Activities

This section contains information on the industry capability opportunities associated with each project. This is presented in a series of matrices that outline areas of industrial capability where it is anticipated that Australian industry could participate, together with corresponding activities expected for each industrial capability. To provide additional granularity, the tables provide an indication of the likely criticality of local industry activity to the ADF:

- D – The industry capability and activity is likely to be **desirable** in Australia.
- O – The industry capability and activity is likely to be **optional** in Australia.

These indicators do not imply that all the designated industry capability must be in Australia, but only that some level of local capacity is likely as part of project acquisition and / or ADF sustainment needs.

The industry activities listed in the matrix are those that are used in the Defence + Industry ePortal[1] (www.dplusi.defence.gov.au). The industry capabilities identified in these matrices are those that have been highlighted in the White Paper as being the broad range of strategic industry capabilities that the Government will monitor. The tables may also contain additional project specific industry capability entries. Below is a further explanation of the major capabilities contained in the matrices:

- **Acoustic technologies and systems.** This capability includes the world class capabilities Australia has in the development and through-life support of underwater acoustic systems.
- **Airborne Early Warning and Control (AEW&C) aircraft systems.** This capability relates to the repair and maintenance of specialist AEW&C systems including the airborne tactical data system, Multi-role Electronically Scanned Array (MESA) radar, IFF, communications and electronic support systems.
- **Anti-tampering capabilities.** These capabilities are incorporated into components or systems to prevent the unauthorised opening of the system, access to the internal workings or Intellectual Property.
- **Armoured vehicles.** This capability relates to the repair, maintenance and some upgrades of specialist military vehicles i ncluding tanks and armoured personnel carriers.
- **Combat clothing and personal equipment.** This capability encompasses the ability to undertake ongoing development of the combat uniform and personal equipment fabrics, to include multi-spectral and other signature reducing characteristics, along with other enhancements to personal survivability.
- **Communications security.** This capability encompasses emanations security testing, which protects against unintentional emissions from communications and IT equipment, commonly known as Tempest testing, and the provision of support to cryptographic equipment.
- **Composite and exotic materials.** This is the ability to repair specialist alloys and composite materials, to develop new repair techniques and to undertake precision machining of such materials.
- **Electronic Warfare.** These industrial capabilities include Electronic Warfare (EW) counter-measures development and validation, EW re-programming, system integration and 'tuning' of overseas developed EW systems to meet our operational needs, the management of threat libraries and, importantly, selective strategic product development to maintain high-end EW knowledge and capability.
- **HF and Phased Array Radars.** This capability includes the ongoing development and support of the locally developed world leading capabilities embodied in the Jindalee Operational Radar Network (JORN) and the Phased Array Radar systems currently being installed on ANZAC frigates.
- **'High end' system and 'system of systems' integration.** Relates to the integration of complex electronic and software systems onboard platforms and to conduct 'system of systems integration' of off-the-shelf capabilities into the broader ADF networks, which is critical to achieving the ADF's network centric warfare goals.
- **Infantry weapons and remote weapons stations.** This capability is the provision of the required level of support to the ADF direct fire weapon fleets (pistols, rifles, machine guns, grenade launchers), and the relatively new capability of remote weapon stations.
- **Protection of networks, computers and information including in the field of cyber defence.** These capabilities safeguard ADF information, through the incorporation of encryption techniques, firewalls, anti-virus software and anti-tampering capabilities and devices.
- **Rotary and fixed wing aircraft.** These capabilities relate to the ability to provide repair and maintenance

1 The Defence + Industry ePortal provides improved opportunities for companies and Small to Medium Enterprises to join in defence acquisition and sustainment programs.

services to maintain operational availability of military aircraft and undertake some selected upgrade, overhaul and rebuild activities.

- **Secure test facilities and test ranges.** This capability relates to the availability of maritime, air and land based ranges for test and evaluation of weapons, signatures and electronic warfare systems. Test ranges are likely to be owned by the Commonwealth with industry providing testing equipment and services.
- **Selected ballistic munitions and explosives.** This capability relates to the manufacture of some high usage munitions, ammunition components, propellants and explosives.
- **Signature management.** Includes the capabilities and coatings used for signature management on submarines, naval vessels, land and air platforms including sound minimisation, radar absorbent materials, infrared absorbent paint and materials, and other stealth technologies.
- **Submarines.** This capability includes specialist submarine design knowledge to enable Australia to be a smart buyer and the capabilities to enable construction of the future submarine in Australia. While Australia will not design a submarine from scratch, the ability to adapt an overseas design, or utilise 'best of breed' technologies to meet Australian requirements will be critical to the development of an effective submarine capability. There is also a repair and maintenance capability to maintain operational availability of submarines and to undertake some selected upgrade, overhaul and rebuild activities.
- **Surface naval vessels.** This capability incorporates naval design and engineering services, the construction of ships and ship modules and the repair and maintenance capabilities to maintain operational availability of naval vessels and undertake some selected upgrade, overhaul and rebuild activities. A specific need within this capability is for adequate access to dry dock facilities and common user facilities in strategically important locations around the Australian coastline for the repair and maintenance of ADF naval vessels in peacetime and in credible contingencies.
- **System assurance capabilities (both hardware and software).** Capabilities that assure ADF IT and software driven systems as suitable and available for service. This includes assessing the reliability of hardware and software, to ensure it is fit for purpose and function, and free of malicious code.
- **System life cycle management.** These capabilities extend the service life of ADF systems by undertaking active life management, including life extension, fatigue management and the development of novel repair techniques.
- **Targeting and precision navigation.** This capability relates to the provision of geospatial information and systems including software development. The capability is associated with both GPS based systems and inertial navigation systems.
- **Through-life and real-time support of mission and safety critical software.** These capabilities are for real-time, or near real-time, adjustment to software associated with critical systems (combat systems).
- **Through-life support of guided weapons.** This capability involves the inspection, repair, maintenance and testing of missiles and guided weapons to ensure that they are in working order and safe to use.

Acquisition Categorisation (ACAT) Scores

In accordance with the recommendations of the Defence Procurement and Sustainment Review 2008 (the Mortimer review), the Estimated Phase Expenditure bands of previous DCPs have been replaced by the Acquisition Category (ACAT) scores for the projects. The Defence Materiel Organisation has been using the ACAT framework since 2004, as it provides a consistent methodology for categorising projects. The ACAT framework operates in conjunction with the Project Manager Certification Framework to align the complexity of projects with the experience and competencies of project managers.

The ACAT framework is based on four Acquisition Categories that provide a graduated scale from the most demanding and complex projects to those that are less so. The largest, most demanding and complex projects are categorised as ACAT I and ACAT II, and the less demanding projects are categorised ACAT III and ACAT IV. The specific description of each level is as follows:

- **ACAT I** projects are major capital equipment acquisitions that are normally the ADF's most strategically significant. They are characterised by extensive project and schedule management complexity and very high level of technical difficulty, operating, support and commercial arrangements.
- **ACAT II** projects are major capital equipment acquisitions that are strategically significant to the ADF. They are characterised by significant project and schedule management complexity and high levels of technical difficulty, operating, support arrangements and commercial arrangements.
- **ACAT III** projects are major or minor capital equipment acquisitions that have a moderate strategic significance to the ADF. They are characterised by the application of traditional project and schedule management techniques and moderate levels of technical difficulty, operating, support arrangements and commercial arrangements.
- **ACAT IV** projects are major or minor capital equipment acquisitions that have a lower level of strategic significance to the ADF. They are characterised by traditional project and schedule management requirements and lower levels of technical difficulty, operating, support arrangements and commercial arrangements.

The ACAT level of a project will provide industry with a more robust description of the scale, complexity and risks in the project. It should be noted that over the life of a project the ACAT score is continuously reviewed, especially as it passes through decision or milestone gates (such as first pass approval, critical design reviews, etc) and as the complexity or risk reduces, the ACAT score is expected to change.

The ACAT score consists of six attributes. Table 1 is the matrix which project staff use to assess the complexity levels of each attribute. This table will be useful to reference when consulting the ACAT score for each project. The attributes are scored and a calculator provides a weighted rating for the project. The attributes are:

- **Acquisition Cost.** The acquisition cost includes the cost of the materiel system (i.e. mission system plus support system), plus facilities costs. This does not include ongoing sustainment budgets. This is based on the current 'constant dollar' budget for the project.
- **Project Management Complexity.** This highlights complexity beyond that associated with traditional project management knowledge areas, which are characterised by a project execution environment which is novel and uncertain with very high-level political interactions.
- **Schedule.** This recognises the complexity brought about by schedule pressures on the project requiring the application of varying levels of sophistication in schedule management.
- **Technical Difficulty.** There are inherent complexities which are associated with technical undertakings of design and development, assembly, integration, test and acceptance.
- **Operation and Support.** An often neglected complexity is associated with the readiness of the organisation and environment into which the system will be operated and supported.
- **Commercial.** This attribute recognises the capability of industry to deliver and support the required system / equipment, the complexity of the commercial arrangements being managed including the number and level of interdependency of commercial arrangements managed by the DMO.

Table 1: The Acquisition Categorisation Framework Decision Support Matrix

Attribute Complexity Level	4 (Low)	3 (Moderate)	2 (High)	1 (Very High)
Acquisition Cost (Note 1)	‹$100m	$100m–$500m	$500m–$1,500m	›$1,500m
Project Management Complexity	Relies predominantly on traditional project management knowledge	Relies predominantly on traditional project management knowledge	Significant	Extensive
Schedule	Routine schedule management issues Requires the application of routine project monitoring and control measures	Difficult schedule management matters expected to arise from time to time Requires the application of difficult remedial schedule management measures	Complex schedule management issues with competing priorities and persistent pressure on delivery date(s) Requires the application of innovative schedule management initiatives	Extremely complex schedule management issues with competing/ conflicting priorities and persistent high-level pressure on delivery date(s) Requires the application of innovative schedule management initiatives and frequent high-level management intervention
Technical Difficulty	Low system complexity Limited hardware and/or critical software development Limited amount of systems integration	Moderate system complexity Moderate level of hardware and/ or software development Moderate systems integration	High system complexity High level of hardware and/or software development High systems integration	Very high system complexity Very high level of hardware and/ or software development Very high systems integration
Operation and Support	Very similar system/ equipment exists in ADF No new operation and support infrastructure changes needed Sustainment can fit in an existing SPO	Similar system/ equipment exists in ADF Some operation and support infrastructure changes needed Sustainment can fit in an existing SPO with minimal change	Some systems/ equipment do not exist in ADF Major operation and support infrastructure changes needed Sustainment may require moderate changes to an existing SPO	Most major systems/ equipment do not exist in ADF Significant operation and support infrastructure changes needed Sustainment could require a new SPO to be put in place or major changes to existing SPO(s)
Commercial	Existing companies have supplied almost identical systems Contracting arrangements and contracts are complex but contract management is routine	Companies have previously demonstrated capability to develop and produce systems Contracting arrangements and contracts are complex and require a high level of contract management	Individual company capabilities exist but not previously combined to produce required capability Project will challenge extant industry capabilities Contracting arrangements are complex or there is high level of interdependency between a number of commercial arrangements being managed by the DMO	New industry capabilities may need to be introduced Project is at the margins of extant industry capability maturity levels Contracting arrangements are highly complex and there is very high level of interdependency between a number of commercial arrangements being managed by the DMO Novel commercial practices required to undertake the project
Examples	*SEA 1351 Ph 1, Replacement East Coast Tugs* *JP 129 Ph 4, Tier 1 Unmanned Aerial Vehicle*	*AIR 9000 Ph 5C, Additional Heavy Lift Helicopter* *JP 157 Ph 1, Replacement Refuelling Trucks*	*SEA 1439 Ph 6, Collins Sonar Replacement* *LAND 17 Ph 1, Artillery Replacement*	*SEA 1000 Program, New Submarine* *AIR 6000 Ph 2A/2B, New Air Combat Capability*

Note 1: Not all acquisition ACAT scores will correlate with project dollar size. E.g. a large purchase of an established capability will be rated at a lower ACAT level.

Planned Schedule Highlights

This section provides indicative first pass approval, year-of-decision (second pass approval) and Initial Operating Capability years. These dates are indicative only. Where the first pass approval and year-of-decision dates are the same this may indicate the project is undertaking a single second pass approval. The timing of some of the projects may be adjusted for a variety of reasons including a change in priorities, modified development timescales, or a change in project intent (e.g. from upgrade to replacement). As also highlighted earlier, there is an element of over-programming built into the DCP. This over-programming is a long-standing practice designed to provide flexibility and to aid in ensuring that best use is made of available funding in the event of delays to the development of individual projects.

The schedule highlights include new attributes from previous DCPs including an indication of when the project is expected to seek first pass approval under the two-pass approval process, as this is seen as a key date for industry strategic planning. It is usual for a RFT, or some other type of industry solicitation or cost refinement activity to be undertaken post first pass approval.

Also included in this section is an indication of when the Initial Operating Capability is required. This replaces the previous 'In-service Delivery' dates which indicated when the first major items of the system were to be delivered, to a measure that highlights when the first elements of the new system need to be operationally ready. This puts the planning and delivery focus on all elements of the system, including training and support, not just on the delivery of the equipment.

Points of Contact

The position and phone number of the points of contact are provided should additional information on specific proposals be required. The points of contact are from the Capability Staff and, where applicable, the Defence Materiel Organisation - or in some instances the Chief Information Officer Group. Project websites are also provided where applicable. Project information should in the first instance be sought from the Capability Staff contact or Chief Information Officer Group contact where they are the sponsor of the project.

INDUSTRY SECTOR IMPLICATIONS

The following charts provide an indication of expected Defence acquisition and sustainment expenditure flowing to Australian industry from the DMO over the period FY 2009-10 to FY 2012–13. These charts show both the sustainment expenditure along with the approved and unapproved capital expenditure. All expenditure estimates are in constant year dollars.

Projections are based on the existing approved capital projects and current sustainment activities, and then add estimates for the unapproved projects included in DCP 2009, and their associated net personnel and operating costs.

There are a number of charts presented and these in total provide a comprehensive picture of order of magnitude of the work that can be expected by Australian industry. The initial chart shows the overall work that is expected to flow to Australian industry across the Forward Estimates period. Then there is summary information for Australian industry that has been broken down into five broad industry sectors:

- Aerospace;
- Maritime;
- Vehicles and Land;
- Weapons and Munitions; and
- Electronic Systems.

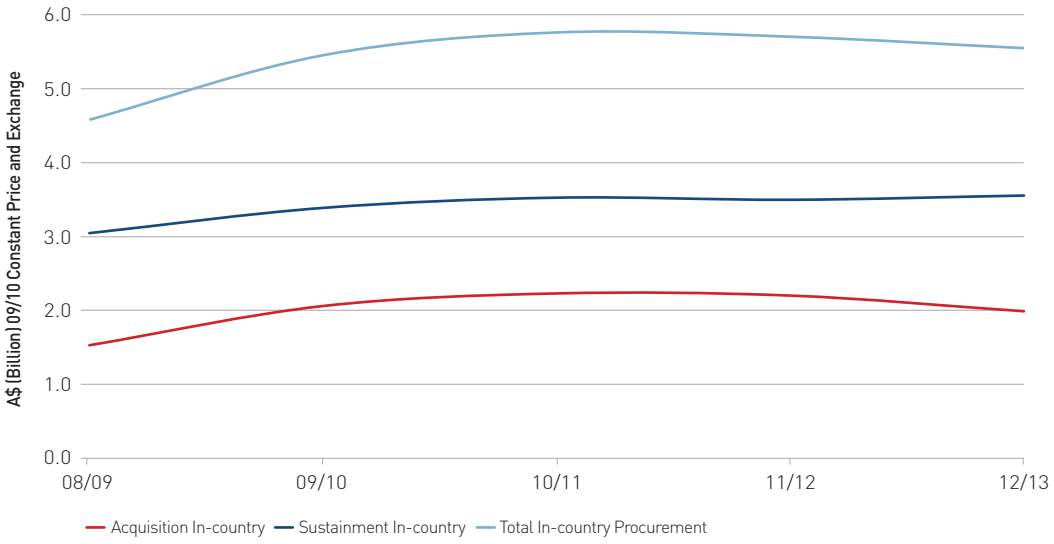
Proposals have been attributed to industry sectors based on the proportion of the estimated expenditure attributed to that sector. In particular, it should be noted that the major electronic systems elements of each capability are separated out from the platform element and included separately in the electronic systems sector. As such, the proposed expenditure outlined in the figures below for Aerospace, Maritime, and Vehicles and Land do not include the major electronic systems elements. For example, projects such as a new ship could have expenditure across three sectors – maritime (for the platform), electronic (for the command, control and communications system), and weapons and munitions (for missiles and guns).

Finally a projection is provided of the estimated direct local workforce required across the Defence industry sectors.

Total Acquisition and Sustainment

Figure 2 provides a graph of the total expected in-country work over the next four years. The graph shows slow growth in sustainment reflecting the expected efficiencies to be gained through the SMART sustainment initiatives. It also shows strong growth is expected in the overall acquisition expenditure in-country. The five year historical real growth trend for local industry was around 3.1 per cent per annum. The average growth projection is about 4 per cent per annum across the next four years.

Figure 2: Total In-Country Expenditure.



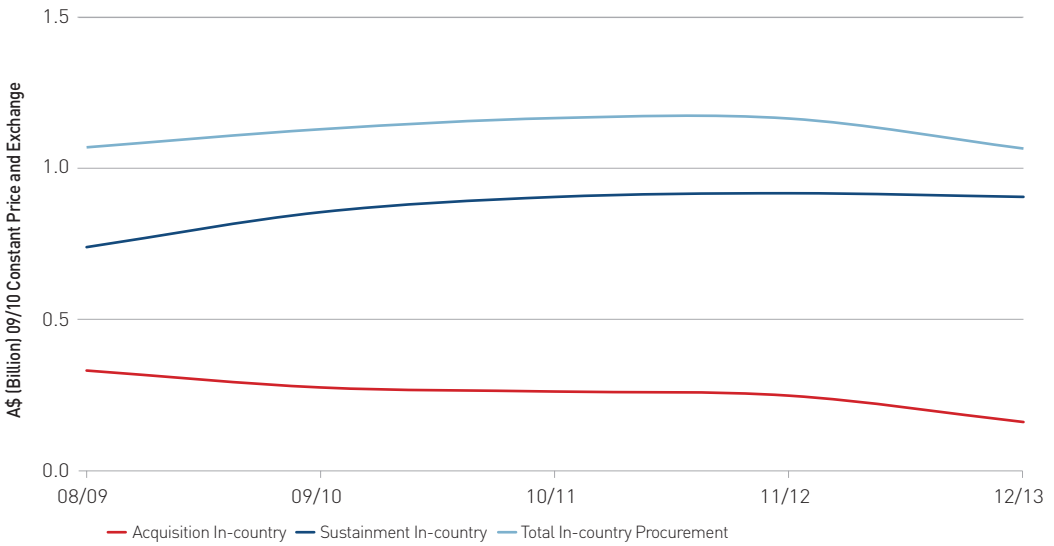
Notes:

1. These charts show acquisition and sustainment of Defence equipment, and exclude ICT or facilities expenditures.
2. The in-country expenditure graph does not include the DMO service fee which is also spent locally. This adds around 8 per cent of total expenditure to the in-country totals. Over 60 per cent of expenditure is expected in-country.

Aerospace

Figure 3 shows that demand for acquisition work in the local aerospace sector is reducing. This is because the majority of air platforms are procured offshore. It is also apparent that there is slow growth in the need for sustainment capacity. This is because less reliable platforms are being retired from service and they are being replaced by more reliable modern platforms. The average annual growth in this sector is 0.1 per cent per annum across the next four years.

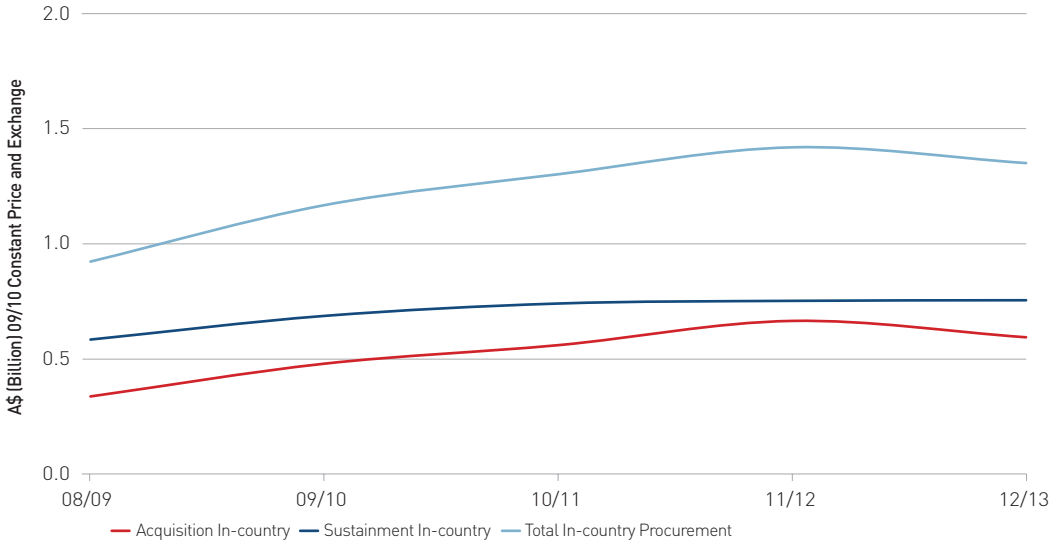
Figure 3: In-Country Expenditure within the Aerospace Sector.



Maritime

Figure 4 shows there is considerable growth in new acquisition work. This is associated with the Air Warfare Destroyer and the Landing Helicopter Dock projects. The five year historical real growth trend for local industry in this sector was around 3.2 per cent per annum. The average growth projection is about 8.3 per cent per annum across the next four years.

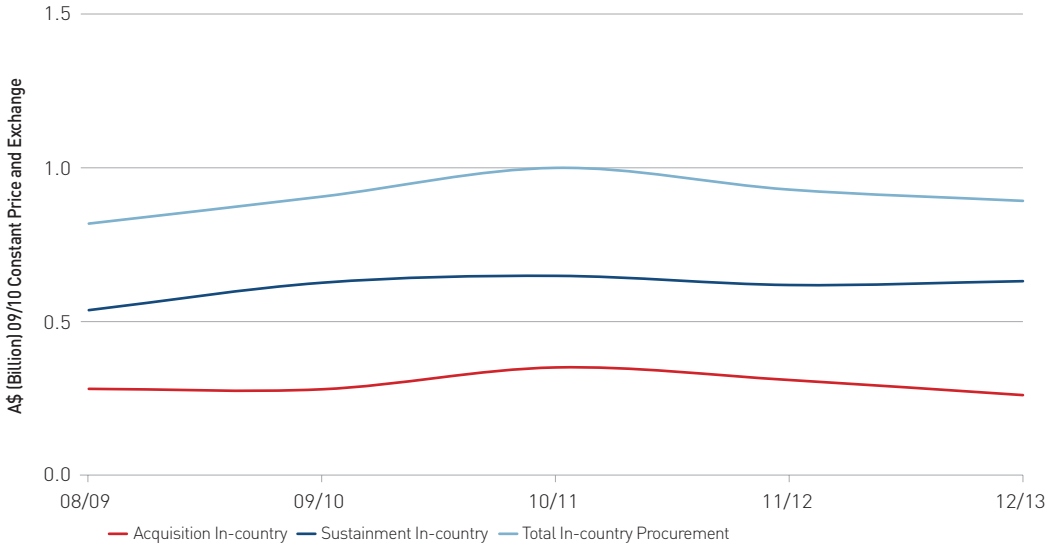
Figure 4: In-Country Expenditure within the Maritime Sector.



Vehicles and Land

Figure 5 shows there is some expected growth in expenditure due to the major projects LAND 121 (Overlander) and LAND 17 (Artillery Replacement). The five year historical real growth trend for local industry in this sector was around 3.5 per cent per annum. The average growth projection is about 2.5 per cent per annum across the next four years.

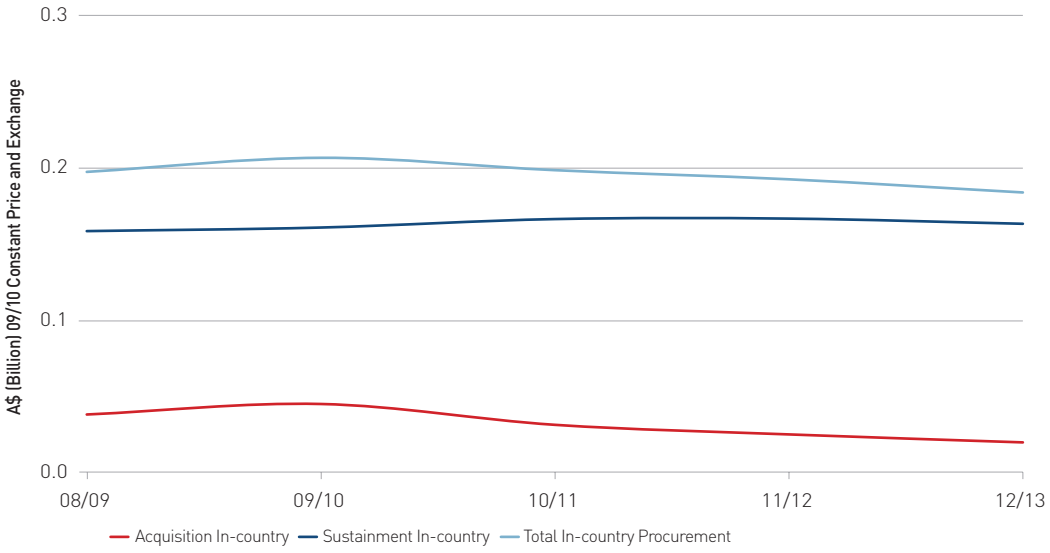
Figure 5: In-Country Expenditure within the Vehicles and Land Sector.



Weapons and Munitions

Figure 6 shows that the demand from Defence is not likely to cause additional growth in this sector. While this DCP contains weapons projects, the majority of these are expected to be sourced offshore. The majority of the local weapons and munitions expenditure is directed to sustainment. The average growth (decline) projection is about –1.7 per cent per annum across the next four years.

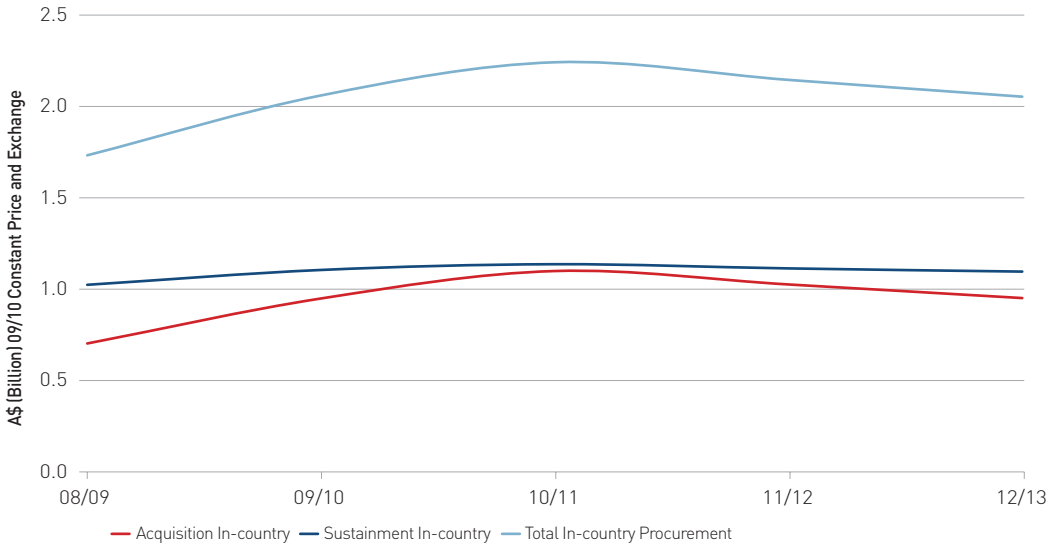
Figure 6: In-Country Expenditure within the Weapons and Munitions Sector.



Electronics Sector

The electronics sector is associated with most major projects and as such there is considerable project based expenditure for Australian industry. As can be seen in Figure 7, there is a significant rise in local industry demand. This is associated with major projects such as SEA 4000 and a plethora of projects delivering command, control, communications, networking and data management. The five year historical real growth trend for local industry in this sector was around 3.4 per cent per annum. The average growth projection is about 4.8 per cent per annum across the next four years.

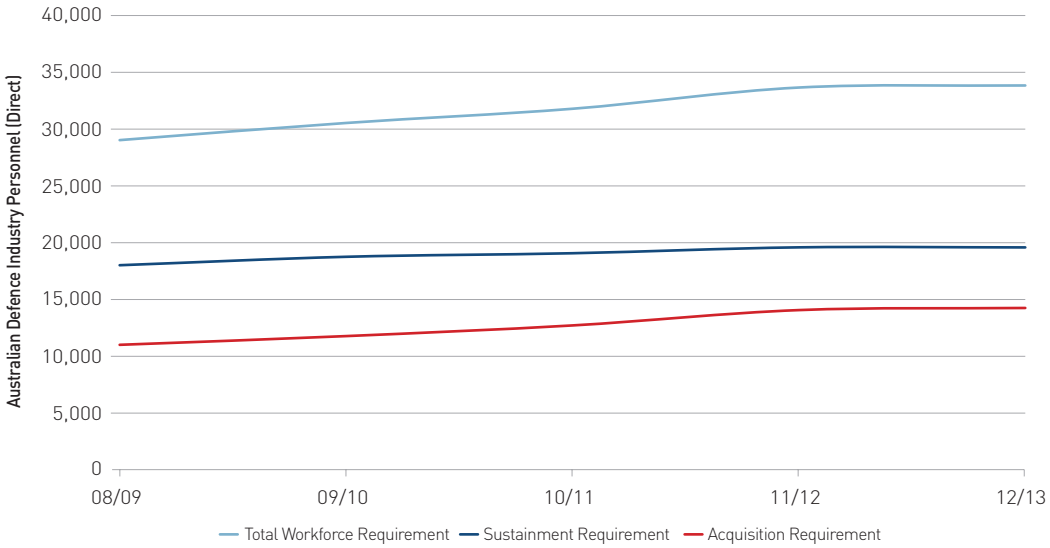
Figure 7: In-Country Expenditure within the Electronics Sector.



Defence Industry Workforce

Also included at Figure 8 is an Australian industry workforce projection chart based on the above Defence expenditure projections. The workforce projection includes both direct and indirect workforce requirements, but does not include DMO workforce numbers. The local industry workforce chart indicates a significant rise in expected workforce numbers over the next four years. The average annual workforce growth is estimated to be around 3.1 per cent per annum, after assuming about 1 per cent per annum productivity improvement.

Figure 8: Australian Industry Workforce Projections.



Note:

1. This chart shows a smoothed moving average of the predicted workforce growth, to take account of project uncertainties and the recruiting and training times for skilled workers to deliver project outcomes.

In summary, the previous industry implications graphs have shown strong growth in demand for local industry over the next four years. The substantial capability plans in the 2009 White Paper foreshadows continuing strong demand growth beyond FY 2012-13. Defence would recommend to international and local industry that they ensure that their companies are positioned to respond to significant demand growth in this period and beyond.

PLANNING FOR CAPABILITIES BEYOND 2013

The 2009 White Paper is the Government's comprehensive plan for Defence for the next 20 years. The primary outcome is to build Force 2030, and remediate the current and projected force, required for the defence of Australia and its approaches, and in relation to our unique strategic interests. The capabilities outlined in the White Paper will create one of the most capable Defence forces in our region, with the world's best people, equipment and support systems.

While the Government has decided that this Public DCP 2009 will set out the expenditures we expect over the next four years, significant commitments have been made in the White Paper to Australia's future military capabilities beyond this period.

Some projects related to these capabilities are not included in this DCP, however, Defence may be conducting capability development activities for a number of them during the period 2009-2013. These activities may include: technical studies to determine capability performance requirements and to assess technical risks; simulation activities and prototype development and evaluation; market studies to determine industry capacity and technological expertise in certain areas; costing studies to develop a robust understanding of acquisition and through-life costs associated with the future capabilities, facilities and supporting infrastructure; studies into human factors and training needs analysis; and analysis and studies to develop plans for the future support services and sustainment systems.

The information gathered through these activities will inform the development of subsequent DCPs. In addition companies who are seeking to understand the longer run plans as a result of the 2009 White Paper will gain some insight through regular participation in Environmental Working Groups and other industry participation activities.

Below is a summary of some of the major programs and phases expected to be included in subsequent DCPs to meet the capability goals of the White Paper:

- **Armed Reconnaissance Helicopter Upgrades.** Under AIR 87 there is likely to be a new phase (or phases) to maintain the effectiveness of the capability. This project is expected to provide system upgrades to the ARH consistent with the parent Franco/German Tiger helicopter program. These upgrades may include weapons, engines, software, aircraft mission management system and ground support system upgrades. This is likely to be an ACAT III project and Defence will commence work on developing this phase for Government consideration after 2016.
- **AEW&C Upgrades.** Under AIR 5077 there are likely to be new phases to maintain the effectiveness of the capability. These phases will be informed by the studies under Phase 4. Some initial plans include developing a comprehensive AEW&C test environment for upgrading aircraft and associated support segments, and to implement and test mandatory security and interoperability upgrades to the Wedgetail AEW&C capability. There will also be a comprehensive mid-life upgrade. These phases may be up to ACAT I and Defence will commence work on developing these phases for Government consideration beyond 2019.
- **Multi-mission Unmanned Aerial Vehicle (MUAV).** AIR 7000 Phase 1B is intending to acquire a High-Altitude Long-Endurance (HALE) Maritime Unmanned Aerial System (MUAS) capable of maritime and overland Intelligence, Surveillance and Reconnaissance (ISR) roles and Electronic Support (ES). This is likely to be an ACAT II project and Defence will commence work on developing this phase for Government consideration beyond 2019.
- **Military Satellite Communications.** Recent and planned phases of JP 2008 are providing a comprehensive satellite communications (SATCOM) capability to support ADF operations. One additional phase is being considered to deliver an ADF Ultra-High Frequency (UHF) SATCOM capability providing coverage in the Pacific Ocean region. This is likely to be an ACAT III project and Defence will commence work on developing this phase for Government consideration after 2016.

- **ADF Joint Command Support Environment.** JP 2030 continues to build upon the capability delivered under previous phases of the project. A later phase is intended to further establish the framework for the Joint Command Support Environment to consolidate existing Command Support Systems into a single integrated environment linking all elements of the ADF. This is likely to be an ACAT III project and Defence will commence work on developing this phase for Government consideration after 2016.
- **Defence GEOINT Capabilities.** JP 2044 is a multi-phased proposal designed to develop and sustain a Defence capability to exploit geospatial data gathered from multiple sources including space-based surveillance. Later phases of this project will seek to further enhance the overall capability and enable Defence to maintain high level technology and effectiveness in this enterprise. These are likely to be ACAT III phases and Defence will commence work on developing the first of these phases for Government consideration after 2013.
- **Strategic Sealift.** A phase of JP 2048 will consider a strategic sealift capability. This capability would enable the ADF to transport bulk equipment, supplies and forces into a theatre of operations and provide significant ongoing support to deployed forces. Strategic sea lift is complementary to amphibious operations. This is likely to be an ACAT II project and Defence will commence work on developing this phase for Government consideration beyond 2019.
- **Battlespace Communications Systems (Land)**. A later phase of JP 2072 is intended to continue the expansion of enhanced communications to support joint operations. The phase will continue to progressively equip the remaining elements of the land force. JP 2072 is an ACAT I Program and Defence will commence work on developing this phase for Government consideration after 2016.
- **Maritime Strike Weapon for New Air Combat Capability.** This new project aims to acquire a maritime strike weapon for the multi-role fighter being acquired under AIR 6000, the New Air Combat Capability. This is likely to be an ACAT III project and Defence will commence work on developing this project for Government consideration after 2016.
- **Ground Based Air Defence Enhancements or Replacement.** Under LAND 19 this phase is intended to enhance or replace the existing Ground Based Air Defence (GBAD) system (RBS 70 based). It will include technologies and weapon systems that are also capable of Countering Rockets, Artillery and Mortars (CRAM). This is likely to be an ACAT II project and Defence will be developing this phase for Government consideration after 2013.
- **Army Battle Management System.** LAND 75 is a multi-phase proposal to deliver a land Battle Management System (BMS). A later phase is planned to take the federated network of BMS type Command and Control systems to a common solution and provide major software releases to enhance interoperability with allied and other agency domains. This is likely to be an ACAT II phase and Defence will commence work on developing this project for Government consideration after 2016.
- **ADF Small Arms Replacement.** This new project aims to replace the ADF small arms inventory. Existing upgrade programs (such as LAND 125 Phase 3) will continue development of the AUSTEYR family of weapons. As such the new small arms will not be required until beyond 2019. This is likely to be an ACAT III project and Defence will commence work on developing this phase for Government consideration beyond 2019.
- **Land Combat Vehicles.** The LAND 400 project will aim to replace and enhance those combat systems currently provided by M113, ASLAV and Bushmaster. The project is likely to be split into phases to deal with vehicle classes or capabilities. This is likely to be an ACAT I Program and Defence will commence work on developing this project for Government consideration after 2016.

- **Long Range Subsurface Detection.** This SEA 1100 phase intends to provide the ability to reliably and effectively employ a towed array sonar from the ANZAC Class FFHs with a high probability of deterring or detecting underwater threats at tactically useful ranges. This is likely to be an ACAT III project and Defence will commence work on developing this project for Government consideration after 2013.
- **Maritime Extended Range Air Defence.** This proposed new project seeks to provide the Royal Australian Navy with an extended range air defence weapon for the Air Warfare Destroyers. This is likely to be an ACAT II project and Defence will commence work on developing this phase for Government consideration beyond 2019.
- **Maritime Operational Support Capability.** This phase of SEA 1654 seeks to replace the capability provided by HMAS *Success*. This is likely to be an ACAT II project and Defence will commence work on developing this project for Government consideration after 2016.
- **Air Warfare Destroyer (AWD) – Strike Capability.** This new phase of SEA 4000 seeks to provide an enhanced sea based long range strike capability for the HOBART Class destroyers. This is likely to be an ACAT III project and Defence will commence work on developing this phase for Government consideration beyond 2019.
- **Future Frigate.** This new project SEA 5000 will introduce into service the next generation of naval surface combatants that will have a strong emphasis on anti-submarine warfare and be capable of independent and task group operations. This is likely to be an ACAT I Program and Defence will commence work on developing this project for Government consideration beyond 2019.

The White Paper also outlines the Government's commitment to further enhance existing platforms, including:

- ensuring that the ANZAC Class frigates continue to be able to operate effectively until they are replaced by the Future Frigates, including putting the ships through the anti-ship missile defence program, subject to successful trials in a lead ship;
- continuing to upgrade the protection, mobility and firepower of the M113 armoured personnel carriers, some of which are already in service;
- continuing to enhance the capabilities of the individual soldier in dismounted close combat to improve combat power, survivability, and command and control.

The Government has also made a commitment to:

- make a substantial investment in intelligence, surveillance and reconnaissance capabilities;
- make major enhancements to Defence's cyber warfare capability;
- focus on strengthening the ADF's electronic warfare capabilities;
- enhance Defence's joint command support system; and
- build a networked ADF through progressively delivering networked maritime, land, air and intelligence, surveillance and reconnaissance domains.

In addition to the capabilities highlighted in the White Paper, there are many smaller projects and phases that together deliver many of the essential support capabilities for the ADF. These projects provide capabilities that enable other major systems to realise their full effectiveness and provide extensive opportunities for Australian small to medium enterprises.

DCP 2006 PROJECTS APPROVED

The table below shows the Public DCP 2006 proposals that have been approved, and as a consequence do not appear in this Public DCP 2009. Information on the approved projects is available through the Defence Materiel Organisation website (www.defence.gov.au/dmo).

Proposal Number	Phase	Name	Estimated Expenditure Band
AIR 5276	8B	AP-3C Electronic Support Measure – Acquisition	$100m to $150m
AIR 5276	CAP1	AP-3C Capability Assurance Program	$50m to $75m
AIR 5376	3.2C	Hornet Structural Refurbishment Stage 2 – Additional	$50m to $75m
AIR 5376	2.3C	F/A-18 EWSP - Jammers	$50m to $75m
JP 126	2	Joint Theatre Distribution System	$150m to $200m
JP 2008	3F	Military Satellite Capability	$75m to $100m
JP 2008	4	Military Satellite Capability	$750m to $1000m
JP 2048	4A/4B	Amphibious Ships	$2500m to $3500m
JP 2069	1B	High Grade Cryptographic Equipment – Secure Telephony	Less than $20m
JP 2077	2B	Improved Logistics Information Systems *(this project was split into Phases 2B.1 and 2B.2, both have received second pass approval)*	$200m to $250m
JP 2080	2B	Defence Management Systems Improvement *(this project has been split into Phases 2B.1 and 2B.2; Phase 2B.2 – ROMAN has received second pass approval; Phase 2B.1 – PMKeyS is in this DCP)*	$20m to $30m
JP 2089	2	Tactical Information Exchange Domain (Data Links) *(this project has been split into Phase 2A and 2B; Phase 2A has received second pass approval; Phase 2B is in this DCP)*	$75m to $100m
JP 2097	1	REDFIN – Enhancements to Special Operations Capability *(this project has been split into Phase 1A and 1B; Phase 1A has received second pass approval; Phase 1B is in this DCP)*	$75m to $100m
LAND 40	2	Direct Fire Support Weapon	$150m to $200m
LAND 58	3	Weapon Locating Radar Life of Type Extension	$20m to $30m
LAND 121	3A and 3B	Overlander – Field Vehicles and Trailers *(these phases were merged and approved as Land 121 Phase 3)*	$2500m to $3500m
LAND 144	1	Counter Mine Capability	$30m to $50m
SEA 1428	4	Evolved Seasparrow Missiles	$75m to $100m
SEA 4000	3	Air Warfare Destroyer	$6000m to $7500m
DEF 224	3	Force Level Electronic Warfare	$100m to $150m

PROPOSALS IN ALPHANUMERIC ORDER

Phase Scope

Phase 4 aims to conduct studies and planning to assure the Wedgetail Airborne Early Warning and Control (AEW&C) capability throughout life-of-type.

Background

The Wedgetail capability comprises six aircraft and associated support systems and facilities.

Phase 4 is intended to provide scientific, engineering and interoperability studies to develop a costed management plan to support the AEW&C capability out to its end of life.

It is expected that upgrade phases will be developed as a result of this study.

Australian Industry Opportunities

Acquisition

The studies may be conducted by consultants who would be engaged through the various contracting methodologies available to Defence.

Through-life Support

As Phase 4 is a study phase, there are no through-life support aspects.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	AEW&C Systems
Modelling / Simulation	O
Project Manage	O
Systems Definition / Development	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Planned Schedule Highlights

First Pass Approval	FY 2012-13 to FY 2014-15
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	Not applicable

Points of Contact

Capability Staff:
Deputy Director
Battlespace Management
(02) 6265 5561

Defence Material Organisation:
Director Project Management Unit
AEW&C Systems Program Office
(02) 4928 5220

AIR 5232

Phase 1 Air Combat Officer Training System

Phase Scope

This Project is intended to provide the ADF with an Air Combat Officer (ACO) training system tailored to meet the training needs of future ADF ACO aircrew.

Background

The project aims to utilise advanced training systems to increase the efficiency and effectiveness of the ACO aircrew training system. The system aims to deliver the fundamental core training for all ACO and then accommodate the specialist training needs of Navy Observers and Air Force ACO aircrew. Specialist training of Air Force ACO battlespace managers is not within the scope of Phase 1.

The complete system may not be replaced at once, but rather will be dependant on a Training Needs Analysis, expiration of current contracts and obsolescence of elements in the current system.

Australian Industry Opportunities

Acquisition

It is anticipated that Australian industry will have the opportunity to design, develop and implement the ACO training system.

Through-life Support

It is anticipated that Australian industry will have involvement with the through-life support aspects of the ACO training system, including the management, ongoing development, delivery, logistics and operational support.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Rotary & Fixed Wing Aircraft	Training Systems
Assemble / Install	D	D
Design		D
Education / Training	D	D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Manufacture / Construct	O	O
Modelling / Simulation	D	
Project Manage	D	
Repair and Maintain	D	
Software Development / Support	D	
Systems Definition / Development	D	D
Systems Integration	D	D
Test and Evaluate	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m-$1500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2015 to 2017

Points of Contact

Capability Staff:
Deputy Director Training
(02) 6265 5450

Defence Materiel Organisation:
Directorate of Emerging Aerospace Projects
Project Manager 1 – Fixed Wing
(02) 6265 5534

AIR 5276

CAP 2 AP-3C Capability Assurance Program

Phase Scope

AP-3C Capability Assurance Program (CAP) 2 is intended to treat AP-3C data management system, electronic support measures and ground support system obsolescence and investigate acoustic warfare system and data link upgrades.

Background

AIR 5276 is a multi-phased project to update the Air Force AP-3C Orion Maritime Patrol Aircraft. The remaining unapproved phases of AIR 5276 have been restructured into the AP-3C CAP to deliver AIR 5276 in coordinated and integrated blocks, with a focus on capability outcomes and improved efficiency of delivery. A number of AIR 5276 approved phases, including CAP 1 are complete or being delivered. The former CAP 3 scope has been subsumed by CAP 2.

The AP-3C CAP will be delivered as integrated elements of the AP-3C Block Upgrade Program (BUP). The AP-3C BUP is the preferred delivery mechanism for all current AP-3C projects including in-work AIR 5276 Phases, AP-3C CAP and RAAF Minor Projects.

CAP 2 is intended to treat AP-3C data management system, electronic support measures, and ground support systems obsolescence and sustainment issues. Treatment of these systems is essential to ensure the continued availability of AP-3C capabilities. Acoustic warfare and data link system upgrades will be considered to ensure the AP-3C capability edge is maintained until the aircraft's planned withdrawal date.

Australian Industry Opportunities

Acquisition

A Prime System Integrator or direct engagement of original equipment manufacturers (OEM) is expected to be required to support integration of the new capabilities introduced by CAP 2 onto the AP-3C weapon system. The Integrator and/or OEMs will be required to introduce CAP 2 capabilities under a Block Upgrade concept to maximise operational availability of aircraft and support systems.

Through-life Support

Either the Prime System Integrator, individual OEMs or existing through-life support (TLS) contractors will be expected to provide TLS for CAP 2 capabilities. It is anticipated that all elements delivered through CAP 2 will be supported through amendments to existing TLS contracts.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability				
	Acoustic Technologies & Systems	Communications Security	Electronic Warfare	Support of Mission & Safety Critical Software	Systems Integration (High End, System of Systems)
Assemble / Install	D	D	D	D	D
Design	O	O	D	D	D
Education / Training	O	O	O	D	D
In-Service / Through-life Support	D	D	D	D	D
Logistics Support	O	D	O	O	O
Project Manage	O	O	O	O	O
Repair and Maintain	D	D	D	D	D
Software Development / Support	D	D	D	D	D
Systems Integration	D	D	D	D	D
Test and Evaluate	D	D	D	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Staff Officer Maritime Patrol and Response 2
(02) 6265 5447

Defence Materiel Organisation:
Director P3 Block Upgrade Program
(08) 8393 3318

AIR 5397

Phase 2 Upgrade Australian Military Airspace Communications and Control System (AMACCS)

Phase Scope

This phase is a technology refresh for the UHF/VHF/HF communications systems delivered under Phase 1.

Background

AIR 5397 Phase 1 delivered fixed and deployable Air Traffic and Air Defence communications systems across the ADF. Communications technology for Air Traffic Control has advanced since the introduction of Phase 1. Phase 2 is expected to reassess the communications requirements within each Air Traffic and Air Defence system and consider the introduction of new technology.

The introduction of Internet Protocol (IP) over radio, voice over IP and data communications over radio are to be assessed for relevance to ADF air-ground-air communications.

Australian Industry Opportunities

Acquisition

The method of acquisition is expected to be Commercial- or Military-off-the-Shelf (COTS or MOTS) to the maximum extent possible through open tender. Australian industry opportunities are expected to be for the supply, installation and integration of the new capability. It is likely that any new radios sourced from overseas manufacturers will require Australian in-country partners to manage, at site level, the network design and integration, installation, and set to work program. Opportunities to standardise the fleet of Pilot Monitoring Facility radios and Air Defence Ground Environment radios may also be available.

Through-life Support

Through-life support to the maximum extent possible using extant Defence corporate logistics tools and processes is expected for this capability. This includes seeking to have engineering, maintenance and logistics support contracts signed at the same time as acquisition.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Assemble / Install	D	D
Design	D	D
Education / Training	D	
In-Service / Through-life Support	D	
Logistics Support	D	
Manufacture / Construct	O	
Project Manage	D	
Repair and Maintain	D	
Software Development / Support	D	
Systems Integration	D	
Test and Evaluate	D	

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2012-13 to FY 2014-15
Year-of-Decision	FY 2014-15 to FY 2016-17
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:
Deputy Director Battlespace Management
(02) 6265 5561

Defence Materiel Organisation:
Director Project Development & Integration
Surveillance and Control Branch
(02) 6265 6291

AIR 5405

Phase 1 Replacement Mobile Regional Operations Centre

Phase Scope

Phase 1 is intended to provide a new Mobile Regional Operations Centre (MROC) to replace the current Tactical Air Defence System (TADS).

Background

MROC provides a deployable integrated air defence command and control system. The current TADS is reaching its life-of-type and needs to be replaced with a modern and flexible air battle management system that will be an important node in the networked battlespace.

Phase 1 will provide the replacement MROC.

Australian Industry Opportunities

Acquisition

It is anticipated that Phase 1 will provide the following industry opportunities:

- provision of MROC system;
- integration of the new MROC into the Australian Aerospace Battle Management systems;
- test and evaluation;
- removal and disposal of existing systems; and
- development of appropriate training systems, provision of maintenance staff and, if applicable, integration within extant simulation and/or training systems.

Through-life Support

The industry requirements will be based around developing and maintaining sufficient capability within Australian industry to undertake the range of through-life maintenance and support activities necessary to sustain the system(s).

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

	Capability
Activity	Mobile Regional Operations Centre
Assemble / Install	D
Design	O
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Project Manage	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:
Staff Officer Battlespace Management 1
(02) 6265 2216

Defence Materiel Organisation:
Director Project Development & Integration
Surveillance and Control Branch
(02) 6265 6291

AIR 5416

Phase 4B1 C-130J Radar Warning Receiver (RWR)
Phase 4B2 C-130J Large Aircraft Infrared Countermeasures (LAIRCM)

Phase Scope

Phases 4B1 and 4B2 are intended to provide additional Electronic Warfare Self Protection (EWSP) for the C-130J aircraft consisting of radar warning and infrared counter-measure systems.

Background

AIR 5416 (Echidna) is a multi-phase project dealing with improving EWSP across a number of aircraft. Phase 4 was to acquire EWSP for C-130J aircraft. It has been restructured as follows:

- Phase 4A (approved in 2005) was brought forward from the original Phase 4 and provided a missile warning and flare dispensing capability for the C-130J.
- Phase 4B1 plans to acquire a radar warning receiver (RWR) for the C-130J.
- Phase 4B2 plans to acquire a laser-based infrared countermeasure system for the C-130J.

Australian Industry Opportunities

Acquisition

Both of these phases rely heavily on the provision of Military-off-the-Shelf (MOTS) EWSP systems via US Foreign Military Sales (FMS).

The C-130J aircraft is already configured for the ALR-56 RWR but the RWR systems have not been installed. The installation and test of the installed RWR systems is likely to occur in Australia following delivery of the RWR equipment from the US. A Request for Tender for the RWR installation and test activities is likely to be released in 2010.

The installation of the laser based infrared countermeasures systems may be carried out under FMS arrangements or under commercial arrangements with support from Australian industry.

Through-life Support

Due to the US centred FMS nature of the proposed procurements, Australian industry involvement in system support is expected to be limited.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 4B1	Capability	
Activity	Electronic Warfare	Rotary & Fixed Wing Aircraft
Assemble / Install		D
Test and Evaluate	D	D

Phase 4B2	Capability	
Activity	Electronic Warfare	Rotary & Fixed Wing Aircraft
Assemble / Install		D
Repair and Maintain	D	
Test and Evaluate	D	D

Acquisition Category (ACAT)

Phase 4B1

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Phase 4B2

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phases 4B1 and 4B2	FY 2009-10 to FY 2010-11
Year-of-Decision	Phases 4B1 and 4B2	FY 2009-10 to FY 2010-11
Initial Operating Capability	Phases 4B1 and 4B2	2010 to 2012

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phases 4B1 and 4B2	Deputy Director Aircraft Survivability (02) 6265 5734	Director Airborne Self Protection Systems Program Office (02) 6265 1615

AIR 5428 Phase 1 Pilot Training System

Phase Scope

This project intends to provide Air Force, Army and Navy with a new fixed wing Pilot Training System (PTS). The system will provide platforms for flight screening and cover all facets of undergraduate pilot training from basic flying up to entry into Air Force Lead-In Fighter and Operational Conversion Units. The system will also provide candidates for the Helicopter Aircrew Training System (HATS) to be delivered under Project AIR 9000 Phase 7.

The PTS is also responsible for the initial training of Qualified Flying Instructors (QFIs) to support the PTS and fixed-wing operational training. Airborne platforms selected for pilot training will also be assessed for their suitability for use by the Forward Air Control Development Unit (FACDU) and Air Operations Support Group (AOSG). If suitable, these aircraft will be acquired under AIR 5428.

Background

The project aims to utilise basic and advanced training systems to increase the efficiency and effectiveness of the fixed wing PTS. Specifically the system will:

- enable an increase in graduation numbers;
- generate pilot skills consistent with advanced 4th/5th generation aircraft;
- enable the withdrawal of current training media; and
- provide solutions for the integration of synthetic training systems.

All pilot training will be conducted within Australia. The ADF intends to retain the military elements of the existing PTS, including military flying schools and the use of predominantly military QFI for student instruction.

Australian Industry Opportunities

Acquisition

Although the industry requirements are yet to be determined, the requirements are anticipated to include:

- development of the PTS (including curriculum, training media such as training aids, manuals and supporting software). It is expected that Australian industry and overseas Original Equipment Manufacturers (OEM) will establish teaming arrangements for software development and other training requirements;
- development and maintenance of a Training Management Information System;
- participation on a cost-effective competitive basis in the global supply chain of the aircraft OEM; and
- development and/or support of PTS related infrastructure.

The training aircraft are expected to be Commercial- or Military-off-the-Shelf. It is anticipated that the acquisition will provide the level of technical transfer and Intellectual Property (IP) access from the OEM necessary to ensure Australian industry is in a position to provide the necessary support of the aircraft in-country.

Through-life Support

Subject to further definition, through-life industry involvement is anticipated to include:

- updating and enhancing the PTS (including curriculum, training media such as training aids, manuals and supporting software);
- provision of support services to training aircraft, the synthetic training environment, facilities and systems;
- maintenance of a Training Management Information System; and
- training delivery.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Rotary and Fixed Wing Aircraft	Facilities & Infrastructure
Assemble / Install	D	
Design	D	D
Education / Training	D	
In-Service / Through-life Support	D	
Logistics Support	D	
Manufacture / Construct		D
Modelling / Simulation	D	
Project Manage	D	D
Repair and Maintain	D	D
Software Development / Support	D	
Systems Definition / Development	D	
Systems Integration	D	
Test and Evaluate	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High >$1500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2015 to 2017

Points of Contact

Capability Staff:
AIR 5428 Desk Officer
(02) 6265 5121

Defence Materiel Organisation:
Project Manager AIR 5428
(03) 9256 3434

AIR 5431

Phase 1 Deployable Air Traffic Management and Control System
Phase 2/3 Fixed Base Air Traffic Management and Control System

Phase Scope

Phase 1 seeks to provide a deployable Defence Air Traffic Management and Control System (DATMCS) to replace the existing system and to add additional capability.

Phase 2 seeks to provide Air Traffic Control (ATC) Surveillance Sensors to replace existing sensors at ADF fixed base locations.

Phase 3 seeks to provide an Air Traffic Management and Control System to replace the existing systems at ADF fixed base locations and a radar simulator at the School of Air Traffic Control (SATC).

Background

This project seeks to procure a new DATMCS to replace the existing Australian Defence Air Traffic System (ADATS) acquired under AIR 5186, which reaches life-of-type in 2015. The DATMCS is expected to comprise deployable and fixed surveillance sensors and command and control systems.

Phase 1 is intended to provide a number of deployable DATMCS. The current capability comprises a single Tactical Airfield Surveillance Radar (TASR).

Phase 2 seeks to acquire ATC sensors to replace existing Alenia radars at RAAF Bases East Sale and Tindal and the Army Aviation Centre at Oakey, and to replace the ADATS radars at RAAF Bases Amberley, Darwin, Pearce, Townsville and Williamtown and the Naval Air Station at Nowra.

Phase 3 seeks to acquire a fixed DATMCS for 11 ADF fixed air bases and a simulator for the SATC at RAAF Base East Sale.

Australian Industry Opportunities

Acquisition

The areas in which industry opportunities for Phase 1 are anticipated include:

- integration of the new deployable DATMCS with extant Air Traffic Management (ATM) systems, e.g. ADATS and the Australian Advanced Air Traffic System (AAATS); and
- test and evaluation.

The areas in which industry opportunities for Phase 2/3 are anticipated include:

- removal and disposal of existing systems;
- provision of new ATM systems;
- integration of the new systems with extant ATM systems, e.g. ADATS and the AAATS;
- development of appropriate training systems and maintenance staff and, if applicable, integration within extant simulation and/or training systems; and
- test and evaluation.

Through-life Support

The industry opportunities are expected around developing and maintaining sufficient capability within Australian industry to undertake the range of through-life maintenance and support activities necessary to sustain the system(s).

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 1 and 2/3	Capability
Activity	Air Traffic Control System
Assemble / Install	D
Design	D
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	O
Project Manage	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

Phase 1

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 2/3

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 $100m-$500m (Towards the upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 1	FY 2010-11 to FY 2011-12
	Phase 2/3	FY 2010-11 to FY 2011-12
Year-of-Decision	Phase 1	FY 2012-13 to FY 2014-15
	Phase 2/3	FY 2011-12 to FY 2012-13
Initial Operating Capability	Phase 1	2014 to 2016
	Phase 2/3	2013 to 2015

Points of Contact

Phase:
Phases 1 and 2/3

Capability Staff:
Staff Officer Battlespace Management 3
(02) 6266 7317

Defence Materiel Organisation:
Director Project Development and Integration Surveillance and Control Branch
(02) 6265 6291

AIR 5432

Phase 1 Communications, Navigation, Surveillance/Air Traffic Management

Phase Scope

This project aims to update ADF platforms and systems to ensure continued optimal use of civil and military airspace. In response to the plans for Australian adoption of the Automatic Dependent Surveillance – Broadcast (ADS-B) system for surveillance of en route air traffic, this phase will focus on the introduction of ADS-B which utilises Mode S. In parallel with this project JP 90 is being developed to update the ADF from Mode 4 Identification Friend or Foe (IFF) to Mode 5. Common transponders and interrogators can be used for both projects.

Background

International advances in Air Traffic Management (ATM) systems will necessitate near and long-term updates to ADF platforms and surveillance systems. The advances affect communications, navigation and surveillance systems within airborne platforms and ground surveillance and control systems.

ADS-B is one of the technology elements of the future Airspace Management landscape which has a clear schedule for introduction. The ADF has agreed to aim for ADS-B compliance for all military aircraft by 2018.

Future phases of this project are expected to address other aspects of ATM technology.

Australian Industry Opportunities

Acquisition

The requirements are anticipated to include initially undertaking a project definition study. Australian industry involvement is likely to include complex integration of new systems procured from overseas, with a range of existing sensor and data systems, along with associated test and evaluation.

Phase 1 is focused on the introduction of Mode S and ADS-B to ADF airborne platforms. This activity will be conducted in conjunction with the introduction of Mode 5 IFF under JP 90 Phase 1.

Through-life Support

The industry involvement is expected to be based around developing and maintaining sufficient capability within Australian industry to undertake the through-life maintenance and support activities associated with the components and systems introduced into service by this project.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Communications Systems (Air Traffic Control – IFF Modes)
Assemble / Install	D
Design	D
Project Manage	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the upper end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2012-13 to FY 2014-15
Year-of-Decision	FY 2014-15 to FY 2016-17
Initial Operating Capability	2018 to 2020

Points of Contact

Capability Staff:
Staff Officer Battlespace Management 2
(02) 6265 7530

Defence Materiel Organisation:
Director Project Development and Integration
Surveillance and Control Branch
(02) 6265 6291

AIR 5438 Phase 1A Lead-In Fighter Capability Assurance Program

Phase Scope

This phase is intended to ensure the Lead-In Fighter Training System (LIFTS) remains effective, efficient and supportable until the Hawk planned withdrawal date. Capability improvements and obsolescence mitigation will be harmonised to the greatest possible extent, resulting in an affordable, high quality training system which can adapt to meet future 'fast-jet' training requirements.

Background

The LIFTS, comprising the Hawk Mk 127 and ground based training support equipment, including flight simulators, will be upgraded to address identified obsolescence issues and provide capability enhancements. A number of project definition activities will be undertaken to scope obsolescence mitigation and capability requirements, including the associated engineering effort, schedule implications, cost and risk.

Australian Industry Opportunities

Acquisition

The acquisition approach for the aircraft modification has yet to be determined, but the project intends to procure an essentially 'off-the-shelf' solution with minimal non-recurring expenditure (NRE), technical risk and certification overheads. Military- or Commercial-off-the-Shelf (MOTS or COTS) components will be utilised wherever practical.

The simulator component is likely to be competed between manufacturers who are able to provide solutions with minimal NRE.

Through-life Support

The industry requirements will be based around developing and maintaining sufficient capability within Australian industry to undertake through-life maintenance and support activities associated with the systems introduced into service by this project.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability		
	Rotary & Fixed Wing Aircraft	System Life Cycle Management	Facilities & Infrastructure
Assemble / Install	D		D
Education / Training	D		
In-Service / Through-life Support	D	D	
Logistics Support	D		
Repair and Maintain	D		
Systems Integration	D		
Test and Evaluate	O		

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2015 to 2017

Point of Contact

Capability Staff:
Deputy Director Firepower
(02) 6265 5568

Defence Materiel Organisation:
Director Lead-In Fighter Management Unit
(02) 4928 6906

AIR 5440

Phase 1 C-130J Block Upgrade Program 7.0
Phase 2 C-130J Block Upgrade Program 8.0

Phase Scope

This project consists of a number of phases each of which will constitute the respective Block Upgrades to the C-130J Hercules. The scope of each phase is likely to contain elements of software and system reliability and maintainability, technology refresh, technology obsolescence, and new capability. The final composition of each phase is intended to be determined collaboratively between all C-130J user nations and take into account the respective national priorities.

Background

The C-130J Hercules features software and hardware systems and functionality which require regular upgrades throughout the life of the aircraft. Accordingly, C-130J users need to, as a minimum, combat obsolescence and maintain reliability and maintainability of systems through regular upgrades to their respective C-130J fleets. The C-130J Block Upgrade Program (BUP) was set up by the international users to manage these upgrades in an effective and efficient manner. The C-130J BUP is managed by the C-130J Joint User Group (JUG) in conjunction with the original equipment manufacturer, Lockheed Martin (LM Aero). The scope of each Block Upgrade is collaboratively established by the joint user community (seven nations) and consists of five key elements being; requirements definition, design development, modification development and acquisition, national installation and through-life support arrangements.

Australian Industry Opportunities

Acquisition

There is limited scope for Australian industry involvement in the Block Upgrades. There is no scope within the design development and modification development elements of the project because of ongoing arrangements with other C-130J users and LM Aero, and also because the method of procurement and contracting will be through the US Foreign Military Sales process.

Through-life Support

The national installation and the through-life support (TLS) element of the project will be undertaken as Australian unique activities and will require Australian industry participation. Australian industry participation is expected to continue throughout future phases.

Industry capabilities and activities for Phase 1 will involve installing the tested and certified Block 7.0 Upgrade package onto the C-130J fleet and providing TLS for the Block 7.0 life-of-type. These activities will be undertaken using extant C-130J support contracts, and will include:

- changes to the supply support systems – codification, identification and acceptance of assets;
- assistance with the engineering effort to augment the project team's resources during the test, design acceptance and certification activities;
- development and incorporation of the changes to the full-flight simulator;
- upgrade to the other training systems and training courseware and material; and
- in-service support.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 1 and 2	Capability
Activity	Rotary & Fixed Wing Aircraft
In-Service / Through-life Support	D
Logistics Support	D
Modelling / Simulation	O
Repair and Maintain	D
Test and Evaluate	O

Acquisition Category (ACAT)

Phases 1 and 2

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band) (for each phase)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for each of these Phases is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 1	FY 2009-10 to FY 2010-11
	Phase 2	FY 2012-13 to FY 2014-15
Year-of-Decision	Phase 1	FY 2009-10 to FY 2010-11
	Phase 2	FY 2012-13 to FY 2014-15
Initial Operating Capability	Phase 1	2012 to 2014
	Phase 2	2015 to 2017

Points of Contact

Phase:
Phases 1 and 2

Capability Staff:
Deputy Director Combat Mobility
(02) 6265 1073

Defence Materiel Organisation:
Project Director AIR 5440
Airlift Systems Program Office
(02) 4588 1165

AIR 6000

Phase 2A/2B New Air Combat Capability – 3 Squadrons
Phase 3 Weapons for New Air Combat Capability
Phase 5 Future Air-to-Air Weapons for New Air Combat Capability and Super Hornet

Phase Scope

Phase 2A/2B for the New Air Combat Capability (NACC) will acquire three operational squadrons and a training unit of F-35 Joint Strike Fighter (JSF) combat aircraft for the RAAF to replace F/A-18A/B Hornets as they are withdrawn from service. Initially the JSF aircraft will be complemented by one squadron of F/A-18F Super Hornets.

Phase 3 intends to acquire reserve stock holdings of the air-to-ground weapons, including 25 mm gun ammunition, and electronic warfare expendables for use on the JSF aircraft.

Phase 5 intends to acquire reserve and training stock holdings of the future air-to-air weapons for the JSF aircraft and F/A-18F Super Hornets.

Background

In the 2009 Defence White Paper the Australian Government announced that it would acquire F35 JSF, along with supporting systems and weapons, as the new air combat capability platform for the RAAF. This decision was based on extensive previous engagement in the JSF Program, including:

- In October 2002 Australia was the eighth (and last) country to join the System Development and Demonstration (SDD) phase of the JSF Program.
- In December 2006 Australia entered the next stage of the JSF Program by signing the multilateral Production, Sustainment and Follow-On Development (PSFD) Memorandum of Understanding (MoU). (All the original SDD partners have signed the PSFD MoU.)
- The JSF is still in the developmental and test phase; however, the Australian Government has made a decision on purchasing the JSF because of confidence that the JSF will be capable of delivering the capability promised, and that the capability will be delivered on time and within budget.

AIR 6000 Phase 1B (approved) undertook a program of detailed definition and analysis activities necessary to provide Government with the information to support Phase 2 approval.

AIR 6000 Phase 2A/2B is the acquisition phase for three operational squadrons, comprising of not fewer than 72 aircraft, to fulfill the functions of air dominance and strike currently provided by the ADF's F/A 18A/B and F-111 aircraft.

As indicated in the 2009 Defence White Paper, an additional acquisition phase (Phase 2C) is intended to acquire a fourth squadron of JSF aircraft in conjunction with the withdrawal of the F/A-18F Super Hornet to bring the total number of JSFs to around 100. This is expected to be programmed in subsequent DCPs.

A critical component of an air combat system is advanced weaponry that can prosecute a full range of targets and threats. Phase 2 will also certify and acquire the initial inventory of weapons, ammunition and countermeasures for the JSF. Phases 3 and 5 are intended to provide the weapons stocks necessary for air-to-air and air-to-surface roles. Provision for a new maritime strike weapon, as identified in the 2009 White Paper, is expected to be programmed in subsequent DCPs.

Australian Industry Opportunities

Acquisition

A key aim of Australia's involvement in the JSF Program is to embed Australian industry in the JSF global supply and support chain for the life of the JSF project under the program's 'Best Value' model. 'Best Value' is determined by the prime contractors through international competition. JSF production commenced with the initial development of 19 aircraft or 'test articles' in which Australian industry won design and manufacturing contracts. Low rate initial production (2007 to 2015) of some 550 aircraft is now underway. Full rate production is scheduled to increase the numbers of JSF to over 3000 throughout the next 20 years. The production phase provides major manufacturing opportunities for internationally competitive Australian companies.

Through-life Support

Through-life support of the global JSF fleet will be provided by Lockheed Martin Corporation and the two engine manufacturers under the JSF Autonomic Logistics Global Sustainment (ALGS) system using a performance-based logistics approach.

Australian industry will continue to play a key role in supporting our combat aircraft. Defence will, however, be aiming to achieve maximum cost effectiveness in sustainment by balancing the need to meet defence self-reliance requirements with the expected cost benefits of the global ALGS system. Australian industry will also have the opportunity to participate in the global system on a best value basis, including for other JSF aircraft operating in the region. Defence and the Department of Innovation, Industry, Science and Research (DIISR) will continue to work with Australian industry and the JSF prime contractors to maximise opportunities for Australian industry as part of the global system.

Specific areas for Australian industry support of the Australian JSF fleet would be expected to include ALGS coordination, deeper maintenance, signature maintenance, training, simulation, supply chain management, engine maintenance, prognostics and health management, and provision and maintenance of support equipment.

Through-life support is also required for weapons delivered through Phases 3 and 5 and, in future, a new maritime strike weapon. Industry requirements will be based around developing and maintaining sufficient capability to undertake the necessary through-life support activities within Australia. Opportunities may also exist to induct an Australian Explosive Ordnance manufacturing capability into the JSF global supply chain.

Follow-on Development

The JSF PSFD MoU incorporates a two-yearly follow-on development program for the JSF. In the development phase of these upgrades, Australian industry would have the opportunity to compete for development, production and sustainment of future capabilities.

Defence and DIISR will work with selected Australian universities, research and development organisations and industry to maximise the opportunities for Australian industry to contribute to JSF future technology refreshes, block upgrades, or to improve JSF manufacturing processes.

Industry Capabilities and Activities

For Australia's involvement in the JSF Program, Defence and DIISR are working with Australian industry as *'JSF Team Australia'* to help companies enter and remain in the JSF global supply chain. Industrial Participation Plans that open up major opportunities in the global JSF Program for qualified Australian companies have been agreed with Lockheed Martin Corporation and the two JSF engine manufacturers. This participation process will continue over the life of Australia's involvement in the JSF Program.

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 2A/2B	Capability																
Activity	Acoustic Technologies & Systems	Combat Clothing & Personal Equipment	Communications Security	Composite & Exotic Material	Electronic Warfare	Guided Weapons	Protection of Networks, Computers & Information	Rotary & Fixed Wing Aircraft	Selected Ballistic Munitions & Explosives	Signature Management	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	Targeting And Precision Navigation	Facilities & Infrastructure	Mission Systems and Avionics	Vehicle Systems	Airframe & Propulsion system
Assemble / Install				D						D			D	D			D
Design				D	O			D						D			D
Education / Training					D			D		D			D			D	D
In-Service / Through-life Support				D	D		D	D			D	O			D	D	D
Logistics Support				D	D			D					D			D	D
Manufacture / Construct		D		D	D			D	D				D	D	D	D	D
Modelling / Simulation															D		D
Project Manage								D						D			
Refurbish / Upgrade				D						D			D	D	D	D	D
Repair and Maintain		D	O	D	D	D		D	D	D			D	D	D	D	D
Research and Development			O	D	O			D		D					D	D	D
Software Development / Support								D			D				O		
Systems Definition / Development																	
Systems Integration								D			D						
Test and Evaluate	D		O	D	D			D		D	D	D			D	D	D

Phase 3	Capability	
Activity	Guided Weapons	Selected Ballistic Munitions & Explosives
Assemble / Install		D
Design		D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Manufacture / Construct		D
Modelling / Simulation		D
Project Manage	D	D
Research and Development	D	
Software Development / Support	D	
Systems Integration		D
Test and Evaluate	D	D

Phase 5	Capability
Activity	Guided Weapons
In-Service / Through-life Support	D
Logistics Support	D
Project Manage	D

Acquisition Category (ACAT)

Phase 2A/2B

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High ›$1500m
Project Management Complexity	Level 1 Very High
Schedule	Level 1 Very High
Technical Difficulty	Level 1 Very High
Operation and Support	Level 1 Very High
Commercial	Level 1 Very High

The ACAT Level assessed for this Phase is ACAT I.

Phase 3

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m-$1500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 5

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m–$1500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 2A/2B Phases 3 and 5	Complete FY 2012-13 to FY 2014-15
Year-of-Decision	Phase 2A/2B Phases 3 and 5	FY 2009-10 to FY 2010-11 FY 2014-15 to FY 2016-17
Initial Operating Capability	Phase 2A/2B Phase 3 Phase 5	2017 to 2019 2018 to 2020 2017 to 2019

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phase 2A/2B	Program Manager New Air Combat Capability (02) 6127 0001	Director Commercial New Air Combat Capability (02) 6127 0086
Phases 3 and 5	Deputy Director Combat Enablers Aerospace Development Branch (02) 6265 5442	Director Emerging Projects Guided Weapons Branch (02) 6265 1464

Project Website:

www.defence.gov.au/dmo/lsp/joint%20Strike%20Fighter%20(JSF.cfm

Phase Scope

This phase is intended to acquire a replacement manned aircraft for the AP-3C Orion, capable of Maritime Intelligence, Surveillance, Reconnaissance and Response (MISRR) roles, overland Intelligence, Surveillance, Reconnaissance (ISR), and Electronic Support (ES).

Background

AP-3C Orion life-of-type is dependant upon ongoing airframe fatigue and corrosion, aircraft system supportability and mission system obsolescence. Specifically, aircraft engines, hydraulics, electrical, oxygen and fuel systems are increasingly costly to support as the platform ages. Although limited mission system obsolescence treatments provided by Project AIR 5276 will assist in facilitating a 2018-19 AP-3C planned withdrawal date, further preclusively costly airframe, aircraft and mission system upgrades would be required to operate the AP-3C post-2018.

This project will replace the AP-3C after taking future ADF MISRR requirements into consideration. This consideration will include the exploration of a broad range of options including manned aircraft replacement, and the use of a Multi-mission Unmanned Aerial System (MUAS) as an adjunct to the manned platform. While this project is focussed on acquisition of a capability centred on MISRR roles, the capability will also support ES and overland ISR roles.

Australian Industry Opportunities

Acquisition

This phase will acquire eight Military-off-the-Shelf (MOTS) Maritime Patrol and Response Aircraft (MPRA) through a government-to-government cooperative program. The areas of anticipated Australian industry involvement opportunities are:

- integration of the ground mission support system to the Defence Information Environment; and
- sub-contractor support and supply of components for the MPRA program.

Through-life Support

Through-life support of MPRA will most likely be through an ongoing sustainment arrangement established through a government-to-government arrangement. There would be opportunity for Australian industry to be part of the MRPA global support system.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability							
	Acoustic Technologies & Systems	Composite & Exotic Materials	Electronic Warfare	Rotary & Fixed Wing Aircraft	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Assemble / Install	O	O	O	O			D	D
Design	O	D	O	O			D	D
Education / Training							D	
In-Service / Through-life Support	O	D	D	D	O	O	D	
Logistics Support		D	D	D	O	O	D	
Manufacture / Construct	D	D	O	O			D	D
Modelling / Simulation	D			D			D	
Project Manage			O		O		D	
Refurbish / Upgrade	D	D	D	D	O	O	D	D
Repair and Maintain	D	D	D	D	O	O	D	D
Research and Development		O	O					
Software Development / Support	O		D	D	O	O	D	
Systems Definition / Development	O						D	
Systems Integration			D	D	O	O	D	
Test and Evaluate			D	D	O	O	D	

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High ›$1500m
Project Management Complexity	Level 2 High
Schedule	Level 1 Very High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2017 to 2019

Points of Contact

Capability Staff:
Deputy Director Maritime Patrol and Response
(02) 6265 3852

Defence Materiel Organisation:
Project Manager AIR 7000 Phase 2B
(02) 6265 1628

Project Website:
www.defence.gov.au/dmo/asd/air7000/air7000.cfm

Phase Scope

Phase 1 is intended to rationalise the capability delivered by the C-130 fleet.

Phase 2 is intended to replace the RAAF DHC-4 Caribou transport aircraft to provide a light tactical fixed wing airlift capability.

Background

Phase 1 is intended to rationalise the C-130 fleet, noting the acquisition of C 17 and planned withdrawal of C-130H aircraft by acquiring an additional two C-130J aircraft.

Phase 2 is intended to enhance the ADF's intra-theatre and regional airlift capability. This capability will focus on the provision of an intra-theatre airlift solution with some inter-theatre application. This capability will be able to operate from a wide range of rudimentary airstrips with useful payload, range and in-theatre survivability. Phase 2 may also provide appropriate training support, which could include the provision of a Full Flight Simulator. Notably, the capability will require careful consideration of the interaction between rotary-wing assets and light / medium fixed wing platforms in the tactical environment and the total airlift fleet mix.

Australian Industry Opportunities

Acquisition

For Phase 1 it is anticipated that the additional C-130J will be sourced from the original equipment manufacturer with few Australian industry opportunities.

For Phase 2 it is anticipated that a Military-off-the-Shelf (MOTS) light tactical fixed wing airlift capability will be sourced from an original equipment manufacturer or through government-to-government (Foreign Military Sales) arrangements with few Australian industry opportunities.

Through-life Support

Deeper maintenance and other through-life support activities are likely to be provided under contracts within Australia.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 1	Capability
Activity	Rotary & Fixed Wing Aircraft
Assemble / Install	O
In-Service / Through-life Support	D
Logistics Support	D
Repair and Maintain	D
Test and Evaluate	O

Phase 2	Capability
Activity	Rotary & Fixed Wing Aircraft
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Repair and Maintain	D
Test and Evaluate	O

Acquisition Category (ACAT)

Phase 1

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m-$1500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Phase 2

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High ›$1500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	Phase 1	FY 2009-10 to FY 2010-11
	Phase 2	FY 2010-11 to FY 2011-12
Year-of-Decision	Phase 1	FY 2011-12 to FY 2012-13
	Phase 2	FY 2012-13 to FY 2014-15
Initial Operating Capability	Phase 1	2013 to 2015
	Phase 2	2014 to 2016

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phases 1 and 2	Deputy Director Combat Mobility (02) 6265 1073	Director New Airlift Program Office (02) 6127 2614

AIR 9000

Background

Project AIR 9000 seeks to provide the ADF with the most appropriate force mix of helicopters. Fundamental to this is a strategic plan for the efficient management of all ADF helicopter fleets, in order to meet operational requirements in a range of roles (airmobile, armed reconnaissance, medium lift, maritime support, anti-submarine, anti-surface warfare, training and support to special forces).

To achieve its aim, Project AIR 9000 has been broken down into a number of phases:

- Phase 1 (ongoing) is the continuation of the ADF Helicopter Strategic Master Plan Development and Program Management;
- Phase 2 (in progress) is the acquisition of Additional Troop-Lift Helicopters (MRH-90);
- SCAP 1 and 2 is providing a Seahawk Capability Assurance Program;
- Phase 4 (in progress) is the Black Hawk Replacement (with MRH-90);
- Phase 5 is the Chinook upgrade/replacement with Phase 5A (Early Engine Upgrade) complete and Phase 5C seeking to replace the current D-Model fleet with F-Models;
- Phase 6 (approved) is the Maritime Support Helicopter Replacement (with MRH-90);
- Phase 7 is the new Helicopter Aircrew Training System; and
- Phase 8 is to provide at least 24 new Anti-Submarine Warfare/Anti-Surface Warfare Helicopters.

A key part of efficiently managing the ADF's helicopter fleets is the rationalisation of types where this is appropriate, efficient and operationally effective. In 2009 there are nine helicopter types in or entering ADF service (Kiowa, Iroquois, Black Hawk, Chinook, Tiger, MRH-90, Squirrel, Sea King and Seahawk). The ADF Helicopter Strategic Master Plan intends to reduce the number of helicopter types to realise synergies and efficiencies across personnel, tools, spares, training and facilities. Future ADF Helicopter Strategic Master Plan development will provide a contemporary and contextual basis to developing the ADF helicopter capability over the next 15 years.

Project AIR 9000 also seeks to engage Australian industry in developing a regional sustainable aerospace industrial base that can provide high levels of support to the ADF, regional support opportunities, and compete as part of the global supply chain.

Points of Contact

Capability Staff:
Director Training and Rotary Wing Development
(02) 6265 4301

Defence Materiel Organisation:
Business Director
Helicopter Systems Division
(02) 6265 2950

AIR 9000

Phase 5C Additional Heavy Lift Helicopter

Phase Scope

Phase 5C will replace the Australian Army's current fleet of six CH-47D Chinook helicopters with seven CH-47F Chinook helicopters and associated Transportable Flight Proficiency Simulators.

Background

Previously Phase 5 intended to address current and future capability deficiencies in the Chinook weapon system. Previous sub-phases included:

- Phase 5A (complete) which replaced the engines in the ADF CH-47D Chinook. The new engines have improved performance and lowered operating costs, as well as providing commonality with the US Army CH-47D configuration;
- Phase 5C (first pass approval 13 September 2007) intended to acquire three additional CH-47F Chinook helicopters; and
- Phase 5B intended to upgrade the extant ADF CH-47D fleet to the same configuration as Phase 5C, that is CH-47F. The previously planned combined outcome of the previous Phases 5C and 5B was a homogenous fleet of CH-47F Chinook helicopters.

The new Phase 5C combines the objectives of the previous Phases 5C and 5B under a single project. The new Phase 5C ensures that the ADF has a viable future Chinook helicopter capability which is aligned to the US Army configuration and support systems throughout its life-of-type.

Australian Industry Opportunities

Acquisition

Phase 5C intends to acquire CH-47F Chinook helicopters from the US Army through a Foreign Military Sales acquisition. There are opportunities for Australian industry involvement through:

- design and fitment of additional mission equipment to the CH-47F aircraft once they are delivered to Australia;
- management, construction and maintenance of facilities to be built at Townsville;
- provision of support to the Transportable Flight Proficiency Simulators; and
- provision of contracted support to the DMO Cargo Helicopter Project Office from 2010.

Through-life Support

It is anticipated that, in the same approach as the CH-47D capability, unit-level maintenance could be carried out by Army personnel while deeper maintenance and other support will be contracted to Australian industry. The CH-47D Deeper Maintenance Request for Tender will be released later in 2009 for work commencing in 2010. The scope of this Request for Tender may also include CH-47F deeper maintenance from 2015 onwards.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability				
	Electronic Warfare	Rotary & Fixed Wing Aircraft	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	Facilities & Infrastructure
Assemble / Install		O			
Design		D			D
In-Service / Through-life Support	O	D	D	D	D
Logistics Support	O	D			
Manufacture / Construct		O			D
Modelling / Simulation	O				
Project Manage					D
Repair and Maintain		D	D	D	D
Research and Development		O			
Software Development / Support		D	D	D	
Test and Evaluate	O	O			

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m-$1500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2010-11 to FY 2011-12
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:
Staff Officer Army Aviation 5
(02) 6265 6435

Defence Materiel Organisation:
Project Manager AIR 9000 Phase 5C
(02) 6265 6611

AIR 9000

Phase 7 Helicopter Aircrew Training System

Phase Scope

Phase 7, the Helicopter Aircrew Training System (HATS) is intended to provide a rotary wing training capability for Navy and Army, to meet the future rotary wing training needs of the ADF. The project aims to deliver a system that encompasses elements of live, synthetic and classroom aviation instruction, to overcome the broadening gap between the current rotary training systems and the advanced operational helicopters in the current and planned future ADF inventories. There are a broad range of options under consideration which could involve a direct capital acquisition or privately financed lease, or elements of both.

Background

Initially, an improved rotary wing training capability was to be provided under two projects – Phase 7A for Navy and Phase 7B for Army. Under the AIR 9000 rationalisation programme these projects were combined to form a joint training system.

Australian Industry Opportunities

Acquisition

The helicopters are likely to be Commercial- or Military-off-the-Shelf (COTS or MOTS). There is potential for Australian industry involvement in assembly of the aircraft and the development of the training system. The training system potentially includes an Aviation Training Vessel which would have significant potential for Australian industry involvement in design and construction.

Environmental Working Groups and industry briefing sessions have been conducted and more are planned to coincide with significant milestones moving toward second pass approval. Adequate notice of these events will be promulgated by Defence.

Through-life Support

Through-life support for the HATS will include, but not be limited to, the ongoing operation, maintenance and support of the HATS aircraft, potentially an Aviation Training Vessel, simulation and training systems and devices, and all associated facilities. These activities are intended to be conducted in Australia.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability												
	Communications Security	Composite & Exotic Materials	Rotary & Fixed Wing Aircraft	Support of Mission & Safety Critical Software	Surface Naval Vessels	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Targeting & Precision Navigation	Facilities & Infrastructure	Training Aids & Solutions	Simulation	Sensor Systems
Assemble / Install	0	0	0		0					0	0	0	0
Design		0			0	0		0		0	0	0	
Education / Training	0		0		0				0	0	0	0	0
In-Service / Through-life Support	0	0	0	0	0	0	0	0	0	0	0	0	0
Logistics Support	0	0	0	0	0	0	0	0	0	0	0	0	0
Manufacture / Construct	0	0	0	0	0	0		0	0	0	0	0	
Modelling / Simulation	0		0						0	0	0	0	0
Project Manage	0	0	0		0	0		0	0	0	0	0	0
Refurbish / Upgrade	0	0	0	0	0			0	0	0	0	0	0
Repair and Maintain	0	0	0	0	0	0	0	0	0	0	0	0	0
Research and Development					0		0			0	0	0	
Software Development / Support			0	0	0		0	0		0	0	0	
Systems Definition / Development			0	0	0	0	0	0		0	0	0	
Systems Integration	0		0	0	0	0	0	0	0	0	0	0	0
Test and Evaluate	0	0	0	0	0	0	0	0	0	0	0	0	0

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m–$1500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3Moderate
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:

Deputy Director Maritime Aviation
(02) 6265 6435

Defence Materiel Organisation:

Project Manager AIR 9000 Phase 7
(02) 4424 1676

Scope

This phase is intended to provide an organic combat aviation capability to Navy's surface combatant fleet. This includes the acquisition of multi-role naval combat helicopters, weapons, synthetic training, infrastructure, logistics and other support systems.

Background

The Navy's current tactical helicopter capability is provided by the Seahawk S-70B-2. A surface warfare strike capability was to have been provided by the cancelled Seasprite program. The White Paper indicated that as a matter of urgency the Government would acquire at least 24 new naval combat helicopters. The new aircraft will possess advanced anti-submarine warfare capabilities along with an ability to fire air-to-surface missiles.

Australian Industry Opportunities

Acquisition

In order to minimise technical, schedule, and financial risks it is envisaged that a Military-off-the-Shelf (MOTS) solution will be sourced from overseas. There may be some opportunity for Australian industry in aircraft assembly, and development of some support systems.

Through-life Support

The retention of an off-the-shelf configuration is considered important for cost effective Australian based deeper level maintenance, engineering and through-life support.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability											
	Acoustic Technologies & Systems	AEW&C Systems	Communications Security	Composite & Exotic Materials	Electronic Warfare	Guided Weapons	Rotary & Fixed Wing Aircraft	Selected Ballistic Munitions & Explosives	Signature Management	Support of Mission & Safety Critical Software	System Life Cycle Management	Targeting & Precision Navigation
Assemble / Install						D	D	D				
Education / Training	D	D	D	D	D	D	D	D		D	O	D
In-Service / Through-life Support	D	D	D	D	D	D	D	D	O	D	O	D
Logistics Support	D	D	D	D	D	D	D	D			O	D
Manufacture / Construct							D					
Modelling / Simulation	D	D	D		D	D	D				O	D
Project Manage	D	D	D	D	D	D	D	D		D	O	D
Refurbish / Upgrade	D	D	D	D	D	D	D	D				D
Repair and Maintain	D	D	D	D	D	D	D	D				D
Research and Development	O	O	O	O	O		O	O	O			O
Test and Evaluate	O		O	O	O	O	O	O	O	D		O

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High› $1500m
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 1 Very High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2010-11 to FY 2011-12
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Deputy Director Maritime Aviation
(02) 6265 6435

Defence Materiel Organisation:
Director Emerging Aerospace Projects
(02) 6265 6298

AIR 9000

SCAP1 Seahawk Capability Assurance Program 1
SCAP2 Seahawk Capability Assurance Program 2

Phase Scope

SCAP1 is to address immediate Seahawk obsolescence issues including Tactical Display Units, Engine Control Units, Automatic Flight Control System, Identification Friend or Foe (IFF) and the Mission System Simulator.

SCAP2 seeks to address Seahawk obsolescence beyond the scope of SCAP 1 until the aircraft's withdrawal from service. SCAP 2 primarily addresses replacement of the Seahawk's main mission computer, the Display Generator Unit.

Background

The future management of Seahawk capability was originally to be provided under AIR 9000 Phase 3 as the Seahawk Mid-life Upgrade and Extension. The strategy for maintaining Seahawk capability until the transition to AIR 9000 Phase 8 is now focused on maximising the number of aircraft available for operations by undertaking a lower risk program that only addresses obsolescence without capability enhancements. SCAP 1 is the first phase of this program designed to address immediate obsolescence. SCAP 2 is the second phase of this program that addresses obsolescence issues not covered under SCAP 1.

Australian Industry Opportunities

Acquisition

It is anticipated that the components will be sourced from specialist original equipment manufacturers in Australia or overseas, and fitted in the aircraft in Australia.

Through-life Support

Deeper level maintenance and through-life support is intended to be conducted in Australia and overseas under the Seahawk support arrangements.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

SCAP 1	Capability	
Activity	Communications Security	Rotary & Fixed Wing Aircraft
Assemble / Install		D
Education / Training		D
In-Service / Through-life Support	D	D
Logistics Support		D
Modelling / Simulation		D
Project Manage		D
Repair and Maintain		D
Software Development / Support		D
Test and Evaluate		D

SCAP 2	Capability	
Activity	Rotary & Fixed Wing Aircraft	Support of Mission & Safety Critical Software
Assemble / Install	D	
Education / Training	D	
In-Service / Through-life Support	D	D
Logistics Support	D	
Project Manage	D	D
Refurbish / Upgrade		D
Repair and Maintain	D	
Software Development / Support	D	D
Systems Integration	D	
Test and Evaluate	D	

Acquisition Category (ACAT)

SCAP 1 and SCAP 2

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band) (for each phase)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 2 High

The ACAT Level assessed for each of these Phases is ACAT III.

Planned Schedule Highlights

First Pass Approval	SCAP1	Complete
	SCAP2	FY 2010-11 to FY 2011-12
Year-of-Decision	SCAP1	FY 2009-10 to FY 2010-11
	SCAP2	FY 2010-11 to FY 2011-12
Initial Operating Capability	SCAP1	2010 to 2012
	SCAP2	2012 to 2014

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
SCAP 1 and 2	Deputy Director Maritime Aviation (02) 6265 6435	Manager Seahawk Capability Assurance Program (02) 4424 3349

DEF 7013

Phase 4 Joint Intelligence Support System

Phase Scope

This phase is intended to provide for further development and evolution of the Joint Intelligence Support System (JISS) for the support of the Australian Defence Intelligence Community. Phase 4 takes greater cognisance of the ADF's migration towards networked operations and the increased demands on Defence intelligence assets to perform effectively within shorter decision cycles. It provides similar functionality in multiple security domains and embraces service oriented architecture concepts.

Background

DEF 7013 is a multi-phased project that provides the ADF's intelligence staff and units with specialised tools and access to shared databases and support applications networked between organisations that have an intelligence role at the strategic, operational and tactical levels of command. The system allows rapid acquisition of intelligence data from all sources, storage, fusion and transformation of data into value-added intelligence and the dissemination of that intelligence in a secure and timely manner to commanders, the command support systems that require it, and other decision makers.

Other phases include:

- Phase 1 (complete) delivered the initial network and high priority databases. It also evaluated a number of Government-off-the-Shelf databases;
- Phase 2 (complete) expanded JISS to a fully operational capability with the addition of a mature infrastructure, the development of information repositories and the evaluation of analytical tools;
- Phase 3A (complete) delivered a deployable capability for JISS; and
- Phase 3B (in progress) is extending JISS to the tactical level. It will provide a more mature deployable and transportable capability that further develops the system to support the intelligence community.

Australian Industry Opportunities

Acquisition

The acquisition prime contractor is likely to be an established Australian entity with experience and expertise in the field of knowledge exploitation. The selected prime contractor may enter into relationships with other companies (local or international), who can provide relevant solutions or expertise.

Through-life Support

Selected vendors will be required to commit to the ongoing support and enhancement of what is intended to be the key element of the future Defence Intelligence Information Environment.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Protection of Networks, Computers & Information	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Geospatial Database Systems
Design	D		D		D	O
Education / Training					D	D
In-Service / Through-life Support	D	D		D	D	D
Logistics Support		D		D		D
Manufacture / Construct	D					
Modelling / Simulation	D					
Project Manage	D	D	D	D	D	D
Refurbish / Upgrade			D			
Repair and Maintain			D			
Software Development / Support	D	D	D		D	O
Systems Definition / Development	D	D	D		D	D
Systems Integration	D	D	D		D	D
Test and Evaluate	D	D	D		D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Director Intelligence &
Geospatial Development
(02) 6265 3489

Defence Materiel Organisation:
Director Military Geographic Information Systems Program Office
(02) 6265 5268

JP 66

Phase 1 Replacement for Air Defence Targets

Phase Scope

This phase is intended to introduce a new air target system, to support operational training, and test and evaluation (T&E) of current and future air defence weapon systems.

Background

Current ADF air target capabilities have limited capacity to meet the ADF's future training and T&E needs. This project aims to introduce a new Air Defence Target System (ADTS) through a service provision contract. The service provided to the Commonwealth is expected to consist of flights of physical targets capable of emulating specified threats, along with target launch, recovery and control systems, and any other required supporting services.

It is envisaged that target assets will be contractor owned, operated and maintained. Australian Government Furnished Materiel (AGFM) is expected to be limited to Australian Government Furnished Facilities (AGFF) at range areas and may, as an example, consist of target launch pads, basic utilities (power and water) and temporary Explosive Ordnance storage during ADTS presentations.

Due to the diverse range of ADF end-user requirements, it is anticipated that the target assets used may comprise of various types of Unmanned Aerial Target (UAT) otherwise referred to as target drones, and may also include the use of manned aircraft, with or without towed targets.

The Commonwealth does not intend to mandate any of the above target asset types or delivery methods.

The ADTS is intended to operate within the existing approved air defence training environment, for the purposes of end-to-end exercise of ADF air defence weapon systems up to and including on-occasion engagement of the target vehicle by live weapons.

The ADTS is expected to have a service life of 10 years.

Australian Industry Opportunities

Acquisition

The capability is to be provided through a service provision contract. The Commonwealth expects to conduct an open tender process in FY 2009-10 seeking responses from entities desiring to serve as a prime contractor to deliver the entire ADTS. The precise threat emulation characteristics to be supplied, rate of effort and date of commencement will be dependent upon a range of related projects, including the FFG Upgrade, Air Warfare Destroyer (AWD), Super Hornet and New Air Combat Capability (NACC).

Through-life Support

The Commonwealth seeks a 'turnkey' service providing aerial target presentations in line with an agreed annual schedule. All target assets are to be contractor owned, operated and maintained. All contracted logistic and facility support is to be within the scope of the single contract for services.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability						
	Composite & Exotic Materials	Rotary & Fixed Wing Aircraft	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Targeting & Precision Navigation	Facilities & Infrastructure
Assemble / Install	O	O					
Education / Training		O					
In-Service / Through-life Support	O	D	D	D	D	O	D
Logistics Support	O	D		O	D		O
Manufacture / Construct	O	O					
Modelling / Simulation		O					
Project Manage		D	D	D	D		D
Refurbish / Upgrade		D					
Repair and Maintain	O	D				O	
Research and Development		O					
Systems Integration	O	D					O

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2010-11 to FY 2011-12
Initial Operating Capability	2012 to 2014

Points of Contact

Capability Staff:

Staff Officer Future Strike Systems
(02) 6265 5592

Defence Materiel Organisation:

JP 66 Project Office
(07) 5467 8165
SRSPO.JP66@defence.gov.au

Phase Scope

This project aims to update ADF platforms to comply with the Mark XIIA Identification Friend or Foe (IFF) standard. The project intends to focus on platforms that have an existing Mode 4 capability and newly delivered platforms which may not be Mode 5 compliant. In parallel with this project AIR 5432 is being developed in response to the plans for Australian adoption of Automatic Dependent Surveillance – Broadcast (ADS-B) for surveillance of en route air traffic (Mode S).

Background

The US and NATO nations have agreed to adopt the Mark XIIA standard by 2019. The IFF Mode 5 waveform, included in the Mark XIIA family, is the means through which sea and air platforms verify their identity to interrogating platforms.

Australian Industry Opportunities

Acquisition

It is expected that industry will focus on aspects that include:

- participation in and contribution to Project Development Studies (PDS) conducted by subject matter experts within Australian industry;
- design and development of any relevant support systems; and
- development and integration of Mode 5 IFF systems into ADF aircraft, ships and ground based units.

Through-life Support

Full through-life support is needed and more specific requirements are to be determined by the PDS for each type of equipment identified. Specific support arrangements are to be assessed on a case-by-case basis as purchasing occurs.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Communication Systems (Air Traffic Control – IFF Modes)
Assemble / Install	D
Design	D
Project Manage	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:
Staff Officer Battlespace Management 2
(02) 6265 7530

Defence Materiel Organisation:
Navigation Warfare Engineer 1
Navigation Warfare Systems Program Office
(02) 6265 7798

Scope

This phase is intended to provide organic Intelligence, Surveillance and Reconnaissance (ISR) support for primarily land force operations through the acquisition of small (Tier 1) Unmanned Aerial Systems (UAS).

Background

Phase 4 intends to provide an ongoing organic ISR capability for land force operations, as well as provision of a system that can be operated from or within confined areas (such as in urban environments). The small UAS to be acquired under Phase 4 are intended to provide units with enhanced situational awareness and increased force protection. The Australian Army currently operates the Elbit Skylark UAS. These were acquired as an interim solution and were not intended to provide an ongoing capability.

At present, it is intended to acquire non-developmental systems based on proven designs. The small UAS is expected to have a service life of 10 years.

Australian Industry Opportunities

Acquisition

It is anticipated that Australian industry will have the opportunity to enhance or upgrade the UAS, and potentially have the opportunity to team with foreign suppliers to implement the small UAS.

Through-life Support

It is anticipated that Australian industry will have involvement with the through-life support aspects of the ADF tactical and small UAS.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Composite & Exotic Materials	Rotary & Fixed Wing Aircraft	System Life Cycle Management	Systems Integration (High End, System of Systems)	Targeting & Precision Navigation	Facilities & Infrastructure
Assemble / Install		D	D			
Design		D				
Education / Training		D	D			
In-Service / Through-life Support		D	D		0	D
Logistics Support		D	D			D
Manufacture / Construct	0	D				
Modelling / Simulation		D	0		0	
Project Manage		D				
Refurbish / Upgrade		D	D			
Repair and Maintain		D	D			
Software Development / Support		D	D	0		
Systems Integration		D	0	0	0	
Test and Evaluate		D	D	0		

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the upper end of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Staff Officer Unmanned Aerial Systems 2
(02) 6265 2386

Defence Materiel Organisation:
Directorate of Emerging Aerospace Projects
(02) 6265 6298

JP 154

Phase 1 Joint Counter Improvised Explosive Device
Phase 2 Joint Counter Improvised Explosive Device

Phase Scope

Phase 1 is intended to introduce the core Electronic Warfare (EW) operational, engineering, maintenance, supply and training support systems for the ADF Force Protection Electronic Countermeasures (FP-ECM) capability and provide a technology refresh of the range of ADF Counter Improvised Explosive Device (CIED) systems.

Phase 2 is intended to encompass a further technology refresh of CIED mission and support systems to ensure that the ADF's FP-ECM capability remains contemporary against the Improvised Explosive Device (IED) threats. Phase 2 also intends to introduce new IED detection equipment and establish a weapons technical intelligence capability to enhance CIED systems' effectiveness.

Background

The ADF's CIED capability encompasses a range of systems and measures to mitigate or defeat the effects of an adversary's use of IEDs. This project aims to develop those systems and measures in accordance with strategic priorities while remaining sufficiently flexible to respond to unpredictable changes in the threat environment and take advantage of technological advances.

First pass approval for Phase 1 was achieved in December 2008. Approval was given to investigate options to update the existing ADF CIED systems, and progress toward the establishment of an indigenous capability that would allow the ADF to counter the IED threat when operating as a lead nation or independently, without reliance on data from Australian allies. Phase 1 has been structured to provide an acquisition framework that later phases can build upon while retaining sufficient flexibility to respond to the rapidly evolving IED threat.

Australian Industry Opportunities

Acquisition

Phase 1 is focused on capability delivery for current operations. As such, it is anticipated that the majority of the primary mission systems will be Military-off-the-Shelf (MOTS) acquired from coalition partners. Australian industry opportunities may include vehicle integration, test and evaluation, software support, training and simulation. Phase 2 is also likely to include these opportunities in addition to possible prime equipment and domestic software development, production, and increased integrated logistic support.

Through-life Support

Through-life support of the Phase 1 capability will generally be limited to ADF sustainment activities associated with vehicle integration and training systems. Phase 2 represents a wider provisioning and is likely to encompass increased levels of industry support, including maintenance and repair.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 1	Capability			
Activity	Electronic Warfare	Secure Test Facilities & Test Ranges	Facilities & Infrastructure	Training Systems & Simulation
Assemble / Install	O	D	D	D
Design	O	D	D	D
Education / Training	D	O	D	D
In-Service / Through-life Support	D	D	D	D
Logistics Support	D	D	D	D
Manufacture / Construct	O	D	D	D
Project Manage	O	D	D	D
Refurbish / Upgrade	O	D	D	D
Repair and Maintain	D	D	D	D
Research and Development	O	D	O	O
Software Development / Support	D	D		D
Systems Definition / Development	O	D	O	O
Systems Integration	D	D		O
Test and Evaluate	D	D		D

Phase 2	Capability				
Activity	Electronic Warfare	Secure Test Facilities & Test Ranges	Systems Integration (High End, System of Systems)	Facilities & Infrastructure	Training Systems & Simulation
Assemble / Install	D	D	D	D	D
Design	O	D	D	D	D
Education / Training	D	D		D	D
In-Service / Through-life Support	D	D		D	D
Logistics Support	D	D		D	D
Manufacture / Construct	D	D	D	D	D
Project Manage	D	D	D	D	D
Refurbish / Upgrade	D	D		D	D
Repair and Maintain	D	D		D	D
Research and Development	D	D	D	O	O
Software Development / Support	D	D	D		D
Systems Definition / Development	D	D	D	O	O
Systems Integration	D	D	D		O
Test and Evaluate	D	D	D		D

Acquisition Category (ACAT)

Phase 1

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 2

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 1	Complete
	Phase 2	FY 2011-12 to FY 2012-13
Year-of-Decision	Phase 1	FY 2009-10 to FY 2010-11
	Phase 2	FY 2013-14 to FY 2015-16
Initial Operating Capability	Phase 1	2010 to 2012
	Phase 2	2014 to 2016

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phases 1 and 2	Staff Officer Electronic Warfare (02) 6265 1884	JP 154 Project Manager (02) 6265 2743

Phase Scope

This phase is intended to enhance or replace the existing ADF aviation ground refuelling capability, including vehicles and hydrant carts, within the National Support Base.

Background

This project seeks to modernise and replace the current ADF aviation ground refuelling equipment fleet, including vehicles and hydrant carts, ensuring sustainment of all current and future ADF fixed and rotary wing aircraft fleets.

Australian Industry Opportunities

Acquisition

The likely acquisition strategy is not clear at this stage but depending on the maturity of systems within the market, the procurement may consider one of the following or a combination:

- Commercial- and/or Military-off-the-Shelf; or
- open tender for ADF ownership or lease.

Through-life Support

Depending on the procurement (ADF ownership or lease) strategy, the through-life support concept for this project will consider supportability options for fleet management, repair and maintenance, storage and distribution, provision of technical data and training as a minimum. It also sees use being made of current in-service capacity and facilities, or original equipment manufacturer support or a combination of both. Contracts for such support will generally be considered at the same time as acquisition.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Aviation Ground Support Equipment
Assemble / Install	D
Design	O
Education / Training	O
In-Service / Through-life Support	O
Logistics Support	O
Manufacture / Construct	O
Refurbish / Upgrade	O
Repair and Maintain	O
Systems Integration	O
Test and Evaluate	O

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:
Staff Officer
Joint Theatre Distribution
(02) 6265 4934

Defence Materiel Organisation:
Land Systems Division Emerging Project Team
(03) 9282 6933

Phase Scope

This phase is intended to deliver a corporate Enterprise Content Management (ECM) system across the Defence business and operational domains. The project is expected to select, acquire and implement an Electronic Document and Records Management solution that will meet Defence's legislated compliance obligations for recordkeeping.

Background

This project is proposed as a solution to improve Defence's current levels of effectiveness and efficiency in managing its holdings of physical and electronic records and ensure ongoing compliance with legislated and standards-based mandatory Commonwealth recordkeeping obligations.

The project will leverage off additional capability that the selected solution might provide in order to realise additional benefits that contribute towards meeting the information and content management business needs of Defence users accessing the Defence Restricted and Secret Networks.

The deployed solution is intended to overcome deficiencies associated with the use of disparate records and document management systems across the department through utilisation of a standard ECM tool, standardisation of business processes and enhanced capability that enables departmental knowledge management and business intelligence initiatives.

Australian Industry Opportunities

Acquisition

Hardware and software is anticipated to be acquired as Commercial-off-the-Shelf (COTS) items available from Australian suppliers. Significant industry opportunity is anticipated for the provision of services that encompass information communications technology (ICT) systems design, integration, installation and commissioning of system components. The project is expected to be a major business change management initiative and significant opportunity for industry involvement is anticipated in the fields of information architecture, business analysis and process engineering, change management and user training.

Phase 1 will be effected through a Request for Tender (RFT). Evaluation will encompass functional demonstration, functional validation and technical qualification assessment of short-listed solutions.

Through-life Support

The through-life support requirements are expected to be heavily influenced by advances in technology and ongoing maturity of the ICT element of the Strategic Reform Program (as set out in the 2009 Defence White Paper).

Industry requirements are expected to be based around developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities. Through-life support is likely to be undertaken within the Australian information technology and services delivery sector and these services are likely to be incorporated into the acquisition contract.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Enterprise Content Management
Design	D
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	D
Modelling / Simulation	D
Project Manage	O
Refurbish / Upgrade	D
Repair and Maintain	D
Research and Development	D
Software Development / Support	D
Systems Definition / Development	D
Systems Integration	D
Test and Evaluate	D
Application Support Services	D
Data Cleansing/Migration	D
Business Process Analysis/Engineering	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2013 to 2015

Point of Contact

Chief Information Officer Group:
Project Director Common Services Document
and Records Management
(02) 6266 4577

Phase Scope

This phase is intended to enhance the direction, collection, processing and dissemination of environmental data to provide a comprehensive and thorough understanding of the physical maritime operating environment and its likely impact on military operations. Phase 1 is expected to focus solely on the maritime environment and although not yet committed, the project is expected to have integral links to future land and air phases.

Background

Knowledge of the environment is a critical factor in the conduct of successful joint military operations. The ADF has a keen interest in improving its capabilities to collect, analyse and disseminate geospatial information. Rapid Environmental Assessment allows relevant geospatial and environmental information relating to a particular area of military operations to be collected, processed and disseminated to military planners, decision makers and operational forces in a coordinated, systematic and timely manner. This geospatial and environmental information includes hydrographic, topographic, oceanographic, and atmospheric data that may be sourced from both archived data and data collected in real-time. The provision of reliable and relevant geospatial and environmental data facilitates comprehensive situational awareness and decision superiority in the battlespace environment, and enables the optimal employment of platforms, weapons systems and sensors. The Rapid Environmental Assessment capability to be delivered by Phase 1 of the project is expected to introduce the improved sensor and collection systems, and enhanced information management and dissemination structures across ADF and the Australian Defence Organisation.

Australian Industry Opportunities

Acquisition

Although industry requirements in support of this phase are yet to be developed, the following industry opportunities are anticipated:

- specialist consulting services in the identification of suitable hardware and software in order to enhance operational capability and future developments;
- systems engineering (including design) and integration, including the integration of Commercial-off-the-Shelf systems (COTS), project management, system acquisition and support, and testing of equipment and services; and
- software development that may be required to support the integration of the various subsystems into the overall solution.

Through-life Support

Full through-life support is needed for the specific components of Phase 1. The detailed requirements are to be determined during future scoping studies. Synergies with other projects are to be investigated.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Protection of Networks, Computers & Information	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Rapid Environmental Data Collection System
Assemble / Install	D				D	D
Design	D		D		D	O
Education / Training					D	D
In-Service / Through-life Support	D	D	D	D	D	D
Logistics Support	D	D	D	D	D	D
Manufacture / Construct	D				D	O
Modelling / Simulation						O
Project Manage	D	D	D	D	D	D
Refurbish / Upgrade	D			D	D	D
Repair and Maintain	D			D	D	D
Software Development / Support	D	D	D		D	D
Systems Definition / Development	D	D	D		D	D
Systems Integration	D	D	D		D	D
Test and Evaluate	D	D	D		D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low<$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2015 to 2017

Points of Contact

Capability Staff:
Deputy Director Patrol and Hydrographic
(02) 6265 6467

Defence Materiel Organisation:
Director Military Geographic Information Systems Program Office
(02) 6265 5635

Phase Scope

This phase aims to provide accurate and timely geospatial and survey support to the ADF. Geomatic support is used to gain a better appreciation of the impact of the physical environment on the conduct of military operations and to assist with infrastructure development in support of operations in a deployed environment. It is required to achieve an accurate 'Common Operating Picture and Situational Awareness' across the theatre of operations. This phase intends to modernise the ability for land forces to conduct geospatial collection, production, survey operations, geospatial data management and presentation of geospatial information.

Background

This phase seeks to modernise land geospatial capability from the current largely manual approaches to an increasingly automated process. This phase seeks to enhance the ability of land forces to collect, process and expose geospatial data with minimum production time and effort. The capability aims to have a large IT focus and see an increase of computerisation for deployed geospatial force elements. Improved survey, mapping and profiling equipment enhances the ability of deployed forces to conduct combat support functions and to support infrastructure tasks in the deployed environment. Improved utilisation of modern technology improves the ability for geomatic support to be provided to highly mobile force elements as well as down to individual soldiers if the communications links exist.

Australian Industry Opportunities

Acquisition

Opportunities may exist for an Australian contractor to purchase on behalf of the Commonwealth the necessary hardware (servers, desktops, monitors, laptops and additional items) and software in support of the project.

Opportunities for an Australian company to conduct the design, development, integration and delivery of the software and hardware for the project may also be presented. It is anticipated that the required software needs will be quite sophisticated.

Discussion with Australian industry is likely to commence around 2013.

Through-life Support

Following the successful completion of this phase, there may be opportunities for the prime contractor to provide in-service support.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Protection of Networks, Computers & Information	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Geomatic Systems
Assemble / Install	D		D		D	D
Design	D		D		D	D
Education / Training	D				D	D
In-Service / Through-life Support	D	D	D	D	D	D
Logistics Support	D	D	D	D	D	D
Manufacture / Construct	D				D	
Modelling / Simulation						D
Project Manage	D	D	D	D	D	D
Refurbish / Upgrade	D				D	D
Repair and Maintain	D				D	D
Software Development / Support	D	D	D		D	D
Systems Definition / Development	D	D	D		D	D
Systems Integration	D	D	D		D	D
Test and Evaluate	D	D	D		D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2012-13 to FY 2014-15
Year-of-Decision	FY 2014-15 to FY 2016-17
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:
Deputy Director Imagery and
Geospatial Information Systems
(02) 6265 3897

Defence Materiel Organisation:
Director Military Geographic Information
Systems Program Office
(02) 6265 5635

Phase 3H Military Satellite Capability – Wideband Terrestrial Terminals
Phase 5B Military Satellite Capability – Wideband Terrestrial Infrastructure

JP 2008

Phase Scope

Phase 3H intends to optimise the early use of the Wideband Global Satellite (WGS) system by rapidly replacing satellite communications (SATCOM) terminal installations in the Middle East with WGS certified terminals and introduce WGS certified terminals to deliver services currently provided by narrowband and L-Band terminals.

Phase 5B will enhance the Australian Defence SATCOM capability through the delivery of a satellite ground station in the east of Australia for WGS system anchoring and the delivery of transportable wideband ground terminals for land forces.

Background

JP 2008 is a multi-phased proposal that provides strategic and tactical satellite communications capabilities to support ADF operations. Other phases include:

- Phase 1 (completed) comprised of studies undertaken in support of the development of a mobile SATCOM capability;
- Phase 2 (complete) is acquiring a SATCOM capability for mobile assets;
- Phase 3A (complete) was a study into the feasibility of options for a suitable interim SATCOM system to meet ADF requirements;
- Phase 3C (in progress) is developing a Theatre Broadcast System concept and technology demonstrator for high, medium and low data rate satellite broadcast capabilities;
- Phase 3D (complete) has delivered a Defence SATCOM capability on the SingTel/Optus C1 satellite and the associated ground control infrastructure;
- Phase 3E (in progress) is providing the terrestrial infrastructure to utilise the SATCOM capabilities of the Defence payload on the SingTel/Optus C1 satellite through the delivery of the Advanced SATCOM Terrestrial Infrastructure System (ASTIS) inclusive of the wideband maritime SATCOM terminals (M-ASTIS) and land force Compact Transmit/Receive System (CTRS);
- Phase 3F (approved) intends to enhance the Australian Defence SATCOM capability through the delivery of a satellite ground station in the west of Australia and a satellite communications network management system. The satellite ground station and network management system will interface deployed forces accessing the WGS system with the Defence Wide Area Network and Australian Defence headquarters and support elements;
- Phase 4 (in progress) is establishing the space and control segments of the future ADF wideband SATCOM capability by providing access to the WGS constellation through a memorandum of understanding (MOU) with the US; and
- Phase 5A (in progress) intends to deliver an ADF UHF SATCOM capability providing coverage over the Indian Ocean Region (IOR) including the Middle East Area of Operations. A contract for the provision of a hosted UHF payload was signed with Intelsat in April 2009.

Australian Industry Opportunities

Acquisition

For Phases 3H and 5B the intention is to acquire the capabilities through tender. In all cases Defence is to investigate the range of options before moving to acquisition.

Through-life Support

The industry requirements will be based around developing and maintaining sufficient capability within Australian industry to undertake a range of through-life maintenance and support activities for ground segments.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 3H	Capability
Activity	Wideband SATCOM Terminals
Assemble / Install	D
Design	D
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	D
Project Manage	D
Refurbish / Upgrade	D
Repair and Maintain	D
Systems Definition / Development	D
Systems Integration	D
Test and Evaluate	D

Phase 5B	Capability	
Activity	Systems Integration (High End, System of Systems)	SATCOM Ground Terminals
Assemble / Install		D
Design		D
Education / Training		D
In-Service / Through-life Support		D
Logistics Support		D
Manufacture / Construct		D
Modelling / Simulation		D
Project Manage		D
Refurbish / Upgrade		D
Repair and Maintain		D
Research and Development		D
Software Development / Support		D
Systems Definition / Development		D
Systems Integration	O	D
Test and Evaluate		D

Acquisition Category (ACAT)

Phase 3H

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 5B

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m-$1500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 3H	FY 2009-10 to FY 2010-11
	Phase 5B	FY 2012-13 to FY 2014-15
Year-of-Decision	Phase 3H	FY 2009-10 to FY 2010-11
	Phase 5B	FY 2014-15 to FY 2016-17
Initial Operating Capability	Phase 3H	2012 to 2014
	Phase 5B	2016 to 2018

Points of Contact

Phase:
Phases 3H and 5B

Capability Staff:
Deputy Director
Long Range Communications
(02) 6265 6502

Defence Materiel Organisation:
Director Satellites Space Systems
Program Office
(02) 6265 4155

Phase Scope

This phase is intended to enhance the Jindalee Operational Radar Network (JORN) capability.

Background

The JORN capability comprises three Over-the-Horizon Radars (OTHR), a JORN Coordination Centre at RAAF Edinburgh, and a Frequency Management System of sounders and transponders located at numerous sites throughout Australia.

This phase is intended to address OTHR sustainability issues and take advantage of Australia's world class OTHR research and development, and technology.

The upgrades are expected to include sensor hardware and software, signals processing, data fusion, communications and information systems, enhanced simulation and operator training facilities, and operator human-machine interface improvements.

Australian Industry Opportunities

Acquisition

It is anticipated that solutions are to involve a very high level of Australian content. A range of possible contracting solutions are anticipated during this phase including a mixture of acquisition and enhancement elements, phased roll-out and prime systems integration.

The areas on which industry requirements are anticipated to focus include:

- provision of new sensors and systems;
- upgrades to existing signal processing and data fusion software;
- enhanced simulation and operator training facilities;
- improvements to operator-machine interfaces;
- integration of the new and upgraded systems into existing JORN systems;
- test and evaluation; and
- removal and disposal of existing systems.

Through-life Support

Australian based full through-life support is required. Through-life support contracting arrangements are anticipated to be turn-key in nature and involve a separate tendering process to the acquisition elements.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Radar (HF & PAR)	System Assurance Capabilities (H'ware & S'ware)	Systems Integration (High End, System of Systems)	Targeting & Precision Navigation	Protection of Networks, Computers & Information	Simulators
Assemble / Install	D	D	D	D	D	D
Design	D	D	D	D	D	D
Education / Training	O	O	O	O	O	O
In-Service / Through-life Support	D	D	D	D	D	D
Logistics Support	D	D	D	D	D	D
Manufacture / Construct	D	D	D	D	D	D
Modelling / Simulation	D	D	D	D	D	D
Project Manage	D	D	D	D	D	D
Refurbish / Upgrade	D	D	D	D	D	D
Repair and Maintain	D	D	D	D	D	D
Research and Development	D	D	D	D	D	D
Software Development / Support	D	D	D	D	D	D
Systems Definition / Development	D	D	D	D	D	D
Systems Integration	D	D	D	D	D	D
Test and Evaluate	D	D	D	D	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2016-2018

Points of Contact

Capability Staff:
Deputy Director
Battlespace Management
(02) 6265 5561

Defence Materiel Organisation:
Officer Commanding Over The Horizon Radar
Systems Program Office
(08) 8259 4001

Project Website:
www.defence.gov.au/dmo/esd/jp2025/jp2025.cfm

Phase Scope

Phase 8 is intended to build upon the capability delivered under previous phases of the project and in particular, extend the functionality through the development of applications that support the planning and conduct of ADF networked operations.

Background

The Joint Command Support Environment is evolving from the development and integration of several new and existing command support systems including the Joint Command Support System, Maritime Command Support System, Air Command Support System, Special Operations Command Support System and the Battlefield Command Support System (part of Project LAND 75).

Other phases include:

- Phases 1-6 (complete) delivered a 'core' command support system to support the planning and conduct of joint operations. This system was delivered to strategic, operational and tactical level headquarters as well as selected ADF units; and
- Phase 7 (in progress) is providing further roll-out and enhancement of the Joint and Air Command Support Systems.

Australian Industry Opportunities

Acquisition

Although many of the required products will be Commercial- and Military-off-the-Shelf items, existing and some new supplier capability would be required for system integration, limited bespoke software development, integrated logistics support development and transition into service. The acquisition strategy will be evolutionary, in which successive upgrades will add to functionality.

Through-life Support

Under existing and new arrangements, a long-term local support capability will be required.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Systems Integration (High End, System of Systems)	Command & Control Systems
Assemble / Install	D	D
Design	D	D
Education / Training	D	D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Project Manage	D	D
Refurbish / Upgrade	D	D
Repair and Maintain	D	D
Research and Development	D	D
Software Development / Support	D	D
Systems Definition / Development	D	D
Systems Integration		D
Test and Evaluate	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2009-10 to FY 2012-13 (evolutionary, with progressive decisions across this time period)
Initial Operating Capability	Various from 2011 onwards

Points of Contact

Capability Staff:

Deputy Director Command and Control Systems
(02) 6265 4086

Defence Materiel Organisation:

Director Joint Command Support Environment
(02) 6270 8332

Project Website:

www.defence.gov.au/dmo/esd/jp2030/jp2030ph8.cfm

JP 2044

Phase 3A.1 Project Eagle Eye
Phase 4 Digital Topographical Systems (DTS) Upgrade

Phase Scope

Phase 3A.1 is intended to enhance the connectivity and interoperability between Defence geospatial intelligence agencies and units.

Phase 4 seeks to further improve capability by networking and developing interoperability of Defence geospatial intelligence agencies. This phase will also seek to enhance interoperability with our allies and maintain relevance, effectiveness and efficiency within an arena of rapidly changing technologies.

Background

JP 2044 is a multi-phased proposal designed to develop and sustain a Defence capability to exploit geospatial data gathered from multiple sources including space-based surveillance.

Other phases include:

- Phase 2A (complete) has delivered system updates and conducted risk reduction activities in preparation for the main acquisition phase;
- Phase 2B (in progress) is the major acquisition phase for information technology, communications and training infrastructure to support a space-based surveillance capability; and
- Phase 3B (almost complete) will extend the networking of Defence geospatial intelligence agencies to facilitate interoperability.

Australian Industry Opportunities

Acquisition

The security classification of much of the system provided under this project precludes the wide engagement of Australian industry in the upgrade or replacement of equipment.

Through-life Support

The ability to engage Australian industry for through-life support will be limited by the system security classification. Depending upon the security classification of the equipment delivered under these phases, there may be some limited opportunities for Australian industry to provide through-life support of the system.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 3A.1 and 4	Capability	
Activity	Systems Integration (High End, System of Systems)	Targeting & Precision Navigation
In-Service / Through-life Support	O	O
Project Manage	O	O
Refurbish / Upgrade	O	O
Repair and Maintain	O	O

Acquisition Category (ACAT)

Phase 3A.1

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 4

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 3A.1	FY 2009-10 to FY 2010-11
	Phase 4	FY 2009-10 to FY 2010-11
Year-of-Decision	Phase 3A.1	FY 2010-11 to FY 2011-12
	Phase 4	FY 2012-13 to FY 2014-15
Initial Operating Capability	Phase 3A.1	2012 to 2014
	Phase 4	2014 to 2016

Points of Contact

Phase:
Phases 3A.1 and 4

Capability Staff:
Deputy Director Imagery and Geospatial Information Systems
(02) 6265 3897

Defence Materiel Organisation:
Director Military Geographic Information Systems Program Office
(02) 6265 5635

JP 2047

Phase 3 Wide Area Communications Network Replacement

Phase Scope

This phase will make major enhancements to enable Defence's information network to improve the preparation for and conduct of military operations and improve the management of Defence business. The project is expected to deliver one network connecting fixed and deployed locations built on a single set of standards and products.

Background

JP 2047 is a multi-phased proposal to maintain and improve the Defence networked communications infrastructure. Other phases include:

- Phase 0 (complete) which encompassed a Project Definition Study and a network security and survivability study, to provide input to the capability requirements for later phases;
- Phase 1A (largely complete) which is modernising telecommunications switching at selected Defence sites. This provides a scalable broadband backbone network, upgraded encryption systems in the Secret domain and upgraded management tools to support the enhanced network;
- Phase 2A (in progress) which is a consolidation stage that strengthens enhancements made in phase 1A, implementing virtual private networking, strengthening the policy framework of the network environment and providing enhanced encryption services on both the Restricted and Secret networks; and
- the previously planned Phases 2B and 2C that have been amalgamated into Phase 3.

Australian Industry Opportunities

Acquisition

Although the industry requirements are yet to be fully developed, the areas in which industry may contribute are as follows:

- systems design, development and integration of both software and hardware in order to enhance Defence communications capability and take advantage of future developments in communications technology; and
- network security enhancements.

Through-life Support

Industry requirements are based around developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities. Through-life support activities are likely to be undertaken within the existing Australian and New Zealand based telecommunications sector.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability				
	Communications Security	Protection of Networks, Computers & Information	System Life Cycle Management	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Assemble / Install	D	D	D	D	D
Design	D	D	D	D	O
Education / Training	D	D	D	D	O
In-Service / Through-life Support	O	O	O	O	O
Logistics Support	O	O	O	O	O
Manufacture / Construct					O
Modelling / Simulation	O	O	O	O	O
Project Manage	O	O	O	O	O
Refurbish / Upgrade	O	O	O	O	O
Repair and Maintain	O	O	O	O	O
Research and Development	O	O	O	O	O
Software Development / Support	D	D	D	D	D
Systems Definition / Development	D	D	D	D	D
Systems Integration	D	D	D	D	D
Test and Evaluate	O	O	O	O	O

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2015 to 2017

Point of Contact

Chief Information Officer Group:
Project Director
(02) 6265 3217

JP 2048

Phase 3 Amphibious Watercraft Replacement
Phase 5 Landing Craft Heavy Replacement

Phase Scope

This project aims to provide the ADF with the platforms necessary to create an amphibious manoeuvre capability in support of the ADF's future operating concept *"Joint Operations for the 21st Century"*. The CANBERRA Class Landing Helicopter Dock (LHD) (currently under construction), and the remaining phases of the project will combine to provide a multi-dimensional manoeuvre capability through its aviation, landing craft and command and control facilities.

Phase 3 will provide landing craft to land vehicles and equipment from the CANBERRA Class LHDs. The landing craft will be integral to the ships' equipment and will operate from the LHD's internal docks. These landing crafts will be able to operate in a much wider range of weather conditions, at higher speed and with heavier loads than the existing system.

Phase 5 will acquire six new heavy landing craft with improved ocean going capabilities able to transport armoured vehicles, trucks, stores and people. It will provide a capability to conduct independent small scale regional amphibious operations or to support the CANBERRA Class as part of an Amphibious Task Group.

Background

This project arose from recognition of the need for a greater amphibious capability than was provided by the two KANIMBLA Class Landing Platform Amphibious Ships (LPA), the Heavy Landing Ship HMAS *Tobruk*, the six BALIKPAPAN Class Heavy Landing Craft and associated Army landing craft.

- Phase 3 is intended to provide the CANBERRA Class LHDs with landing craft to enable personnel, equipment and supplies to be loaded and offloaded over the beach. In addition it is anticipated that a small number of craft would be acquired to enable shore based training and maintenance.
- Phase 5 is intended to deliver ocean-going landing craft that are capable of independent amphibious operations or support the Amphibious Task Group.

As is highlighted in the 2009 White Paper, a future phase of this project is expected to acquire a large strategic sealift ship.

Australian Industry Opportunities

Acquisition

For Phase 3 the craft may either be constructed entirely overseas, entirely in Australia or as a mixed build. Identified industry opportunities that may relate to this phase include the production of landing craft and in-service support.

For Phase 5 industry requirements will be guided by the information gained through definition studies. Possible industry opportunities that may relate to these phases include design, design interpretation, ship production, ships propulsion systems, ships electrical and electronic systems, ship environmental systems, and in-service support.

Through-life Support

The industry requirements will be based around developing and maintaining sufficient capability within Australian industry to undertake as wide a range of through-life maintenance and support activities as practicable for all phases of the project.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 3 Activity	Capability Surface Naval Vessels
Assemble / Install	O
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	O
Project Manage	O
Refurbish / Upgrade	D
Repair and Maintain	D
Test and Evaluate	D

Phase 5 Activity	Capability Surface Naval Vessels
Assemble / Install	D
Design	O
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	O
Modelling / Simulation	O
Project Manage	D
Refurbish / Upgrade	D
Repair and Maintain	D
Research and Development	O
Software Development / Support	D
Systems Definition / Development	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

Phase 3

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 5

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m-$1500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 3	Complete
	Phase 5	FY 2012-13 to FY 2014-15
Year-of-Decision	Phase 3	FY 2011-12 to FY 2012-13
	Phase 5	FY 2015-16 to FY 2017-18
Initial Operating Capability	Phase 3	2014 to 2016
	Phase 5	Beyond 2019

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phase 3	Staff Officer Amphibious Mobility (02) 6265 2429	Program Manager Amphibious Deployment and Sustainment Capability (02) 6266 7040
Phase 5	Staff Officer Amphibious and Afloat Support (02) 6265 4726	

Phase Scope

JP 2060 is a multi-phase joint project which involves the identification and development of capabilities required to prevent, treat and evacuate casualties in joint operations in the defence of Australia and its interests.

This phase is intended to improve the existing ADF Deployable Health Capability to deliver optimum quality services for the prevention, treatment and evacuation of casualties. It intends to achieve this through the adoption of a 'whole of system' approach to the delivery of health support, addressing each of the following five Health Operating Systems:

- Preventive Health;
- Treatment;
- Medical Evacuation;
- Health Information Systems (command, control, communication, intelligence and information management systems); and
- Health Service Logistics.

Background

JP 2060 is comprised of five distinct elements:

- Phase 0 (completed 2001) was a preliminary phase;
- Phase 1 (completed 2003) was a Project Definition Study;
- Phase 2A (completed 2008) was an early acquisition of Portable Ultrasound systems and Intermediate Fidelity Mannequin systems;
- Phase 2B (in progress) is a main acquisition phase addressing the treatment aspects of surface and air evacuation, disease and injury prevention, facilities and equipment, and deployment flexibility; and
- Phase 3 will deliver the next generation ADF Deployable Health Capability. It is intended that the phase will continue to acquire new health technologies/systems and suitably train and equip the ADF with the materiel and information management capability to meet its future health support requirements.

Australian Industry Opportunities

Acquisition

The acquisition strategy for Phase 3 is yet to be determined. It is anticipated that local industry involvement will be an important feature of the acquisition strategy and may include the supply of medical support and equipment together with through-life support.

Through-life Support

Australian industry opportunities will be based around developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability		
	System Life Cycle Management	Facilities & Infrastructure	Medical Technology
Assemble / Install		O	O
Design		D	D
Education / Training		D	D
In-Service / Through-life Support		D	D
Logistics Support		D	D
Project Manage		O	O
Refurbish / Upgrade		D	D
Repair and Maintain		D	D
Research and Development		O	O
Software Development / Support		D	D
Systems Definition / Development		O	O
Systems Integration		D	D
Test and Evaluate		D	D
Outsourced Capability	O	O	O

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:
Staff Officer Health
(02) 6265 7689

Defence Materiel Organisation:
Land Systems Division Emerging Project Team
(03) 9282 4307

Phase Scope

This phase is intended to provide improved geospatial information databases and applications to benefit operational planners and the conduct of operations.

Background

This project is a multi-phased proposal to develop a geospatial information infrastructure and services capability to provide Defence clients with online access to geospatial information, geospatial information resource discovery mechanisms and geospatial services (i.e. tailored responses to customer requests for information). Simply expressed, this project provides users with ready visibility of, and access to, geospatial information.

Phase 3 covers all aspects of production, data storage, dissemination and service provision. The project implements solutions in all security domains and across a range of networks to support users in fixed and deployed locations. Access to data via this mechanism becomes the principal means by which command support systems of the ADF's networked force and other systems obtain the geospatial information that they require.

Other phases include:

- Phase 1 (complete) has enhanced the geospatial production capability; and
- Phase 2 (acquisitions are now complete) is providing Defence information system network users with a single coherent picture of the total range of authorised trusted geospatial information products and provides simple web-enabled access to such products. In-service support for the Phase 2 system is now in-place.

Australian Industry Opportunities

Acquisition

There is the potential for an Australian contractor to purchase on behalf of the Commonwealth the hardware (servers, desktops, monitors, laptops and additional items) and software (enterprise and application software) from within Australia or from overseas vendors.

There is also the potential for an Australian company to conduct the design, development, integration and delivery of Phase 3. This would involve the installation of systems and the integration of software with current information systems at a number of Defence sites both in Australia and overseas.

Discussions with Australian industry would most likely commence around 2011.

Through-life Support

Following on from the acceptance of the Phase 3 products there is the potential for the acquisition contractor to provide in-service support.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Protection of Networks, Computers & Information	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Geospatial Database Systems
Assemble / Install	D		D			D
Design	D		D		D	D
Education / Training					D	D
In-Service / Through-life Support	D	D		D	D	D
Logistics Support		D		D		D
Manufacture / Construct	D		D			D
Project Manage	D	D	D	D	D	D
Refurbish / Upgrade			D	D		D
Repair and Maintain				D		D
Research and Development			D			
Software Development / Support		D				D
Systems Definition / Development	D		D		D	D
Systems Integration	D	D	D		D	D
Test and Evaluate	D	D	D		D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Deputy Director Imagery and
Geospatial Information Systems
(02) 6265 3897

Defence Materiel Organisation:
Director Military Geographic Information
Systems Program Office
(02) 6265 5635

Phase Scope

Phase 2 is intended to upgrade the Australian Integrated Broadcast Service (IBS) to maintain compatibility with allies. It is expected to introduce new system capabilities, extend the ADF roll-out of the system and build upon infrastructure developed during Phase 1.

Phase 3 aims to further develop the capability of the existing Australian system and extend IBS capabilities to additional users. It is expected to include new technologies.

Background

Phase 1 (approved) delivered the IBS to the ADF. This system manages and disseminates directly to deployed forces the tactically significant information produced by Australian and allied assets. The Australian IBS vision includes an information management centre that manages and bridges information between computer networks and satellite components with suitable gateways to real-time tactical data links. This capability provides an important interface to Defence's Tactical Information Exchange Environment and enhances allied interoperability.

Australian Industry Opportunities

Acquisition

IBS specific equipment and services are to be procured through government-to-government arrangements. Other equipment and services may be procured through Australian industry.

Through-life Support

The through-life support of IBS specific equipment is to be procured through government-to-government arrangements. The through-life support of all other IBS equipment is contracted to Australian industry.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 2 and 3	**Capability**					
Activity	Electronic Warfare	Rotary & Fixed Wing Aircraft	Submarines	Surface Naval Vessels	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Assemble / Install	D	D	D	D	D	D
Design	D	D	D	D	D	D
Education / Training	D	D	D	D	D	D
In-Service / Through-life Support	D	D	D	D	D	D
Logistics Support	D	D	D	D	D	D
Refurbish / Upgrade	D	D	D	D	D	D
Repair and Maintain	D	D	D	D	D	D
Systems Integration	D	D	D	D	D	D
Test and Evaluate	D	D	D	D	D	D

Acquisition Category (ACAT)

Phase 2

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Phase 3

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 2	FY 2009-10 to FY 2010-11
	Phase 3	FY 2011-12 to FY 2012-13
Year-of-Decision	Phase 2	FY 2010-11 to FY 2011-12
	Phase 3	FY 2012-13 to FY 2014-15
Initial Operating Capability	Phase 2	2012 to 2014
	Phase 3	2014 to 2016

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phases 2 and 3	Deputy Director Intelligence Systems (02) 6265 1222	Project Director JP 2065 (02) 6265 3011

Phase Scope

This phase is intended to reduce the vulnerability of Defence's information systems through the provision of advanced Computer Network Defence (CND) hardware and software including a support facility to conduct ongoing development and maintenance.

Background

JP 2068 is a multi-phased proposal to progressively develop a survivable Defence Network Operation Centre capability, which will enable Defence to more effectively manage, monitor and secure its major communications networks and information systems. Phases of this project include:

- Phase 1A (approved) provided a Network Operations Centre facility at HMAS *Harman* in Canberra;
- Phase 1B (approved) trialled a Defence Science and Technology Organisation-developed CND pilot system on the Defence Restricted Network. Outcomes of this trial will be used to assess the need and functional requirements for a mature CND facility in JP 2068 Phase 2; and
- Phase 2B will further enhance the capabilities provided in Phase 1 by improving the management, monitoring, security and visibility of the Defence Information Environment. Phase 2B.1 (approved) will extend the network management facilities at HMAS *Harman* to facilitate collocation and integration of network and security operations functions. Phase 2B.2 will provide enhanced CND information and computer technology infrastructure, techniques and capabilities to protect Defence's core information systems against intrusions.

Australian Industry Opportunities

Acquisition

Opportunities for Australian industry are expected in the areas of systems design, development and integration of both software and hardware in order to enhance Australia's CND capability and associated future developments.

Through-life Support

Industry requirements will be based around developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities. Through-life support activities will likely be undertaken within the existing Australia and New Zealand based information technology sector.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Systems Integration (High End, System of Systems)
Assemble / Install	D
Design	D
Education / Training	D
In-Service / Through-life Support	O
Logistics Support	D
Manufacture / Construct	O
Modelling / Simulation	O
Project Manage	O
Refurbish / Upgrade	O
Repair and Maintain	O
Research and Development	D
Software Development / Support	D
Systems Definition / Development	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2014 to 2016

Point of Contact

Capability Staff:

Director Network Application Development
(02) 6265 7983

Phase Scope

This phase will partially replace the existing ADF fleet of high grade cryptographic equipment. The proposal also includes management of the new fleet and associated cryptographic keys.

Background

The project is a multi-phased proposal to acquire replacement high grade cryptographic equipment for the ADF. High grade cryptographic equipment is used when there is a requirement to protect nationally classified information during electronic transmission. The proposal aims to modernise the ADF's fleet of high grade cryptographic equipment to avoid obsolescence, take advantage of technology advancements and maintain interoperability with allies.

Other phases of JP 2069 include:

- Phase 1A (completed in 2006) defined the strategy and scope of the later phases of the project; and
- Phase 1B (largely complete) has acquired the new generation of secure telephony.

Australian Industry Opportunities

Acquisition

Although most equipment is likely to be sourced from overseas, either through Foreign Military Sales (FMS) or Direct Commercial Sales (DCS) arrangements, there is scope for integration and installation effort from Australian industry. The primary equipment is expected to be Commercial- or Military-off-the-Shelf products that will be integrated into both new and existing communication systems.

Through-life Support

In this phase it is intended that through-life support will be required but it is likely that the equipment procured will be either repaired under warranty or by replacement.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Communications Security	Equipment Integration
Assemble / Install	O	D
Design		D
Education / Training	O	D
In-Service / Through-life Support	O	
Logistics Support	O	D
Manufacture / Construct		D
Project Manage		D
Refurbish / Upgrade		D
Repair and Maintain	O	
Systems Integration	D	D
Test and Evaluate	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low ‹$100m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2010-11 to FY 2011-12
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Director Network Application Development
(02) 6265 7983

Defence Materiel Organisation:
Project Manager JP 2069
(02) 6266 1893

Phase Scope

This phase will assess the need to supplement the AP-3C Light Weight Torpedo (LWT) capability provided by the MK 46 torpedo with either the MU90 LWT entering service with the Royal Australian Navy or another torpedo.

Background

A LWT that is effective against capable, modern submarines is an essential element of the AP-3C's Anti-Submarine Warfare (ASW) capability. Should the assessment of the MK 46 torpedo recommend that it be supplemented by another torpedo, options include investigating the level of integration of the MU90 LWT or another torpedo onto the AP-3C. The torpedo selected must provide assurance of the ADF's capability to conduct effective ASW operations in littoral environments. The torpedo solution chosen must be able to be quickly and simply integrated onto the AP-3C.

Australian Industry Opportunities

Acquisition

Although industry requirements are yet to be developed, the areas on which requirements are anticipated to focus include:

- aircraft system integration; and
- storage, handling and transport of weapon systems.

Through-life Support

The through-life support (TLS) prime contractor provides TLS for the AP-3C weapons system. It is anticipated that all aircraft related elements of the capability delivered through this project will be supported through the TLS prime contractor.

Limited TLS is required for the ordnance components delivered through this project. Support is expected to be limited to Integrated Logistic Support functions particularly in the handling, transport and storage specialisations.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Guided Weapons	Rotary & Fixed Wing Aircraft
Assemble / Install		D
Design		D
In-Service / Through-life Support		D
Logistics Support	D	D
Systems Integration		D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2009-10 to FY 2010-11
Initial Operating Capability	2011 to 2013

Points of Contact

Capability Staff:
Deputy Director Combat Enablers
Aerospace Development Branch
(02) 6265 5442

Defence Materiel Organisation:
Director Emerging Projects
Guided Weapons Branch
(02) 6265 1464

Phase Scope

Phase 2 is intended to continue the roll-out of modern communications infrastructure to high readiness land formations and units of the ADF through sub-phases 2A and 2B. Phase 2A aims to align with other Land Communications Information Systems (CIS) projects, in particular LAND 75 Phase 4 and is intended to provide the digital communications backbone and other low risk communication capabilities to address key shortfalls. Phase 2B aims to provide enhanced Command and Control (C2) services including enhanced trunking and switching infrastructure in the land environment. Phases 2A and 2B are key to achieving the ADF's Network Centric Warfare (NCW) milestone of the Networked Brigade.

Phase 3 will continue the expansion of enhanced communications to support joint operations. This phase is intended to continue to equip a second brigade and its supporting elements, as well as other high readiness units. Equipment acquired in earlier phases may also be refreshed during this phase.

Background

JP 2072 is a multi-phased proposal to progressively define and acquire an integrated Battlespace Communications System for the ADF's land elements.

Phase 1 (in progress) plans to acquire equipment to address urgent shortfalls to support the ADF's land communications needs. This priority support will focus on providing the digital radio backbone for the Battlefield Command Support System already in service and Battlefield Management Systems intended to be procured under LAND 75 and LAND 125. This phase will assist in the achievement of the ADF's NCW milestone of the Networked Battlegroup.

Australian Industry Opportunities

Acquisition

Although most equipment is likely to be procured from overseas sources, there is scope to acquire equipment from Australian industry. The primary equipment is expected to be Commercial- or Military-off-the-Shelf products that will be integrated into both new and legacy platforms and assemblages.

Through-life Support

The industry opportunities will be based around developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 2A	Capability			
Activity	Communications Security	Protection of Networks, Computers & Information	Systems Integration (High End, System of Systems)	Command & Control Systems
Assemble / Install		D	D	D
Design		D	D	D
Education / Training	D			D
In-Service / Through-life Support	D	D	D	D
Logistics Support	D	D	D	D
Manufacture / Construct				D
Modelling / Simulation		D		D
Project Manage			D	D
Repair and Maintain	D	D	D	D
Research and Development	D			D
Software Development / Support		D		D
Systems Definition / Development				D
Systems Integration		D	D	D
Test and Evaluate		D	D	D

Phase 2B	Capability			
Activity	Communications Security	Protection of Networks, Computers & Information	Systems Integration (High End, System of Systems)	Command & Control Systems
Assemble / Install		D	D	D
Design		D	D	D
Education / Training	D		D	D
In-Service / Through-life Support	D	D	D	D
Logistics Support	D	D	D	D
Manufacture / Construct			D	D
Modelling / Simulation		D	D	D
Refurbish / Upgrade			O	O
Repair and Maintain	D	D	D	D
Research and Development	D		D	D
Software Development / Support		D	D	D
Systems Definition / Development			D	D
Systems Integration		D	D	D
Test and Evaluate		D	D	D

Phase 3	Capability			
Activity	Communications Security	Protection of Networks, Computers & Information	Systems Integration (High End, System of Systems)	Command & Control Systems
Assemble / Install		D	D	D
Design		D	D	D
Education / Training	D		D	D
In-Service / Through-life Support	D	D	D	D
Logistics Support	D	D	D	D
Manufacture / Construct			D	D
Modelling / Simulation		D	D	D
Project Manage			D	D
Refurbish / Upgrade			O	
Repair and Maintain	D	D	D	D
Research and Development	D		D	D
Software Development / Support		D	D	D
Systems Definition / Development			D	D
Systems Integration		D	D	D
Test and Evaluate		D	D	D

Acquisition Category (ACAT)

JP 2072 Program

ACAT Attribute	Complexity Level Assessment
Acquisition Cost – Phase 2A Acquisition Cost – Phase 2B Acquisition Cost – Phase 3	Level 2 High $500m-$1500m (Towards the middle of the band) Level 3 Moderate $100m-$500m (Towards the upper end of the band) Level 2 High $500m-$1500m (Towards the lower end of the band)
Project Management Complexity	Level 1 Very High
Schedule	Level 2 High
Technical Difficulty	Level 1 Very High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT level assessed for this Program is ACAT I.

Planned Schedule Highlights

First Pass Approval	Phase 2A	FY 2009-10 to FY 2010-11
	Phases 2B and 3	FY 2010-11 to FY 2011-12
Year-of-Decision	Phase 2A	FY 2010-11 to FY 2011-12
	Phases 2B and 3	FY 2012-13 to FY 2014-15
Initial Operating Capability	Phase 2A	2012 to 2014
	Phases 2B and 3	2014 to 2016

Points of Contact

Phase:
Phases 2A, 2B and 3

Capability Staff:
Staff Officer Mobile Communications – Land
(02) 6265 6501

Defence Materiel Organisation:
Project Director JP 2072
(02) 6265 4183

JP 2077

Phase 2D Improved Logistics Information Systems

Phase Scope

JP 2077 aims to incrementally upgrade and enhance Defence's logistics information systems to ensure leading edge support continues to be provided in support of warfighting and corporate objectives.

This phase is intended to leverage and integrate existing systems and acquire new systems and capabilities to bring about enhancements in the areas of Engineering and Maintenance Management (including Repairable Items), Enterprise Reporting and Classified Assets management. Phase 2D also plans to address the underlying information systems architecture and management components along with providing Automated Materiel and Process Tracking in support of phase components. The necessary business process improvement and transformation activities necessary to exploit these initiatives are also part of this phase.

Background

The Defence Materiel Logistic Information System (MLIS) exists to support both day-to-day operations and the strategic management of the Department's materiel resources. It underpins:

- the generation of combat power by providing ADF units with logistics information systems support in the Joint environment;
- the provision of support to Defence's business activities; and
- high-level reporting to Government.

JP 2077 is a multi-phased proposal to improve Defence's logistics information systems:

- Phase 1 (completed) set the context for the program and confirmed the scope and conceptual requirements for the improved MLIS;
- Phase 2A (completed) delivered a range of targeted products that served to refine the direction of the program. Together, these products established the enabling structures, processes and plans to ensure that the following phases pursued a 'whole of capability' approach to the development of the future MLIS;
- Phase 2B.1 (in acquisition) is upgrading the Standard Defence Supply System (SDSS) from Mincom Information Management System (MIMS) v4 to MIMS v6, which is a Military-off-the-Shelf (MOTS) variant of the current v5 product known as 'Ellipse'. This upgrade is aimed at providing the foundation system for the establishment of an integrated MLIS, with an approved financial module that is compliant with the Australian Equivalent International Financial Reporting Standards;
- Phase 2B.2 (in acquisition) is intended to deliver a Deployable Logistics System (DLS) that will extend the reach of the Mincom Ellipse core transactional system to ADF force element groups deployed on operations, and integrate the existing ADF In-transit Visibility System into the Ellipse core; and
- Phase 2C (completed) delivered an interim Radio Frequency Identification (RFID) asset tracking system including both hardware and software, based on the proprietary Savi Tag system.

Australian Industry Opportunities

Acquisition

Phase 2D is intended to provide opportunities for the information technology (IT) industry in Australia. In particular, openings for Australian companies to partner with international suppliers for the delivery system overhaul, and ongoing support of applications being considered by the project, are expected. It is anticipated that the vast majority of the budget will be spent in Australia in the areas of project management, change management, help services (online, contextual and technical support), training solutions, and policy and procedure development.

A Request for Proposal (RFP) was released to global industry on 6 December 2007 and closed on 24 April 2008. All respondents to the RFP will proceed through to subsequent Request for Tender(s) to be conducted during 2010 and 2011. Additional Australian industry opportunities in 'above the line' activities in support of project acquisition activities are expected.

Through-life Support

Australian industry is considered well placed to deliver in the areas of systems integration, systems support, data cleansing and migration, training and change management.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability			
	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)
Assemble / Install	D	D	D	D
Education / Training	D	D	D	D
In-Service / Through-life Support	D	D	D	
Logistics Support	D	D	D	
Refurbish / Upgrade	D	D	D	
Repair and Maintain	D	D	D	
Software Development / Support	D	D	D	
Test and Evaluate	D	D	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the upper end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2015 to 2017

Points of Contact

Capability Staff:
Deputy Director Materiel Logistic Information Systems
(02) 6265 1101

Defence Materiel Organisation:
Project Director JP 2077 Phase 2D
(03) 9256 3199

Project Website:
www.defence.gov.au/dmo/coo/jp2077/index.cfm

JP 2078

Phase 2 Hyper–Spectral Imaging

Phase Scope

This phase aims to develop an operational hyper-spectral imaging (HSI) capability. Hyper-spectral imaging provides remotely sensed detection, classification and identification of the earth's features and other objects through spectral analysis of more than 100 bands of reflected and radiant energy in the visible and near-visible portion of the electro-magnetic spectrum.

Background

This capability is intended to aid in the detection and identification of hard to detect targets. This may include (but is not limited to) detecting facilities associated with the production of weapons of mass destruction and improvised explosive devices, as well as military equipment under camouflage or in deep hide. It also has the ability to provide information on soil conditions and mineral content, and to provide a passive unique target identification capability. Imaging sensors may be mounted on manned or unmanned aircraft or on space-based platforms.

The desired outcomes of Phase 2 are:

- a definition study to provide Defence with an understanding of the potential uses and counter-uses of advanced hyper-spectral imaging techniques; and
- based on the outcomes of the study, provide Defence with a HSI capability, which may involve receiving HSI data from a collaborative partnership with either a commercial or existing international partner agency, for independent processing, exploitation and storage of HSI data by Australia.

Australian Industry Opportunities

Acquisition

The project has the potential for Australian industry and the Defence Science and Technology Organisation (DSTO) to work together on a HSI system from the planning and development stages to in-service implementation.

Opportunities may exist for Australian industry to conduct the preliminary definition study that would analyse the application of advanced hyper-spectral imaging techniques. DSTO may also be interested in undertaking this study or assisting in the provision of scientific expertise.

Opportunities may also exist for industry to participate in a collaborative partnership with an international commercial or partner agency, to assist in the development, marketing and support of a HSI system. Further opportunities may also exist for data processing and storage. This project has the potential to incorporate a number of airborne platforms that could provide additional opportunities for industry. Discussion with Australian industry is likely to commence around 2012.

Through-life Support

It is envisaged that the ongoing support of the HSI hardware and software would be arranged through a through-life support (TLS) contract. The TLS contract would incorporate the ongoing development of the HSI system and it is anticipated that DSTO would provide assistance with ongoing development and improvements.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Protection of Networks, Computers & Information	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Hyper-Spectral Technology
Assemble / Install	D				D	D
Design	D		D		D	D
Education / Training			D		D	D
In-Service / Through-life Support	D	D	D	D	D	D
Logistics Support	D	D	D	D	D	D
Manufacture / Construct	D				D	D
Modelling / Simulation						D
Project Manage	D	D	D	D	D	D
Refurbish / Upgrade	D			D		D
Repair and Maintain	D			D		D
Research and Development	D					D
Software Development / Support	D	D	D		D	D
Systems Definition / Development	D	D	D		D	D
Systems Integration	D	D	D		D	D
Test and Evaluate	D	D	D		D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2016-2018

Points of Contact

Capability Staff:
Deputy Director Space Systems
(02) 6265 2970

Defence Materiel Organisation:
Director Military Geographic Information Systems Program Office
(02) 6265 5635

JP 2080

Phase 2B.1 Defence Management Systems Improvement – Personnel Systems Modernisation
Phase 3 Defence Management Systems Improvement – Finance System

Phase Scope

These phases are intended to enhance Defence's core financial and personnel information systems to accommodate changes in user requirements, technical platforms and upgrades to the commercial applications on which they are based. This ensures the ongoing sustainability of the Defence Enterprise Resource Planning Systems to support Defence capability and decision making requirements.

Background

This project seeks to improve the range and quality of functionality and information available to managers, deliver business efficiencies and improve the interchange of management information within Defence's corporate support systems. It also provides an opportunity for the coordination of existing management information initiatives from individual programs and is expected to address a range of architectures, policies, procedures and standards to guide the provision of management information and improve processes.

The project comprises of these phases:

- Phase 1 (completed) provided a number of urgent improvements to selected Defence management systems;
- Phase 2 (Phase 2A (completed) and Phase 2B.2 (completed) and Phase 2B.1 (unapproved)) is intended to improve the sustainability, efficiency and effectiveness of Defence's finance and personnel management systems; and
- Phase 3 aims to further enhance and /or upgrade the finance management information systems to ensure that they continue to provide effective support to the Australian Defence Organisation.

Phase 2B has previously received first pass approval from Government, however the sub-phase 2B.1 will be required to seek an amended first pass and second pass approval.

Australian Industry Opportunities

Acquisition

Phases 2B.1 and 3 provide opportunities for the Information Technology (IT) industry in Australia. It is anticipated that through an open tender, IT service providers will have the opportunity to implement Commercial-off-the-Shelf (COTS) product solutions to meet Defence requirements. Services include project management, change management, training and process improvement.

Through-life Support

Industry support sought will be around the development and maintenance of sufficient capability within Australia to undertake a full range of implementation and through-life maintenance support activities.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 2B.1 and 3	**Capability**		
Activity	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)
Assemble / Install		O	O
Design	D	D	D
Education / Training		D	
In-Service / Through-life Support		D	
Refurbish / Upgrade	D	D	D
Software Development / Support	D	D	D
Systems Definition / Development	O	D	O
Systems Integration	D	D	D
Test and Evaluate	D	D	D

Acquisition Category (ACAT)

Phase 2B.1

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 3

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low < $100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 2B.1	FY 2010-11 to FY 2011-12
	Phase 3	FY 2009-10 to FY 2010-11
Year-of-Decision	Phase 2B.1	FY 2012-13 to FY 2014-15
	Phase 3	FY 2010-11 to FY 2011-12
Initial Operating Capability	Phase 2B.1	2014 to 2016
	Phase 3	2012 to 2014

Point of Contact

Phase:
Phases 2B.1 and 3

Chief Information Officer Group:
Project Director
(02) 6266 4780

JP 2085

Phase 2/3 Explosive Ordnance Warstock

Phase Scope

This phase seeks to remediate the ADF's Explosive Ordnance (EO) stocks in order to ensure that joint forces have appropriate operational viability period stocks for a range of concurrent contingencies in accordance with Government expectations of Defence.

Background

This project seeks to reconstitute reserve stocks of EO. Recent operational tempo has placed pressure on reserve stockholdings. While routine operating stock replenishment activity will continue, this project seeks to re-establish appropriate quantities of EO reserve stocks. An earlier phase (Phase 1) was focused on the ADF's highest priority EO natures. This phase will extend the project by increasing reserve stockholdings of other EO natures.

Australian Industry Opportunities

Acquisition

The scope of this phase is confined to increasing reserve stockholdings of EO natures that are currently in-service with the ADF. While Australian industry involvement will therefore probably be focused around existing local supply arrangements, Defence is keen to build on the strategic advantages offered by domestic manufacturing capability. Potential exists for new opportunities to emerge in the EO domain.

Through-life Support

Extensive opportunities exist for Australian industry to provide through-life support services to the ADF's EO inventory, including activities such as training support, logistics support, refurbishment, repair, maintenance, systems integration, testing and evaluation. These opportunities will continue in support of the additional reserve stocks to be acquired under this phase.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Selected Ballistic Munitions & Explosives
Assemble / Install	D
Design	D
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	O
Modelling / Simulation	O
Project Manage	O
Refurbish / Upgrade	D
Repair and Maintain	O
Research and Development	O
Software Development / Support	O
Systems Definition / Development	D
Systems Integration	O
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m–$1500m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 4 Low
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Deputy Director
Explosive Ordnance
(02) 6265 1003

Defence Materiel Organisation:

Guided Weapons:
Deputy Director Emerging Projects
(02) 6265 1464

Non-Guided Explosive Ordnance:
Director Project Assurance and
Capability Enhancement
(02) 4737 0807

JP 2089

Phase 2B Tactical Information Exchange Domain (Data Links)
Phase 3 Tactical Information Exchange Domain (Data Links)

Phase Scope

This project is intended to establish a coherent and coordinated environment for tactical information exchange through a system-of-systems data network. The scope of the project is to:

- define the standards for the ADF Tactical Information Exchange Domain (TIED) to ensure Joint and Combined Interoperability;
- deliver the infrastructure to support the ADF TIED; and
- invest in legacy systems to enable them to operate to the required standards within the TIED.

Phase 2B is intended to implement a Variable Message Format (VMF) digital communication system on F/A-18A/B Hornet aircraft to provide greater interoperability with land forces during Close Air Support (CAS) missions.

Phase 3 is intended to implement a VMF Tactical Information Exchange (TIE) solution for the Tiger Armed Reconnaissance Helicopter (ARH) and to further develop the common support infrastructure to support the TIED.

Background

TIE systems, including Tactical Data Links, are key to information exchange connectivity within networked defence forces. Under JP 2089, the ADF is introducing a coherent and coordinated TIE environment and is systematically introducing TIE capability to selected legacy platforms.

Previous phases of JP 2089 include:

- Phase 1 was a project definition study to quantify TIE requirements to ensure all current and future ADF platforms can seamlessly exchange tactical information across the battlespace; and
- Phase 2A (in progress) will provide VMF and Link-16 integration with the Mark 3E Combat Management System on the ANZAC Class frigates and provide the initial common support infrastructure to support the TIED.

Australian Industry Opportunities

Acquisition

For Phase 2B it is expected that TIE solutions for F/A-18A/B Hornet aircraft will be achieved through leveraging off current project contracts and within existing maintenance and support arrangements.

For Phase 3 the industry requirements are yet to be fully developed, however Australian industry involvement is expected in the majority of the proposed activities.

Through-life Support

For Phase 2B it is expected that through-life support for the TIE solutions for the F/A-18A/B will be achieved through leveraging off current project contracts.

For Phase 3 the industry requirements will be based upon developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life operation, maintenance, and support activities.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 2B	Capability	
Activity	Rotary & Fixed Wing Aircraft	Support of Mission & Safety Critical Software
Assemble / Install	D	D
Design	D	D
Education / Training	D	D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Modelling / Simulation		D
Project Manage	D	
Repair and Maintain	D	
Software Development / Support	D	D
Systems Integration		D
Test and Evaluate	D	D

Phase 3	Capability		
Activity	Rotary & Fixed Wing Aircraft	Support of Mission & Safety Critical Software	Facilities & Infrastructure
Assemble / Install	D	D	D
Design	D	D	D
Education / Training	D	D	
In-Service / Through-life Support	D	D	D
Logistics Support	D	D	
Manufacture / Construct			D
Modelling / Simulation		D	
Project Manage	D		D
Refurbish / Upgrade			D
Repair and Maintain	D		D
Software Development / Support	D	D	
Systems Integration		D	
Test and Evaluate	D	D	

Acquisition Category (ACAT)

Phase 2B

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low ‹ $100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Phase 3

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 2B	Complete
	Phase 3	FY 2010-11 to FY 2011-12
Year-of-Decision	Phase 2B	FY 2009-10 to FY 2010-11
	Phase 3	FY 2012-13 to FY 2014-15
Initial Operating Capability	Phase 2B	2012 to 2014
	Phase 3	2014 to 2016

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phases 2B and 3	Staff Officer Communications Air (02) 6265 7215	Project Director JP 2089 (02) 6266 0722

Phase Scope

This phase is intended to improve Defence's ability to share information with allies and coalition partners.

Background

This project seeks to upgrade and augment the core infrastructure and services currently available to the Australian Defence Organisation (ADO), to facilitate classified information exchange with allied coalition partners. The project builds on the extant coalition and gateway infrastructure, developed under the Combined ENTerprise Regional Information eXchange System (CENTRIXS) and Griffin initiatives respectively, to improve and expand Australia's multi-national collaboration capabilities. This capability is important for Defence to enable it to support both the planning and conduct of operations and the day-to-day business of Defence with other nations.

Other phases of JP 2090 include:

- Phase 1A (complete) has developed a capability demonstrator as a potential solution to multi-level information security in the coalition environment; and
- Phase 1B (in progress) is providing an initial bilateral information exchange capability with the United States and the United Kingdom, Canada and New Zealand.

Australian Industry Opportunities

Acquisition

Phase 1C is principally a systems integration project utilising multi-nationally agreed designs, to upgrade and augment the ADO's existing information exchange capabilities. The Chief Information Officer Group (CIOG) is the prime systems integrator for the project, leading a team comprising of Defence and industry representatives and using existing CIOG sourcing arrangements. It is expected that elements of the project are to be contracted out to industry using these existing arrangements. The majority of both the hardware and software components are likely to be Commercial-off-the-Shelf (COTS) items, with some specialist items sourced as either Military-off-the-Shelf (MOTS) or COTS.

Through-life Support

Phase 1C is delivering a range of multi-national information sharing capabilities that are expected to be integrated into Defence's existing Information and Communications Technology (ICT) through-life support arrangements to the maximum extent possible. Hence, the majority of industry involvement is through existing ICT sourcing arrangements. Additional through-life support arrangements for specialist hardware and software is organised during the acquisition phase and incorporated as part of the CIOG ICT sourcing arrangements.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability			
	Protection of Networks, Computers & Information	System Life Cycle Management	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Assemble / Install	D	D	D	D
Design	D	D	D	D
Education / Training	D	D	D	D
In-Service / Through-life Support	D	D	O	D
Logistics Support	D	D	D	D
Manufacture / Construct	D	O	D	D
Project Manage	D	D	D	D
Refurbish / Upgrade	D	D	D	D
Repair and Maintain	D	D	D	D
Research and Development	O	O	O	O
Software Development / Support	D	D	D	
Systems Definition / Development	D	D	D	D
Systems Integration	D	D	D	D
Test and Evaluate	D	D	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the upper end of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 3 Moderate
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2010-11 to FY 2011-12
Initial Operating Capability	2011 to 2013

Points of Contact

Capability Staff:
Staff Officer Coalition Infrastructure
(02) 6265 1316

Chief Information Officer Group:
Director Coalition Networks and Wide Area
(02) 6128 7176

Phase Scope

Phase 1 is intended to focus on the design and developments of an architecture that will provide networked access to the growing volumes of data sourced from multiple surveillance sensors available to the Australian Defence Organisation (ADO), and facilitate the related information management (including tasking and dissemination) of the sensor outputs.

Background

The Defence Capability Plan contains many projects that deliver platforms and capabilities that contribute to the supply of Intelligence, Surveillance and Reconnaissance (ISR) data. Allied systems and other ADF initiatives are also adding to this volume. The achievement of an information edge in a networked force requires that this information is managed and mustered to best affect Defence's command and decision making. The intent of this project is to provide the means of managing and delivering information in a timely manner.

This project aims to enhance Defence ISR through the efficient management, analysis and integration of ISR assets into a Defence wide architecture. The project focuses on the provision of the means by which ISR assets across Defence are integrated into the Australian Defence ISR Integration Backbone (ADIIB) architecture and this phase is focussed on the design and development of that architecture. The use of appropriate communications and IT infrastructures will ensure that the right information is provided to the right person at the right time to provide Defence with information advantage over adversaries. This project will seek to ensure that ISR resources and information are effectively utilised by enabling coordinated tasking and exploitation of all ISR assets and effective dissemination of ISR data. This system-of-systems project also encompasses the provision of the means to achieve the federation and networking of distributed databases (the holding repositories for the collected data and the processed information and intelligence).

Australian Industry Opportunities

Acquisition

Although industry requirements in support of this project have not yet been developed, the following needs are anticipated:

- specialist consulting services in the design, development and integration of very sophisticated high level architecture to fulfil the ADIIB system requirements;
- sophisticated software along with a significant amount of hardware to enhance operational capability and future developments for the ADIIB system; and
- the provision of design, development and integration capabilities for the various products that will be identified as deliverables of the project.

Through-life Support

Opportunities are likely to exist for Australian industry in the through-life support of the software and hardware items provided under this project.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Protection of Networks, Computers & Information	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	High Level Architecture Design
Design	D		D		D	D
Education / Training					D	D
In-Service / Through-life Support	D	D		D	D	D
Logistics Support		D		D		D
Modelling / Simulation	D					D
Project Manage	D	D	D	D	D	D
Refurbish / Upgrade				D		
Repair and Maintain				D		
Software Development / Support	D	D	D		D	D
Systems Definition / Development	D	D	D		D	D
Systems Integration	D	D	D		D	D
Test and Evaluate	D	D	D		D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Director Intelligence and
Geospatial Development
(02) 6265 3489

Defence Materiel Organisation:
Director Military Geographic Information
Systems Program Office
(02) 6265 5635

Phase Scope

This phase seeks to enhance two high priority Special Operations capabilities, in order to maintain a capability edge over emerging threats to Australia's national interests:

- Land Mobility. It is intended that the land mobility capability provides three fleets of vehicles to support the tactical manoeuvre of Special Operations and to replace obsolete vehicles. This capability enhancement would focus on the key requirements of mobility, survivability, sustainability, knowledge and lethality.
- Networked Special Operations Capability (NSOC). The NSOC provides an integrated information environment and a range of electronic systems to support the spectrum of Special Operations. This capability enhancement focuses on the key requirements of information exchange, information management, situational awareness, decision support and battlespace sensing.

Background

The ADF Special Operations capability includes offensive operations (such as strike and direct action), special reconnaissance, special recovery, support operations and counter-terrorism.

Australian Industry Opportunities

Acquisition

This phase will seek to procure equipment systems that are highly interoperable with the remainder of the ADF as well as with coalition partners. Military-off-the-Shelf equipment will be sought for both the land mobility and NSOC elements of the project and integrated into the REDFIN capability. It is expected that there will be opportunities for Australian industry in this phase including component production, systems integration, trials and testing, training development, and training.

Through-life Support

It is expected that there will be opportunities for Australian industry to provide through-life support for Phase 1B, but due to the nature of some of the systems sought, through-life support will be provided by original equipment manufacturers. However, where possible it is envisaged that support services contracts would be competitively tendered. Possible opportunities for Australian industry to provide through-life support include scheduled maintenance, repairs, engineering and logistic analysis services, modifications, spare parts supply, technical documentation and training.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability			
	Facilities & Infrastructure	Land Vehicles	Communications Systems	Command & Control Systems
Assemble / Install	0	0	0	0
Design	0			
Education / Training		0	0	0
In-Service / Through-life Support	0	0	0	0
Logistics Support		0	0	0
Manufacture / Construct	0			
Modelling / Simulation			0	0
Project Manage	0			
Refurbish / Upgrade		0	0	0
Repair and Maintain	0	0	0	0
Software Development / Support			0	0
Systems Definition / Development			0	0
Systems Integration		0	0	0
Test and Evaluate		0	0	0

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 4 Low
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Deputy Director Special Operations
(02) 6265 5215

Defence Materiel Organisation:
Project Director JP 2097 Phase 1B
(03) 9282 3957

Phase Scope

This project proposes a Defence-wide identity management capability to provide a comprehensive and trusted source of highly assured identities and manage the verification and control of Defence Identities throughout all phases of the Identity lifecycle. This standards compliant capability is expected to establish a common identity service that can be leveraged throughout Defence's operational and corporate systems environment. The capability is expected to provide the basis for trust and security in the electronic environment through authentication, data integrity and non-repudiation to desktop. It provides personnel and systems with reliable, timely and authoritative confirmation of the electronic identity of other personnel and network-aware resources (including computing devices, sensors and weapon systems) operating across fixed and deployed components of Defence's information environment. This phase is intended to:

- define and deliver policy, governance and assurance processes and standards to create and manage Defence Identity information throughout its lifecycle;
- establish a governance structure to manage and control Defence Identity; and
- implement the necessary technical infrastructure to deliver, integrate and support the operation of the common service as part of the Defence Information Environment.

Background

This project is a major information security enablement investment, requiring a significant business process re-engineering effort to support electronic authentication through mechanisms such as smart card and Public Key Infrastructure-based authentication technologies. Its principle objective is to achieve identity assurance and data integrity, both critical foundations for information assurance, and providing the security services required to achieve agreed network centric warfare outcomes. It is a key contributor to electronic interoperability with coalition partners.

The proposed capability recognises that a trusted source of identity, available as a common service, is increasingly critical as Defence's operational dependence on data exchange and information sharing between networked personnel and systems continues to increase in all capability areas. The proposed capability enables Defence to adopt a coherent, strategic approach to Identity Management. Capability implementation focuses primarily on policy, governance and business processes and the cultural change required by Defence to achieve the capability outcomes.

Australian Industry Opportunities

Acquisition

Acquisition of a Commercial-off-the-Shelf (COTS) system, is to be conducted through a staged procurement process, involving an Open Request for Proposal (released November 2008) followed by a Select Request for Tender (scheduled for around November 2009).

Through this process, the Commonwealth intends to engage a Prime Systems Integrator (PSI) to deliver the required capability under two separate, but linked, contracts; an acquisition contract and a sustainment contract.

The acquisition contract is expected to implement the proposed Identity Management common service capability system, integrating the capability into the Defence Information Environment and supporting the necessary cultural and organisational change required to support the adoption of the capability.

Industry activities in support of this project would include:

- systems integration and ongoing support, incorporating systems engineering tasks (potentially including design and development for some components), project management, system acquisition and support, integration and testing of equipment and services;
- software development to support the integration of various subsystems into the overall solution;

- specialist consulting services, including organisational change management and security and identity management policy; and
- opportunities to locally source a range of COTS information technology hardware and software, including Smartcards, Smartcard readers, enrolment workstations, token printers, and server hardware and software.

The implementation of the capability is also expected to involve facility upgrades at a number of existing Defence Pass Offices. The upgrades are outside the scope of the acquisition contract proposed for the common service, and are to be managed regionally.

Through-life Support

A PSI is to be engaged under the sustainment contract to provide the necessary through-life support services for the support and maintenance of the identity management specific components of capability introduced by the project. Existing support contracts are to be used where appropriate.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Anti-Tampering Capabilities	Communications Security	Protection of Networks, Computers & Information	Secure Test Facilities & Test Ranges	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Assemble / Install					D	
Design	D		D		D	D
Education / Training					D	
In-Service / Through-life Support	D	D	D		D	
Logistics Support		D			D	
Manufacture / Construct						D
Project Manage					D	D
Refurbish / Upgrade	D	D			D	
Software Development / Support	D				D	
Systems Definition / Development	D		D		O	
Systems Integration	D		D		D	
Test and Evaluate	D		D	D	D	

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 1 Very High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2012 to 2014

Points of Contact

Chief Information Officer Group: (Sponsor)
Director
Electronic Business Integration
(02) 6128 7592

Chief Information Officer Group: (Acquisition & Sustainment)
Project Manager
Application Development Branch
(02) 6266 3993

JP 2110

Phase 1A Chemical, Biological, Radiological, Nuclear Defence
Phase 1B Chemical, Biological, Radiological, Nuclear Defence

Phase Scope

Phase 1A is intended to purchase Military- or Commercial-off-the-Shelf (MOTS or COTS) chemical and radiological point detectors that are either already in use within the ADF or and allied defence force.

Phase 1B has a broader scope including items requiring systems integration or additional evaluation. It will address the five elements of Chemical, Biological, Radiological and Nuclear Defence (CBRND):

- detection, identification and monitoring;
- warning and reporting;
- physical protection;
- hazard management; and
- medical support.

Background

Recent deployments and terrorist activities have heightened concerns about CBRND challenges for the ADF. In almost all deployments, the possibility of Toxic Industrial Hazards (TIH) arises.

This project aims to improve the ADF CBRND capability through the protection of personnel from the strategic, tactical and physiological impacts of exposure to TIH and CBRN weapons. This will be achieved by anticipating, training and equipping for such eventualities, so that operations can continue in CBRN environments.

Australian Industry Opportunities

Acquisition

The acquisition strategy is currently being developed for Phase 1A and is likely to provide limited opportunities for Australian industry. The likely acquisition strategy for Phase 1B is not clear at this stage but depending upon the maturity of systems within the market, the procurement may consider one, or a combination of, the following:

- MOTS and/or government-to-government arrangements such as Foreign Military Sales; or
- open tender.

Through-life Support

The through-life support concept for Phase 1A is likely to be similar to through-life support for current in-service equipment. Phase 1B will consider supportability options for fleet management, repair and maintenance, storage and distribution, provision of technical data and training as a minimum. It is anticipated that this project will make use of current in-service capacity and facilities, or original equipment manufacturer support, or a combination of both. Contracts for such support will generally be considered at the time of acquisition.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 1A and 1B	Capability	
Activity	Combat Clothing & Personal Equipment	Chemical, Biological, Radiological and Nuclear Defence
Education / Training	D	D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Refurbish / Upgrade		D
Repair and Maintain		D
Systems Integration	D	D
Test and Evaluate	D	D

Acquisition Category (ACAT)

Phase 1A

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Phase 1B

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 1A	FY 2009-10 to FY 2010-11
	Phase 1B	FY 2011-12 to FY 2012-13
Year-of-Decision	Phase 1A	FY 2009-10 to FY 2010-11
	Phase 1B	FY 2013-14 to FY 2015-16
Initial Operating Capability	Phase 1A	2011 to 2013
	Phase 1B	2015 to 2017

Points of Contact

Phase:
Phases 1A and 1B

Capability Staff:
Staff Officer Nuclear, Biological and Chemical Defence
(02) 6265 7850

Defence Materiel Organisation:
Land Systems Division Emerging Project Team
(03) 9282 6933

Phase Scope

This phase seeks to update the current non-lethal capabilities of the ADF across all three Services and make them more relevant to the threats faced now and in the future. This phase will replace current non-lethal weapons and provide some enhanced non-lethal capabilities.

Background

This project seeks to address current limitations within the ADF's Joint non-lethal capability. Capabilities that span a wide range of technology classifications are in development across the globe and this project will seek to take advantage of these developments as they mature.

Australian Industry Opportunities

Acquisition

The likely acquisition strategy is not clear at this stage but depending on the maturity of systems within the market, the procurement may consider one of the following or a combination:

- Military-off-the-Shelf and/or government-to-government arrangements such as Foreign Military Sales; or
- open tender.

Through-life Support

The through-life support concept for this project will consider supportability options for fleet management, repair and maintenance, storage and distribution, provision of technical data and training as a minimum. The support program will also take advantage of current in-service capacity and facilities, or original equipment manufacturer support or a combination of both. Contracts for such support will generally be considered at the same time as acquistion.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase inlcude:

Activity	Capability
	Non-lethal Weapons
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Refurbish / Upgrade	D
Repair and Maintain	D
Software Development / Support	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Staff Officer Small Arms
(02) 6265 1863

Defence Materiel Organisation:
Land Systems Division Emerging Project Team
(03) 9282 7165

Phase Scope

This phase is intended to expand the functionality of the Joint Combined Training Capability to assist in the training on electronic warfare systems and the responses to electronic warfare threats.

Background

The project seeks to provide the ADF with a capability to simulate electronic warfare threats in a training environment thus enhancing the realistic training and evaluation of ADF and allied platforms.

Australian Industry Opportunities

Acquisition

It is envisaged that the core of this capability will be acquired as off-the-shelf solutions from allied sources using government-to-government acquisition such as Foreign Military Sales. Opportunities for local industry involvement may exist in integration, mobile installation and servicing.

Through-life Support

The through-life support of the materiel systems delivered by this project is expected to be contracted to Australian industry.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Electronic Warfare
Assemble / Install	D
Education / Training	D
In-Service / Through-life Support	D
Repair and Maintain	O
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the lower end of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Director Network Infrastructure Development
(02) 6265 2079

Defence Materiel Organisation:
Director Airborne Self Protection Systems Program Office
(02) 6265 1615

Phase Scope

This project seeks to replace the Aerospace Test and Evaluation (T&E) and Research and Experimentation (R&E) equipment at the Woomera Test Facility in order to effectively support Defence T&E and R&E activities in a reliable, controlled, secure and safe environment.

Background

The current systems used at the Woomera Test Facility are near the end of their useful life and will not meet the requirements to support future Defence aerospace experimental, developmental and operational T&E flight trials of air platforms and weapons. Replacement of the extant systems will enable Defence to support all types of aerospace T&E and R&E beyond 2015 including the extension of manned and unmanned aircraft performance envelopes, weapons assessment (including the ability to release stand-off/beyond visual range live weapons), T&E and R&E for intelligence and electronic warfare systems, and R&E into the effects of weapon systems.

Australian Industry Opportunities

Acquisition

The preferred method of acquisition is to seek Commercial- or Military-off-the-Shelf (COTS or MOTS) systems to the maximum extent possible through open tender. Industry opportunities will be available in the supply, installation and integration of the new capability. It is likely that any new equipment sourced from overseas manufacturers will require Australian in-country partners to manage the installation, integration and set-to-work at site level. Government-to-government or Foreign Military Sales may be an option for the acquisition of some systems.

Through-life Support

Through-life support to the maximum extent possible using extant Defence corporate logistics tools and processes is expected for this capability. This will include seeking that engineering, maintenance and logistics support contracts be signed at the same time as acquisition.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Systems Integration (High End, System of Systems)
Assemble / Install	D
Design	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	D
Modelling / Simulation	D
Project Manage	D
Repair and Maintain	D
Research and Development	D
Software Development / Support	D
Systems Definition / Development	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Director Network Infrastructure Development
(02) 6265 2079

Defence Materiel Organisation:
Deputy Director JP 3024
(08) 8393 2206

JP 3025

Phase 1 Deployable Incident Response Regiment (IRR) Capability

Phase Scope

This phase aims to improve the specialist Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) defence capability within the ADF. This will be achieved by expanding current capabilities of the Incident Response Regiment (IRR) to provide a rapidly deployable, specialist CBRNE prevention and response capability. This expanded capability will include specialist CBRNE reconnaissance and search support to Special Forces operations.

Background

Global events and recent deployments have heightened awareness of the potential for large-scale CBRNE incidents. The IRR was raised to provide response to domestic CBRNE incidents and rescue within the broader ADF. Project JP 3025 is the next step in developing a mature CBRNE defensive capability for the ADF.

Capabilities to be provided by related projects JP 2110, LAND 125 and JP 3025 will provide an integrated CBRNE defensive capability for the ADF.

Australian Industry Opportunities

Acquisition

The likely acquisition strategy is not clear at this stage but depending on the maturity of systems within the market, the procurement may consider one of, or a combination of the following:

- Military-off-the-Shelf and/or government-to-government arrangements such as Foreign Military Sales; or
- open tender.

Through-life Support

The through-life support concept will consider supportability options for fleet management, repair and maintenance, storage and distribution, provision of technical data and training as a minimum. Use may be made of current in-service capacity and facilities, or original equipment manufacturer support or a combination of both. Contracts for such support will be considered at the time of acquisition.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Combat Clothing & Personal Equipment	Chemical, Biological, Radiological and Nuclear Defence
Education / Training	D	D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Refurbish / Upgrade		D
Repair and Maintain		D
Systems Integration	D	D
Test and Evaluate	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:
Staff Officer Nuclear, Biological and Chemical Defence (NBCD)
(02) 6265 7850

Defence Materiel Organisation:
Land Systems Division
Emerging Project Team
(03) 9282 6933

JP 3027

Phase 1 JDAM Enhancements

Phase Scope

This phase intends to enhance the performance of the Joint Direct Attack Munitions (JDAM) family of weapons currently in-service with the Air Force. Possible enhancements include a range extension wing kit, improved guidance systems and improvements to the warhead.

Background

The JDAM is the principle direct attack weapon of the F/A-18 and relies on Global Positioning System (GPS) guidance to provide excellent accuracy. A Capability Technology Demonstrator (CTD) program conducted by the Defence Science and Technology Organisation (DSTO), Hawker De Havilland and Boeing IDS successfully demonstrated a significant range extension for the 500lb JDAM in flight trials at Woomera in 2008. The CTD employs a JDAM extended range (JDAM-ER) wing kit that allows the JDAM to glide to its designated target. This phase is intending to conduct activities to adapt this technology for production, conduct final certification of the JDAM-ER on the F/A-18A/B, and acquire a number of wing kits.

The improved guidance system may be based on a laser guidance system (Laser JDAM), that will provide the ability for strike aircraft to effectively attack moving targets, and targets where the coordinates are not adequately refined, by using its own or a third party's laser designator; whilst retaining the original JDAM GPS guidance modes.

The improvements to the warhead could include a low collateral damage warhead that will provide strike aircraft with the ability to engage targets in urban or other collaterally sensitive areas with the minimum possible risk to surrounding structures and/or personnel.

Introduction of these enhancements will increase the range of targets available to strike aircraft resulting in increased flexibility and effectiveness with a reduced logistics footprint.

Australian Industry Opportunities

Acquisition

Australian industry will be involved in the design, development and manufacture of the JDAM-ER wing kit. The other possible enhancements have been developed overseas and thus procurement is likely to be from overseas suppliers.

Through-life Support

There may be opportunities for Australian industry to provide logistics support.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

ACTIVITY	CAPABILITY
	Guided Weapons
Assemble / Install	D
Manufacture / Construct	D
Modelling / Simulation	D
Project Manage	D
Research and Development	O
Systems Integration	D
Test and Evaluate	O

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the upper end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2010-11 to FY 2011-12
Initial Operating Capability	2012 to 2014

Points of Contact

Capability Staff:
Deputy Director Combat Enablers
Aerospace Development Branch
(02) 6265 5442

Defence Materiel Organisation:
Director Emerging Projects
Guided Weapons Branch
(02) 6265 1464

Phase Scope

This phase will deliver a variety of simulation systems and supporting infrastructure to the Australian Defence Organisation (ADO).

Background

Simulation provides a significant capability to Defence and ensures the ADF is well equipped, well trained and ultimately well prepared. It represents real situations without the cost of using real equipment or the risk (to personnel and equipment) associated with real military activities.

The *Defence Simulation Roadmap 2006* details the ADO plan for the future development of simulation. It plans for an increase in the use of Navy, Army, Air Force and Joint simulation to enhance capability, reduce risk, and save resources. This project is the acquisition program that will provide the simulation systems required to deliver these benefits.

Australian Industry Opportunities

Acquisition

As an acquisition program, this project will acquire simulation systems and supporting infrastructure from multiple sources, with industry consultation commencing late in 2009. Australian industry will be able to compete for the provision of both the simulation systems and the supporting infrastructure.

Through-life Support

Australian industry will have the opportunity to be involved in the ongoing operation and maintenance of the various simulators acquired.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

ACTIVITY	CAPABILITY																		
	Acoustic Technologies & Systems	AEW&C Systems	Armoured Vehicles	Communications Security	Electronic Warfare	Guided Weapons	Infantry Weapons & Remote Weapons Stations	Protection of Networks, Computers & Information	Rotary & Fixed Wing Aircraft	Secure Test Facilities & Test Ranges	Selected Ballistic Munitions & Explosives	Submarines	Surface Naval Vessels	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Targeting & Precision Navigation	Simulation Systems for Various Platforms
Assemble / Install																		D
Design																		D
Education / Training																		O
In-Service / Through-life Support																		D
Logistics Support																		D
Manufacture / Construct																		D
Modelling / Simulation	D	O	D	D	O	D	D	D	D	D	O	D	D	D	D	D	D	D
Project Manage																		O
Refurbish / Upgrade																		D
Repair and Maintain																		D
Research and Development																		D
Software Development / Support																		D

Acquisition Strategy (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m-$1500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	Various from 2017 onwards

Points of Contact

Capability Staff:
JP 3028 Desk Officer
(02) 6265 3451

Defence Materiel Organisation:
Director Aerospace Simulators and
Special Purpose Aircraft
(02) 6127 2775

Project Website:
www.defence.gov.au/capability/ADSO

JP 5408

Phase 3 ADF Navigation Warfare (NAVWAR) Capability

Phase Scope

This project is intended to enhance Global Positioning Systems (GPS) on legacy ADF platforms by providing either protection or redundancy capabilities in response to GPS denial activities. The provision of such systems is expected to enable selected ADF capabilities to conduct operations in a navigation warfare environment. Phase 3 continues the implementation of those legacy platforms that were not included in Phase 2B.

Background

JP 5408 aims to provide GPS NAVWAR protection to key ADF platforms.

The phases include:

- Phase 1 (approved) is ongoing and included a project definition study that defined the scope of enhancements and replacements for the current GPS systems. The project definition study was delivered in 2002; and
- Phase 2B (approved) and Phase 3, are intended to incrementally implement the enhancements and replacements to the ADF's GPS equipment as recommended by the results of the Phase 1 study.

Australian Industry Opportunities

Acquisition

Industry opportunities for Phase 3 may include the development and integration of GPS enhancement modifications into nominated ADF platforms and development of relevant support systems.

Through-life Support

Defence's intent is for all phases of this project to be based around developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability			
	Rotary & Fixed Wing Aircraft	Submarines	Surface Naval Vessels	Targeting & Precision Navigation
Education / Training				D
Repair and Maintain				D
Systems Integration	D	D	D	D
Test and Evaluate				D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the upper end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2010-11 to FY 2011-12
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Deputy Director Combat Enablers
Aerospace Development Branch
(02) 6265 5442

Defence Materiel Organisation:
Project Manager JP 5408
Navigation Warfare Systems Program Office
(02) 6265 1192

LAND 17

Phase 1 Artillery Replacement

Phase Scope

This phase is intended to enhance the Australian Army's indirect fire support system through the replacement of the 105mm Hamel and 155mm M198 Howitzer fleets when they reach the end of their service life with a mix of towed and self-propelled 155mm guns.

Background

The Australian Army's current offensive support system is based on procedures that date back to the 1960s, and ammunition and Howitzer technologies developed in the 1970s which were introduced into Australian service in the 1980s. The changing nature of operations in land and littoral environments require the Army's offensive support system to have the ability to apply precise lethal and non-lethal effects from mortars, howitzers, ships and aircraft over large areas of the battlefield. The modernised offensive support system will be characterised by responsiveness, high tactical mobility, greater autonomy and survivability. It is intended that the modernised system will complement current and future ADF surveillance, target acquisition, digitisation and land logistic capabilities.

Australian Industry Opportunities

Acquisition

The project intends to utilise a conventional acquisition model. It is anticipated that the methods of procurement will be through open competition and the United States (US) Foreign Military Sales program.

Through-life Support

It is anticipated that through-life support will involve a combination of Commonwealth, contractor, and US Government (Foreign Military Sales) mechanisms. A performance based logistics approach will be investigated. In-service support concepts for each capability element will examine the potential benefits of a holistic approach to the delivery of platform support.

The overall objective is to have the full scope of support services in place by the time the delivery of the mission system has been completed.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability									
	Anti-Tampering Capabilities	Armoured Vehicles	Communications Security	Composite & Exotic Materials	Infantry Weapons & Remote Weapons Stations	Support of Mission & Safety Critical Software	System Life Cycle Management	Systems Integration (High End, System of Systems)	Targeting & Precision Navigation	Facilities & Infrastructure
Assemble / Install					D					
Design										D
Education / Training		D			D	D				
In-Service / Through-life Support		D	D	D	D	D	D	D		D
Logistics Support		D	D	D	D	D	D			
Manufacture / Construct										D
Modelling / Simulation									O	
Project Manage		D			D					D
Refurbish / Upgrade		O			D		D			D
Repair and Maintain		D	D	D	D	O	D			D
Research and Development								O	O	
Software Development / Support	O	D	O			D				
Systems Definition / Development								O	D	
Systems Integration		D			D					
Test and Evaluate		D	D		D	D	D	D	D	

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High ›$1500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2009-10 to FY 2010-11
Initial Operating Capability	2012 to 2014

Points of Contact

Capability Staff:
Staff Officer Fire Support
(02) 6265 1734

Defence Materiel Organisation:
Project Director LAND 17
(03) 9282 5832

Project Website:
www.defence.gov.au/dmo/lsd/land17/land17.cfm

Phase Scope

This phase aims to augment the current ADF Night Fighting Equipment (NFE), such as night vision goggles, night weapon sights and night aiming devices as they reach the end of their service life.

Background

LAND 53 is a multi-phased project intended to provide a suite of surveillance systems. These include perimeter surveillance equipment, night fighting equipment, ground surveillance radar and thermal surveillance systems which provide land forces with detection and recognition capabilities under various battlefield conditions.

There are presently no associated projects with Phase 1BR, but there may be interoperability linkages with future projects involving helmets and weapon systems used by soldiers.

Australian Industry Opportunities

Acquisition

The proposed acquisition approach is to seek Military-off-the-Shelf (MOTS) solutions through an open tender process. Depending on further analysis, the acquisition approach may be restricted should it be found that there are limited solutions to satisfy the scope of the project.

Phase 1BR plans to consult with industry through information sessions and market surveys. Information gathered will assist in identifying possible NFE improvements to augment the current NFE used in the ADF. It is expected that these sessions will occur between first and second pass.

Through-life Support

The sustainment approach will permit the ADF to maintain NFE at operator, light grade and medium grade repair levels. It is proposed that an in-service support contract for medium and heavy grade repair levels will be established at the time of acquisition. It is likely that the NFE sub-systems will be sourced from overseas but it is preferable that through-life support is carried out in Australia.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Surveillance
Assemble / Install	O
Design	O
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	O
Modelling / Simulation	O
Project Manage	D
Refurbish / Upgrade	D
Repair and Maintain	D
Research and Development	O
Software Development / Support	O
Systems Definition / Development	O
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Staff Officer Small Arms
(02) 6265 4349

Defence Materiel Organisation:
Project Director Surveillance
(03) 9282 6057

Phase Scope

Phase 3.4 is intended to provide further development of the Battlefield Command Support System (BCSS) and acquire an initial Battle Management System (BMS) capability to equip up to a Brigade sized force. This force is augmented by support to both elements of Special Operations and RAAF Airfield Defence Guards.

Phase 4 aims to continue the roll-out of, and provide enhancement to, the Australian Army's BMS procured under Phase 3.4. Phase 4 is intended to deliver the BMS to two Brigades, further elements of Special Forces and RAAF, whilst providing updates to the pre-existing fleet to maintain commonality. Phase 4 is expected to fund major software releases to enhance BCSS with a focus on enhancement and interoperability up to the Joint level.

The delivery and final definition of later phases of this project is highly dependant on the direction and decision of the previous phases and supporting projects. Later phases of this program are likely to align with the appropriate phases of JP 2072.

Background

LAND 75 is a multi-phased proposal to provide the Australian Army with a BMS and BCSS. These systems allow the transfer, processing and management of tactical level information necessary for the conduct and control of land operations.

Others phases include:

- Phases 1 and 2 (complete) were studies conducted throughout the 1980s under the auspices of the (then) Australian Army Tactical Command and Control System (AUSTCCS) project;
- Phase 3.1 (complete) delivered the first iteration of BCSS under a contract with CelciusTech Australia;
- Phase 3.2 (largely complete) moved BCSS from Unix to NT technology and delivered the NT-based BCSS to the Army's 1st Brigade;
- Phase 3.3 (largely complete) simplified the user interface of BCSS through a contract with Saab Systems Australia (formerly CelciusTech Australia). To simplify the Phase 3.3 deliverables, responsibility for development of a Special Forces command support capability was transferred to JP 2030 – Joint Command Support Environment; and
- Phase 3.3B (in progress) continues to enhance the functionality, stability and interoperability of BCSS and roll-out the system within the Australian Regular Army.

Phase 3.4 has received first pass approval from Government.

Australian Industry Opportunities

Acquisition

It is anticipated that opportunities exist for Australian industry to provide BMS ancillary hardware and to integrate and install the equipment into Defence's A and B vehicle fleets. Opportunities for BMS software development are limited as the ADF is seeking Military- or Commercial-off-the-Shelf (MOTS or COTS) solutions. Other projects associated with the BMS component of Phase 3.4 include LAND 125 Phase 3A and JP 2072 Phase 1 which were the subject of a joint RFT issued in May 2007. Included as part of the tender evaluation is a comprehensive Offer Definition Activity with the primary aim of reducing risk.

BCSS development continues to provide opportunity for application development and implementation.

Through-life Support

Through-life support is a key aspect of the BMS acquisition. There is a preference for systems to be supported and maintained in Australia. BCSS development continues to provide opportunity to Australian industry for its support and maintenance.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 3.4	Capability				
Activity	Armoured Vehicles	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Design		D			
Education / Training		D			
In-Service / Through-life Support		D			
Logistics Support		D			
Project Manage		D			
Refurbish / Upgrade	D				
Repair and Maintain		D			
Software Development / Support				D	
Systems Integration			D		D
Test and Evaluate			D		

Phase 4	Capability				
Activity	Armoured Vehicles	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Design		D			
Education / Training		D			
In-Service / Through-life Support		D			
Logistics Support		D			
Project Manage		D			
Refurbish / Upgrade	D				
Repair and Maintain		D			
Software Development / Support				D	
Systems Integration			D		D
Test and Evaluate			D		

Acquisition Category (ACAT)

Phase 3.4

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 4

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the upper end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	Phase 3.4	Complete
	Phase 4	FY 2011-12 to FY 2012-13
Year-of-Decision	Phase 3.4	FY 2009-10 to FY 2010-11
	Phase 4	FY 2013-14 to FY 2015-16
Initial Operating Capability	Phase 3.4	2010 to 2012
	Phase 4	2016 to 2018

Points of Contact

Phase:
Phases 3.4 and 4

Capability Staff:
Staff Officer LAND 75
(02) 6265 7809

Defence Materiel Organisation:
Project Manager LAND 75
(02) 6266 7432

Project Website:
www.defence.gov.au/dmo/esd/land75/index.cfm

LAND 112

Phase 4 ASLAV Enhancement

Phase Scope

This phase is a survivability enhancement and mid-life upgrade to the fleet of Australian Light Armoured Vehicles (ASLAV). This phase may include some or all of the following:

- enhancing ASLAV survivability against current and future threats. Possible enhancements include:
  - mine protection,
  - ballistic protection,
  - battlefield management system integration,
  - signature management, or
  - defensive aid suite;
- offsetting weight increases to the vehicle caused by the above survivability enhancements in order to maintain current amphibious and land mobility;
- upgrading or replacing the power pack; and / or
- enhancing the Crew Procedural Trainer.

Background

LAND 112 is a multi-phased proposal to provide a light armoured vehicle for the Australian Army. Other phases include:

- Phase 1 (complete) acquired 15 wheeled, light armoured vehicles from the United States Marine Corps for a concept evaluation of wheeled reconnaissance in the north of Australia;
- Phase 2 (complete) acquired 113 wheeled, light armoured vehicles. The vehicles were manufactured by General Motors Defence, of Canada, with final fit out in Australia completed by BAE Systems Australia; and
- Phase 3 (in progress) has acquired 144 additional ASLAV vehicles to equip the 2nd/14th Light Horse Regiment, to fully equip the 2nd Cavalry Regiment, and has retrofitted earlier Phase 2 ASLAV to the improved Phase 3 standard. The final ancillary items, such as the Multi-spectral Surveillance Suite, are currently being developed.

Australian Industry Opportunities

Acquisition

For the acquisition stage of this proposal, the industry requirements may include:

- installation of enhanced mission role kits;
- installation of the survivability kits and spall liners (for ASLAV interior);
- systems enhancements for electronic, communication and electro-mechanical components;
- manufacture of components and assemblies, storage and shipping containers, special tools and test equipment, consumables and other repair parts; and
- training and provision of technical documentation.

Opportunities for Australian industry may also exist in the integration of electronic and mechanical systems to armoured vehicles including mine protection, battlefield management, signature management and ballistic protection.

Through-life Support

It is anticipated that one or a number of Australian contractors may undertake through-life support activities. A Request for Tender for through-life support is being conducted and evaluated through 2009.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Armoured Vehicles	Signature Management
Assemble / Install	D	D
Design	O	O
Education / Training	O	D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Manufacture / Construct	D	D
Modelling / Simulation		O
Project Manage	D	O
Refurbish / Upgrade	D	D
Repair and Maintain	D	D
Systems Integration	O	D
Test and Evaluate	O	O

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Staff Officer Combat (Heavy)
(02) 6265 4360

Defence Materiel Organisation:
Project Manager ASLAV Phase 4
(03) 9282 3926

LAND 121

Phase 4 Overlander
Phase 5A Overlander

Phase Scope

Phase 4 aims to provide light protected vehicles and trailers for command, liaison, utility and reconnaissance roles. This phase is expected to replace around one third of the current ADF Land Rover fleet.

Phase 5A is intended to provide unprotected light vehicles, modules and trailers to enable tactical training. This phase is expected to replace around one third of the current ADF Land Rover fleet.

Background

Overlander is a multi-phased proposal to provide the ADF with field vehicles and trailers to meet its mobility requirements. The ADF fleet of field vehicles and trailers is the backbone of its war fighting force and sustainment structure. These vehicles are used to transport personnel, combat supplies, materiel, and replacement combat systems and when necessary, evacuate casualties. They also serve as platforms and prime movers for command, control, communications, computer and intelligence (C4I) systems and numerous weapon systems.

Field vehicles and trailers are an essential element of combat, combat support and combat service support capabilities of the ADF. Vehicle characteristics must be tailored to suit the units and equipment they support as well as the conditions under which they are required to operate.

Around one third of the fleet of vehicles are to be armoured to protect personnel from the effects of mines, bullets and improvised explosive devices.

The current phases include:

- Phase 2A (in progress) is enhancing current vehicle capability for heavy recovery and bulk liquid transport. It also addresses excessive cabin noise and personnel/cargo restraint and segregation systems and rollover protection;
- Phase 3 (in progress) replaces the current fleet of ADF field vehicles and trailers with future field vehicles and trailers. This phase includes the acquisition of;
  - around 1200 unprotected Mercedes G-Wagon light vehicles, with modules and trailers, to replace around one third of the current Land Rovers to enable tactical training;
  - around 2300 medium and heavy trucks, at least 1300 of which will be protected to enable operational deployment, in total replacing around two thirds of the medium and heavy vehicle fleet; and
  - around 290 Bushmaster Protected Mobility Vehicles to provide light troop transport functions currently provided by some Land Rovers;
- Phase 4 provides the core of the ADF operationally employable light protected vehicle fleet through the acquisition of around 1300 vehicles and trailers; and
- Phase 5A completes the replacement of light vehicles through the acquisition of unprotected vehicles to enable tactical training.

Australian Industry Opportunities

Acquisition

In order to pursue the capability sought by Phase 4, Australia has joined the technology development stage of the United States Joint Light Tactical Vehicle (JLTV) program. A decision on whether Australia will acquire the JLTV is to be made once the vehicles have passed key development and testing milestones, likely to be in 2010 - 2011. To support this decision, the project will also engage with industry to explore other options to provide protected light mobility vehicles.

The capability sought by Phase 5A may be acquired through the acquisition of additional quantities of unprotected capability acquired under Phase 3, or through market solicitation for a fleet of Commercial-off-the-Shelf vehicles modified to meet tactical training requirements.

Through-life Support

The industry requirements are likely to be based around developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities to the maximum extent possible. The contract period for through-life support is expected to be 15 years with an option for a further 15 years.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 4 and 5A	Capability
Activity	Field Vehicles
Assemble / Install	D
Design	D
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	O
Modelling / Simulation	O
Project Manage	D
Refurbish / Upgrade	D
Repair and Maintain	D
Research and Development	O
Software Development / Support	O
Systems Definition / Development	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

LAND 121 Program

ACAT Attribute	Complexity Level Assessment
Acquisition Cost – Phase 4 Acquisition Cost – Phase 5A	Level 1 Very High ›$1500m (Towards the lower end of the band) Level 3 Moderate $100m – $500m (Towards the upper end of the band)
Project Management Complexity	Level 1 Very High
Schedule	Level 2 High
Technical Difficulty	Level 1 Very High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Program is ACAT I.

Planned Schedule Highlights

First Pass Approval	Phase 4	Complete
	Phase 5A	FY 2010-11 to FY 2011-12
Year-of-Decision	Phase 4	FY 2012-13 to FY 2014-15
	Phase 5A	FY 2010-11 to FY 2011-12
Initial Operating Capability	Phase 4	2016 to 2018
	Phase 5A	2014 to 2016

Points of Contact

Phase:
Phases 4 and 5A

Capability Staff:
Deputy Director Mobility
(02) 6265 7837

Defence Materiel Organisation:
Program Manager Overlander
(03) 9282 7658

Project Website:
www.defence.gov.au/dmo/lsd/land121/land121.cfm

Phase 3A Soldier Enhancement Version 2 – C4I Component
Phase 3B Soldier Enhancement Version 2 – Survivability
Phase 3C Soldier Enhancement Version 2 – Lethality
Phase 4 Soldier Enhancement Version 3

LAND 125

Phase Scope

This project intends to develop and acquire an enhanced close combat capability for the Land Deployable Force.

Background

In the late 1980s, NATO and ABCA (America, Britain, Canada, Australia) recognised that digitisation, computers and electro-mechanical devices could be miniaturised to allow the infantry to take advantage of the existing or planned enhancements for naval and air forces. Project WUNDURRA was developed in 1994 from the NATO/ABCA requirements/functional subsystems and became Australia's soldier modernisation program. WUNDURRA undertook requirements definition and detailed studies to acquire an integrated soldier combat system design. Due to development difficulties common across like programs, it was determined in 2004, that it was unlikely that a suitable integrated solution would be available by 2007. Project WUNDURRA then evolved into LAND 125, which stabilised in 2005 as a multi-phase program (Phases 2B, 3 and 4) that would provide incremental enhancements through a spiral development approach until suitable integrated soldier system solutions were available.

The program status is as follows:

- Phase 2B achieved second pass approval in February 2005. Initial deliveries to the regular infantry have been completed, with the Enhanced Land Force increment now being acquired. Components acquired include:
  - individual equipment including helmet, load carriage and knee/elbow pads; and
  - team equipment including thermal weapon sights and personal voice radios;
- Phase 3 achieved first pass approval in August 2005. Phase 3 builds on Phase 2B, while being a step in the journey to an integrated system. The provisioning has been expanded to equip combined arms and service teams. The three subsystems will now be delivered as separate entities through:
  - Phase 3A - C4I, where it is intended that battalion to fire team commanders will receive a new voice network and add a data network as part of the combined LAND 75/125 Battle Management System acquisition. The enhancements will improve situation awareness, decision tempo and precision engagement. Phase 3A has completed an offer definition activity with Elbit Systems Ltd;
  - Phase 3B - Survivability, where it is intended that soldier survivability will be modernised through improved body (modular combat body armour system) and eye protection (ballistic and laser ocular protection system). The enhancements will provide personal protection from blast, projectiles and laser threats; and
  - Phase 3C - Lethality, where it is intended that the F88 rifle will be enhanced to support Army Capability Requirement Infantry 2012 with commander, marksman, grenadier and standard variants. The previous LAND 91 project for F88 development has now been incorporated into LAND 125. The enhancements will improve target acquisition, probability of hit and cooperative engagement. Phase 3C has engaged Thales Australia Pty Ltd for the design, development and production of the enhanced F88; and
- Phase 4 is intended to provide an effective integrated soldier system to deployed forces, within a joint inter-agency task force. A Phase 4 soldier will have a system that maximises commonality, is optimised for day/night all-weather disaggregated combat, humanitarian and stability operations against peer and irregular threats in any terrain. The soldier should be well-protected, carry robust weapons, have good situational awareness, and carry reliable communication systems. An effective soldier system will be easy to use, have an open architecture and be as lightweight as practicable to allow rapid adaptation to the tactical situation.

Australian Industry Opportunities

Acquisition

The Phase 3 acquisition strategy has been to source individual subsystems through functional systems integrators that provide both equipment and support services. Phase 3 elements have now progressed through source selection and future opportunities for Australian industry in this phase are expected to be limited.

As a strategy to improve overall systems integration and consolidate commercial and project management functions, Phase 4 may seek a Prime Systems Integrator (PSI) to oversee the design, development and support of the complete soldier system. The Phase 4 system will seek to utilise existing systems where possible and be cost-effective, as part of a robust, viable and open system architecture.

Phase 4 is expected to present significant opportunities for Australian and overseas suppliers. These companies must be capable of working as, or with, a potential PSI to improve existing subsystems. They will assist in introducing new soldier system capabilities or help develop technical solutions to support system-wide integration. Further Australian industry opportunities will be guided by information gained through the employment of earlier enhancements and research and development activities.

Through-life Support

Australian industry opportunities are expected to be based around developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 3A, 3B and 3C	**Capability**				
Activity	Combat Clothing & Personal Equipment	Composite & Exotic Materials	Infantry Weapons & Remote Weapons Stations	Targeting & Precision Navigation	Command, Control, Communications, Computers & Intelligence Systems
Assemble / Install	D		D	O	O
Design	O				
Education / Training	D		D	O	D
In-Service / Through-life Support	D		D	O	D
Logistics Support	D	D	D	O	O
Manufacture / Construct	D	D	D	O	O
Project Manage	D		D		O
Refurbish / Upgrade	D		D	O	O
Repair and Maintain	D		D	D	D
Software Development / Support				D	D
Systems Definition / Development	O		D		
Systems Integration	O		D	O	O
Test and Evaluate	D		D	O	O

Phase 4	Capability							
Activity	Combat Clothing & Personal Equipment	Composite & Exotic Materials	Infantry Weapons & Remote Weapons Stations	Signature Management	Systems Integration (High End, System of Systems)	Targeting & Precision Navigation	Command, Control, Communications, Computers and Intelligence Systems	Power Management
Assemble / Install	D		D		O		O	
Design	O			D	O	O		D
Education / Training	D		D		O	O	D	D
In-Service / Through-life Support	D				O	O	D	D
Logistics Support	D			D	D	O	O	
Manufacture / Construct	D	D		D	D	O	O	D
Project Manage	D		D		D		O	
Refurbish / Upgrade	D		D			O	O	D
Repair and Maintain	D				O	D	D	D
Research and Development		D		O	O			
Software Development / Support						D	D	
Systems Definition / Development	O		D		O			
Systems Integration	O		D		O	O	O	D
Test and Evaluate	D		D	D	D	O	O	D

Acquisition Category (ACAT)

Phase 3A

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 1 Very High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 3B

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 3C

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m–$1500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 4

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m–$1500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	Phase 3A	Complete
	Phase 3B	Complete
	Phase 3C	Complete
	Phase 4	FY 2010-11 to FY 2011-12
Year-of-Decision	Phase 3A	FY 2009-10 to FY 2010-11
	Phase 3B	FY 2010-11 to FY 2011-12
	Phase 3C	FY 2009-10 to FY 2010-11
	Phase 4	FY 2012-13 to FY 2014-15
Initial Operating Capability	Phase 3A	2010 to 2012
	Phase 3B	2011 to 2013
	Phase 3C	2011 to 2013
	Phase 4	2014 to 2016

Points of Contact

Phases:
Phases 3A, 3B, 3C and 4

Capability Staff:
Staff Officer Soldier Combat Systems
(02) 6265 2810

Defence Materiel Organisation:
Project Director LAND 125
(03) 9282 6486

Project Website:
www.defence.gov.au/dmo/lsd/land125

Phase Scope

This phase is intended to replace the current Army mortar capability, including selected Army Reserve Artillery units, with a networked mortar capability.

Background

This project aims to replace and enhance the current Infantry Battalion mortar capability with a modern, robust and sustainable organic mortar capability, networked within the joint fires environment. This includes integration of the mortar capability into the joint fires network through acquisition of a networked ballistic calculator, acquisition of advanced munitions and future proofing for new munitions. The project also aims to meet the indirect fire support capability needs of the Army Reserve by equipping selected Reserve Artillery units with a mortar capability.

Australian Industry Opportunities

Acquisition

The likely acquisition strategy is not clear at this stage but depending on the maturity of systems within the market, the procurement may consider one of the following or a combination:

- Military-off-the-Shelf and/or government-to-government arrangements such as Foreign Military Sales; or
- open tender.

Through-life Support

The through-life support concept for this project will consider supportability options for fleet management, repair and maintenance, storage and distribution, provision of technical data and training as a minimum. This may be achieved through the use of current in-service capacity and facilities, original equipment manufacturer support or a combination of both. Contracts for such support will generally be considered at the same time as acquistion.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability			
	Infantry Weapons & Remote Weapons Stations	Selected Ballistic Munitions & Explosives	Support of Mission & Safety Critical Software	Command & Control
Manufacture / Construct		O		
Education / Training	D	D	D	D
In-Service / Through-life Support	D	D	D	D
Logistics Support	D	D	D	D
Refurbish / Upgrade	D	D	D	D
Repair and Maintain	D	D	D	D
Software Development / Support			D	D
Systems Integration	D	D	D	D
Test and Evaluate	D	D	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low ‹$100m (Towards the upper end of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Staff Officer Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR)
(02) 6265 6519

Defence Materiel Organisation:
Land Systems Division Emerging Projects Team
(03) 9282 4307

Phase Scope

This is a multi-phased project that is intended to acquire and introduce a Combat Identification (CID) capability that enhances operational effectiveness of the ADF Land Force elements and minimises the risk of fratricide.

Phase 2 is expected to leverage on the capability delivered under Phase 1 by equipping the remainder of the Land Force with coalition compatible systems.

Background

CID is the process of determining an accurate understanding of objects and persons detected in the battlespace to allow the timely application of tactical options and weapons effects. The key role of the CID system is to positively identify the location and status of friendly forces to allow the precise and discriminative application of firepower in the battlespace and, therefore, minimise fratricide. The situational awareness expected to be provided by this capability is expected to form a significant building block of the Network Centric Warfare concept.

Phase 1 (approved) is conducting studies into CID approaches and technologies and is currently acquiring an interim CID capability for a Deployable Battle Group in the 1st Brigade. This capability is expected to see the Deployable Battle Group equipped with the recognised CID baseline for coalition operations.

Analysis of the technology maturity indicated that an electronic assured solution was not likely to be possible in the Phase 2 timeframe. At first pass Phase 2 was directed to acquire an extension of the capability delivered for Phase 1-General CID (GCID), and commence the acquisition process to acquire a Digital Terminal Control System (DTCS) to improve terminal attack control.

Since first pass approval the development of the various CID technologies has accelerated at different rates and in such a manner as to render some of the legacy GCID capabilities delivered in Phase 1 obsolete in a number of operational scenarios. To overcome this issue, the project direction for Phase 2 has moved toward CID capability for mounted and dismounted operations using passive and active cooperative technologies that operate in the near as well as mid- and far-portion of the electro-magnetic spectrum.

The DTCS solution for this phase is expected to be the same as that to be delivered under LAND 17 Phase 1.

Australian Industry Opportunities

Acquisition

It is anticipated that the GCID component is to be acquired through open tender. The DTCS component is intended to be acquired through a restricted tender, limited to the short listed companies identified through the LAND 17 'Battle Management System Fires - Forward Observer Invitation to Register' (ITR).

Through-life Support

Yet to be determined.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability			
	Armoured Vehicles	Combat Clothing & Personal Equipment	Signature Management	Targeting & Precision Navigation
Assemble / Install		D	O	D
Design		D		
Education / Training				D
In-Service / Through-life Support		D	O	D
Logistics Support		D		D
Manufacture / Construct		D	O	
Repair and Maintain				D
Research and Development		D		
Software Development / Support				D
Systems Integration	O	D		D
Test and Evaluate			O	

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2010-11 to FY 2011-12
Initial Operating Capability	2011 to 2013

Points of Contact

Capability Staff:
Staff Officer Air
(02) 6265 3875

Defence Materiel Organisation:
Project Manager LAND 146-2
(03) 9622 2801

Phase Scope

This phase is intending to provide land forces with the ability to cross a range of wet and dry gaps in support of combat operations. It will provide the capability to tackle the complex physical terrain features such as rivers, ravines and other natural and man-made gaps to achieve the agility required in the future operating environment.

Background

Current ADF bridging operations are severely restricted through the available ageing bridging systems, the inability of most bridges to meet the Military Load Classification required for the modern ADF vehicles and the absence of viable rapidly emplaced bridging systems.

Australian Industry Opportunities

Acquisition

The likely acquisition strategy is not clear at this stage but depending on the maturity of systems within the market, the procurement may consider one of the following or a combination:

- Military-off-the-Shelf and/or government-to-government arrangements such as Foreign Military Sales; or
- open tender.

Through-life Support

The through-life support concept for this project will consider as a minimum supportability options for fleet management, repair and maintenance, storage and distribution, provision of technical data and training. It also sees the use of current in-service capacity and facilities, or original equipment manufacturer support or a combination of both. Contracts for such support are generally to be considered at the same time as acquisition.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	System Life Cycle Management	Facilities & Infrastructure (Bridging)
Education / Training		D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Refurbish / Upgrade	D	D
Repair and Maintain	D	D
Systems Integration		D
Test and Evaluate		D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:
Staff Officer Engineers
(02) 6265 4819

Defence Materiel Organisation:
Land Systems Division Emerging Project Team
(03) 9282 7165

Phase Scope

This phase intends to provide fire vehicles capable of aircraft crash response, emergency response and fire fighting. The vehicle is intended to be air portable and capable of being deployed on expeditionary operations.

Background

Army and Air Force currently use Titan fire fighting field trucks which require replacement. In addition, Army uses rural and barracks fire fighting vehicles with limited emergency response capability and nearing their end of life. This project will rationalise these capabilities into a single deployable emergency response vehicle to fulfil the aircraft crash rescue and fire fighting requirement for deployed forces.

Australian Industry Opportunities

Acquisition

Commercially available equipment, with necessary modifications, will be sought and integrated into the ADF fire fighting capability. It is likely that the original equipment manufacturer will be an overseas based company, however solicitation via open tender may result in an Australian solution being provided for consideration. Notwithstanding, Australian industry involvement may still exist in the areas of component production, trials and testing, training development and training delivery.

Through-life Support

It is expected that there will be opportunities for Australian industry to provide through-life support for the capability. Due to the nature of the system being sought, much of the through-life support will be provided by original equipment manufacturers. However, dedicated support services contracts may be competitively tendered, leading to opportunities for Australian industry to provide through-life support including maintenance, repairs, logistic analysis services, spare parts supply, technical documentation and training.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Facilities & Infrastructure	Land Vehicles
Assemble / Install	D	O
Design	D	
Education / Training		O
In-Service / Through-life Support		O
Logistics Support		O
Manufacture / Construct	D	
Project Manage		O
Repair and Maintain		O
Systems Integration	D	O
Test and Evaluate		O

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate / Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Staff Officer Engineers
(02) 6265 4819

Defence Materiel Organisation:
Director Combat Support Vehicle Systems Program Office
(03) 9282 4181

SEA 1000

Phase Scope

This project seeks to acquire an increased and enhanced submarine capability that will provide the ADF with a potent submarine capability beyond the planned withdrawal date of the COLLINS Class submarines. Phase 1 will commence the design of the new capability.

Background

As part of the 2009 Defence White Paper preparations, significant work was undertaken to identify and quantify the maritime capability developments that would be required to meet Government's expectations. This process resulted in SEA 1000.

SEA 1000 will provide Australia with a new and more potent defence capability with greater range, longer patrol endurance and increased capability compared to the COLLINS Class. Key capabilities will be in the areas of anti-submarine warfare; anti-surface warfare; strike; intelligence, surveillance and reconnaissance; electronic warfare; mine warfare; and support to both special forces and advance force operations.

The project will undertake a competitive, staged acquisition process to acquire this capability. It is expected that the phases of this project will be:

- Initial Definition Phase (currently in progress). This will be complete in December 2009 and identify the top level requirements for the future submarine;
- Phase 1 – Design. This comprises Concept Design, Preliminary Design, and Detailed Design. Funding and commencement of each design stage will be approved separately by Government;
- Phase 2 – Construction. This will commence around 2016; and
- Phases 1 and 2 also intend to define and integrate the primary requirements for the weapons capabilities, including a precision strike capability, with the weapons to be acquired in later phases.

Australian Industry Opportunities

Acquisition

This project will place significant demands upon Australian industry and provide commensurate opportunities. Its scale will exceed that of any previous project. This project will need a project management, industrial, and research and support capability capable of constructing and sustaining the future submarine capability over its entire life-cycle and which encompasses all integrated logistics support elements.

The acquisition strategy is yet to be determined, however, it is expected that opportunities for Australian industry involvement will be significant, ultimately growing and developing the foundations of Australia's technological and industrial based sectors.

Through-life Support

The support concepts are yet to be determined, however, it is expected that opportunities for Australian industry involvement will be significant, particularly as the future submarine will be maintained and sustained in Australia. The Royal Australian Navy, supported by DMO, will be the Parent Navy for the future submarine.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 1A, 1B and 1C	Capability											
Activity	Acoustic Technologies & Systems	Composite & Exotic Materials	Electronic Warfare	Guided Weapons	Signature Management	Submarines	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Targeting & Precision Navigation	Facilities & Infrastructure
Design	D	D	O	O	D	O	D	D	D	D	O	D
Modelling / Simulation	D	D	D	D	D	D	D	D	D	D	D	D
Project Manage	D	D	D	D	D	D	D	D	D	D	D	D
Research and Development	D	D	D	O	D	D	D	D	D	D	D	D
Systems Definition / Development	D	D	D	D	D	D	D	D	D	D	D	D

Acquisition Category (ACAT)

SEA 1000 Program

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High ›$1500m
Project Management Complexity	Level 1 Very High
Schedule	Level 1 Very High
Technical Difficulty	Level 1 Very High
Operation and Support	Level 1 Very High
Commercial	Level 1 Very High

The ACAT Level assessed for this Program is ACAT I.

Planned Schedule Highlights

Year-of-Decision	Phase 1A	FY 2009-10 to FY 2010-11
	Phase 1B	FY 2011-12 to FY 2012-13
	Phase 1C	FY 2013-14 to FY 2015-16
Initial Operating Capability	Phases 1A, 1B and 1C	Not Applicable

Points of Contact

Capability Staff:
Future Submarine
Project Coordinator
(02) 6265 6178

Defence Materiel Organisation:
SEA 1000 Project Director
(02) 6265 3519

Phase Scope

This project is intended to acquire replacements for the current ARMIDALE Class Patrol Boats, HUON Class Mine Hunter Coastals and Hydrographic Survey Fleet as these vessels reach their life-of-type.

Background

The rationalisation of the Royal Australian Navy's smaller ships represents an opportunity to leverage the advantages of platform and systems commonality as far as it can be implemented to fulfil a range of maritime missions. It is intended to exploit the advantages of using either the same vessel or a family of vessels to conduct offshore security, mine countermeasure and hydrographic roles. Where possible, this vessel or family of vessels will employ modular concepts that enable each to be employed in multiple roles to meet the needs of particular operations or strategic circumstances.

Australian Industry Opportunities

Acquisition

Although industry requirements will be guided by the information gained through early feasibility studies, the areas on which requirements are anticipated to focus include:

- assistance for various concept studies including operations, infrastructure, crewing and support;
- design, development and construction of platfoms and systems (including adaptable payloads); and
- project management and support.

Through-life Support

Through-life support may take various forms depending on the outcomes of further studies. However, the Australian naval shipbuilding and repair industry is expected to play a significant role in the construction and support of this capability. An in-country capacity to maintain, repair and service any automated technologies acquired under the project is also considered important.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability				
	Acoustic Technologies & Systems	Composite & Exotic Materials	Signature Management	Support of Mission & Safety Critical Software	Surface Naval Vessels
Assemble / Install	D	O	D	D	D
Design	O	O	O	O	D
Education / Training	D			D	D
In-Service / Through-life Support	D	O		D	D
Logistics Support	D	O		D	D
Manufacture / Construct	O	O		O	D
Modelling / Simulation	O		D	O	O
Project Manage	O	O	O	D	D
Refurbish / Upgrade	O	O		O	O
Repair and Maintain	D	O		D	D
Research and Development	O	O		O	D
Software Development / Support	O			D	D
Systems Definition / Development	D			D	D
Systems Integration	D			D	D
Test and Evaluate	D	O	D	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High ›$1500m
Project Management Complexity	Level 1 Very High
Schedule	Level 1 Very High
Technical Difficulty	Level 2 High
Operation and Support	Level 1 Very High
Commercial	Level 1 Very High

The ACAT Level assessed for this Phase is ACAT I.

Planned Schedule Highlights

First Pass Approval	FY 2012-13 to FY 2014-15
Year-of-Decision	FY 2018-19 to FY 2020-21
Initial Operating Capability	Beyond 2019

Points of Contact

Capability Staff:
Deputy Director Mine Warfare
and Clearance Diving
(02) 6265 5913

Defence Materiel Organisation:
Director Maritime Acquisition Support
(02) 6265 7757

Phase Scope

This project seeks to provide maritime ranges capable of acoustic, magnetic, seismic and electric field measurement to provide vulnerability, capability and performance assessments, and certification at the platform, system and equipment level.

Background

This project is expected to deliver the following:

- a large ship magnetic treatment facility,
- a shallow water tracking range that will utilise facilities that are currently used by the deep water tracking range, and
- a portable tracking range.

Australian Industry Opportunities

Acquisition

The method of procurement is yet to be determined but illustratively the acquisition of the large ship magnetic treatment facility is likely to be coordinated by Defence through standing offer panels and non-panel restricted tenders. It is anticipated that the shallow water tracking range would be acquired through approved suppliers. The portable tracking range may be acquired through the extension of an existing sustainment in-service support system where the entire system would be re-baselined.

Through-life Support

It is anticipated that the through-life support of the large ship magnetic treatment facility will be managed by Defence personnel with the acquisition of components being carried out on an ad hoc basis. The maintenance of the shallow water tracking range is likely to be carried out by Defence personnel, possibly augmented by contractor operators. The portable tracking range is likely to utilise a sustainment in-service support system that is currently in place.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Acoustic Technologies & Systems	Secure Test Facilities & Test Ranges	Signature Management	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Facilities & Infrastructure
Assemble / Install	D	D	D			D
Design	D	D				
Education / Training	D	D	D			
In-Service / Through-life Support	D	D	D			D
Logistics Support	D	D	D			
Manufacture / Construct	D	D	D			D
Project Manage	D	D				
Refurbish / Upgrade	D	D	D		D	
Repair and Maintain	D	D	D		D	D
Software Development / Support	D	D			D	
Systems Definition / Development					D	
Systems Integration	D	D	D			
Test and Evaluate	D	D	D	D	D	

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Staff Officer Mine Warfare and Clearance Diving
(02) 6265 6477

Defence Materiel Organisation:
Director Maritime Ranges Systems Program Office and Sonar Group
(02) 6265 2341

Phase Scope

This project is intended to deliver tug services in support of nuclear powered warship visits to designated Australian ports.

Background

There is a requirement to ensure that tug services are available to support the visits of nuclear powered warships in designated Australian ports throughout the duration of such visits. Tugs will need to be available to move these ships at short notice. It is also a Government requirement that Royal Australian Navy personnel would operate the tugs in particular circumstances.

This project is focused on the provision of tug services rather than the acquisition of vessels. There is an associated need to provide for the training and qualification of Royal Australian Navy personnel in the operation of tugs.

Australian Industry Opportunities

Acquisition

Although the industry requirements are yet to be developed, potential project options include public private partnerships or similar ventures.

Through-life Support

Through-life support activities will depend on the acquisition approach, however, it is expected to involve Australian based industry.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Surface Naval Vessels
Assemble / Install	D
Design	O
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	O
Manufacture / Construct	O
Modelling / Simulation	O
Project Manage	D
Refurbish / Upgrade	D
Repair and Maintain	D
Research and Development	D
Software Development / Support	O
Systems Definition / Development	O
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low ‹$100m (Towards the upper end of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Staff Officer Mine Warfare and Clearance Diving
(02) 6265 6477

Defence Materiel Organisation:
Director Maritime Acquisition Support
(02) 6265 7757

Phase Scope

This project seeks to provide upgrades to the Evolved Sea Sparrow Missile (ESSM) to ensure the surface combatant force can defend against evolving anti-ship cruise missile threats, and also maintain inventory.

Background

Studies are currently underway by the NATO Sea Sparrow Project Office to develop an appropriate business and capability model proposal to be funded by member nations. The follow-on inventory remediation would be completed using the latest production versions of the missile.

Australian Industry Opportunities

Acquisition

The acquisition strategy for the weapon system is yet to be determined, however, it is expected that it will be based on the same concept used to develop and acquire the current ESSM. Australian industry involvement would be as subcontractors to a US prime contractor for the manufacture of missile components and subassemblies, proportional to Australia's contribution to the Engineering, Manufacture and Development (EMD) phase of the project. In addition, Australian industry will be involved in the integration of the ESSM into Royal Australian Navy platforms including combat systems, launching systems and training/simulation systems.

Through-life Support

Industry requirements are yet to be determined but will be based around developing and maintaining sufficient capability within Australian industry to undertake a limited range of through-life maintenance and support activities. This requirement is expected to be spread across a number of subcontractors dealing with different prime contractors for the missile, launching system, ship combat system and training/simulation systems.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability
	Guided Weapons
Design	D
Education / Training	D
Logistics Support	D
Manufacture / Construct	D
Research and Development	D
Software Development / Support	D
Systems Definition / Development	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High >$1500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2012-13 to FY 2014-15
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2015 to 2017

Points of Contact

Capability Staff:
Deputy Director Systems
(02) 6265 5466

Defence Materiel Organisation:
Director Emerging Projects
Guided Weapons Branch
(02) 6265 1464

Phase Scope

This phase is intended to replace the existing submarine escape rescue and abandonment system (SERAS).

Background

In 1995, the Royal Australian Navy acquired a submarine rescue capability which could be deployed to the scene of a disabled submarine on a mother ship in order to effect the rescue of personnel. An integral component of this rescue capability, the remotely operated rescue vehicle REMORA, will need to be withdrawn from service by 2018, necessitating the acquisition of a replacement rescue system.

This project seeks to replace the existing capability to recover and provide the necessary on-scene treatment of personnel from a disabled submarine, whether submerged or on the surface. The new system will be required to support both the COLLINS Class submarine and the future submarine (SEA 1000).

Australian Industry Opportunities

Acquisition

Definition studies will guide industry requirements, however, it is anticipated that Defence will seek to acquire a proven solution that can be adapted to the needs of the COLLINS Class submarine and the future submarine capability.

Through-life Support

Through-life support activities will be ideally undertaken by Australian based industry.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

ACTIVITY	CAPABILITY
	Submarines
Assemble / Install	D
Design	O
Education / Training	D
In-Service / Through-life Support	D
Logistics Support	D
Manufacture / Construct	D
Modelling / Simulation	O
Project Manage	D
Refurbish / Upgrade	D
Repair and Maintain	D
Research and Development	O
Software Development / Support	O
Systems Definition / Development	D
Systems Integration	D
Test and Evaluate	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2015 to 2017

Points of Contact

Capability Staff:
Deputy Director Amphibious and Afloat Support
(02) 6265 3415

Defence Materiel Organisation:
Director COLLINS Systems Program Office
(08) 9553 2494

Phase Scope

This project seeks to upgrade the Royal Australian Navy's Phalanx Close-In Weapons System (CIWS) to an enhanced capability configuration.

Background

The Raytheon Phalanx CIWS is presently fitted to the four ADELAIDE Class FFGs. The enhanced configuration offers improved ship self-defence against anti-ship missiles, helicopters and small craft threats.

Australian Industry Opportunities

Acquisition

The Ship alteration (Shipalt FFG7-360) kits will be purchased under the existing Guided Missile Frigate System Program Office (FFGSPO) Foreign Military Sales (FMS) case and installed to existing CIWS mounts during their next scheduled overhaul in the USA.

The specific 'ship fit' components of the upgrade will be conducted in Australia under FFGSPO project management once the ship alteration has been approved under existing FFGSPO engineering change processes.

Through-life Support

Upgraded CIWS mounts will be sustained through-life under a new FMS case similar to that already existing. This will include an overhaul program and supporting integrated logistic support requirements.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability		
	Surface Naval Vessels	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Assemble / Install		D	
Logistics Support	D	D	D
Project Manage	D	D	D
Repair and Maintain	D		D
Systems Integration	D	D	D
Test and Evaluate	D	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Planned Schedule Highlights

First Pass Approval	FY 2012-13 to FY 2014-15
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Staff Officer Above Water Warfare
(02) 6265 6630

Defence Materiel Organisation:
Director FFG Systems Program Office
(02) 9359 6285

Phase Scope

This project seeks to provide short-range surface defence against asymmetric threats for the ANZAC Class frigates.

Background

Major surface combatants require protection against asymmetric surface attack through provision of advanced warning and effectors. Although the scope for this project is yet to be fully defined, it is likely to involve the purchase of weapons, training systems and an appropriate integrated logistics support package.

Australian Industry Opportunities

Acquisition

Some equipment has already been installed in the Class under rapid acquisition. Phase 1 is expected to extend the installation of the Mini Typhoon to the entire Class and formalise through-life support and initial spares.

Through-life Support

It is expected that there will be a need to establish a long-term through-life support capability utilising Australian industry.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Surface Naval Vessels	Infantry Weapons & Remote Weapons Stations
Assemble / Install	D	D
Design	O	D
Education / Training	D	D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Manufacture / Construct	O	O
Modelling / Simulation	D	D
Project Manage	D	D
Refurbish / Upgrade	D	D
Repair and Maintain	D	D
Research and Development	O	O
Software Development / Support	D	D
Systems Definition / Development	D	D
Systems Integration	D	D
Test and Evaluate	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low ‹$100m (Towards the middle of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Planned Schedule Highlights

First Pass Approval	FY 2012-13 to FY 2014-15
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Staff Officer Above Water Warfare
(02) 6265 6630

Defence Materiel Organisation:
Director ANZAC Systems Program Office
(08) 9591 9850

Phase Scope

Phase 5 seeks to remediate ADF Nulka Active Missile Decoy (AMD) stockholdings and address system support issues.

Background

Nulka was developed under a Joint Australian and United States project arrangement. The AMD capability is currently deployed with the Navies of the United States, Canada and Australia.

Phase 5A seeks to procure additional Nulka rounds to align with current stockholding requirements.

Phase 5B seeks to facilitate the installation of Nulka capability into the CANBERRA Class platforms. The project also seeks to address obsolescence and sustainment issues associated with the fire control and launcher subsystems, including enhancements to the Nulka system's human-machine interface.

Australian Industry Opportunities

Acquisition and Through-life Support

It is expected that the current Nulka prime contractor – BAE Systems Australia will be heavily involved in both Phases 5A and 5B in acquisition and through-life support.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phases 5A and 5B	**Capability**			
Activity	Electronic Warfare	Support of Mission & Safety Critical Software	System Life Cycle Management	Systems Integration (High End, System of Systems)
Assemble / Install	D			
Design	D	D		
In-Service / Through-life Support	D		D	
Logistics Support	D			
Manufacture / Construct	D			
Modelling / Simulation	D			
Project Manage	D			
Repair and Maintain	D			
Software Development / Support	D			
Systems Definition / Development	D		D	D
Systems Integration	D	D	D	D
Test and Evaluate	D	D	D	D

Acquisition Category (ACAT)

Phase 5A

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 5B

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 5A	FY 2009-10 to FY 2010-11
	Phase 5B	FY 2011-12 to FY 2012-13
Year-of-Decision	Phase 5A	FY 2009-10 to FY 2010-11
	Phase 5B	FY 2013-14 to FY 2015-16
Initial Operating Capability	Phase 5A	2010 to 2012
	Phase 5B	2015 to 2017

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phases 5A and 5B	Staff Officer Electronic Warfare (02) 6265 5101	Director Maritime Electronic Warfare Systems Program Office (02) 6265 1624

Phase Scope

This project aims to complete provision of torpedo self-defence systems across the Surface Combatant, Amphibious and Afloat Support forces, which will offer a level of protective measures to reduce the threat and risk from heavy weight torpedoes.

Background

Torpedoes pose a significant and lethal threat as their acoustic, tactical and dynamic capabilities are advanced, rendering simple counter-manoeuvres or countermeasures ineffective.

Australian Industry Opportunities

Acquisition

It is expected that the torpedo self-defence system will be acquired through Foreign Military Sales.

Through-life Support

The industry requirement will be based on developing sufficient capability within Australian industry to undertake a range of through-life maintenance and support activities.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Acoustic Technologies & Systems	Surface Naval Vessels
Assemble / Install	O	D
Education / Training	O	
In-Service / Through-life Support	D	
Logistics Support	D	
Project Manage	D	
Repair and Maintain	D	
Systems Definition / Development	O	
Systems Integration	D	D
Test and Evaluate	D	

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 4 Low
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT IV.

Planned Schedule Highlights

First Pass Approval	FY 2011-12 to FY 2012-13
Year-of-Decision	FY 2011-12 to FY 2012-13
Initial Operating Capability	2013 to 2015

Points of Contact

Capability Staff:
Staff Officer Under Water Warfare
(02) 6265 6371

Defence Materiel Organisation:
Director Maritime Acquisition Support
(02) 6265 2596

Phase Scope

This phase is intended to deliver an updated digital hydrographic data management and chart production capability to the Australian Hydrographic Office. The replacement digital hydrographic display system would include the capacity to process both classified and unclassified information.

Background

The digital hydrographic display system (operating at classified and unclassified levels), underpins digital data management and electronic chart generation requirements of the Australian Hydrographic Office. The system could be accessed by a range of users and must be capable of importing data from a variety of defence and civilian sources. As an updated capability, the system will manage more data and generate a greater demand for products from maritime geospatial information. It is expected to include data import and archive functionality, data assessment, data processing, data management and product generation, and also satisfy the assurances integral to the Australian Hydrographic Office's current and future obligations with respect to national and international charting responsibilities.

Australian Industry Opportunities

Acquisition

Although the industry requirements are yet to be developed, it is expected that the opportunities for Australian industry will include:

- provision and adaptation of Commercial-off-the-Shelf (COTS) hardware and software;
- software integration; and
- systems integration (particularly with existing Defence information system infrastructures).

There should be a strong focus on obtaining COTS software to provide the required functionality.

There is the potential for an Australian contractor to purchase on behalf of the Commonwealth the hardware (servers, desktops, monitors and additional items) and software (enterprise and application software) from within Australia or from overseas vendors.

Accordingly, there is the potential for an Australian company to manage the integration and delivery of the Phase 5 activities. Integration will involve system installation and software integration at the Australian Hydrographic Office, Wollongong.

Through-life Support

The industry opportunities are expected to be based on the development and maintenance of sufficient capability within Australian industry to undertake a full range of through-life support activities. Following on from the acceptance of the Phase 5 products there is the potential for the acquisition contractor to provide in-service support.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability					
	Protection of Networks, Computers & Information	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Hydrographic Database Systems
Assemble / Install	D		D			D
Design	D		D		D	O
Education / Training					D	D
In-Service / Through-life Support	D	D		D	D	D
Logistics Support		D		D		D
Manufacture / Construct	D		D			D
Modelling / Simulation						D
Project Manage	D	D	D	D	D	D
Refurbish / Upgrade			D	D		
Repair and Maintain				D		D
Research and Development			D			
Software Development / Support		D				O
Systems Definition / Development	D		D		D	D
Systems Integration	D	D	D		D	D
Test and Evaluate	D	D	D		D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the middle of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2012-13 to FY 2014-15
Year-of-Decision	FY 2014-15 to FY 2016-17
Initial Operating Capability	2016 to 2018

Points of Contact

Capability Staff:

Deputy Director Patrol and Hydrographic
(02) 6265 6467

Defence Materiel Organisation:

Director Military Geographic Information Systems Program Office
(02) 6265 5635

SEA 1439

Phase Scope

Phase 3.1 is intended to replace the existing integrated ship control monitoring and management system for the COLLINS Class submarines.

Phase 5B.2 is intended to improve the electronic warfare and external communications systems fitted to the COLLINS Class through the acquisition of a high data rate satellite communications capability, replacement of the existing communications centre and enhancements to the fitted electronic warfare capability.

Phase 6 will upgrade the existing COLLINS Class sonar system including signal processors.

Background

Earlier phases of this project (Phases 1 and 2) involved the conduct of studies into modifications and improvements required to bring the COLLINS Class to full capability. The recommendations from those studies were implemented in Phase 3 - Sustainability & Reliability Enhancements, and Phase 4 - COLLINS Full Operational Capability (which included the acquisition of the replacement combat system).

Phases 3.1, 5B.2 and 6 address the requirement to update COLLINS Class ship control, communications, electronic warfare and sonar systems.

Australian Industry Opportunities

Acquisition

During all phases, it is likely that replacement systems will be based on similar and proven systems currently in-service in other navies. It is anticipated that the project phases will utilise significant levels of in-country capacity for project management, equipment assembly, system integration, training development and support.

Through-life Support

Industry requirements are likely to focus on developing optimum through-life support arrangements to manage and maintain the capabilities delivered by each phase. The Australian naval shipbuilding, refit and repair industry is expected to remain an integral component of this support.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 3.1	Capability				
Activity	Submarines	Support of Mission & Safety Critical Software	System Life Cycle Management	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Assemble / Install	D	D	D	D	D
Design	O	D	D	D	D
Education / Training	D	D	D	D	D
In-Service / Through-life Support	D	D	D	D	D
Logistics Support	D	D	D	D	D
Manufacture / Construct	D	D	D	D	D
Modelling / Simulation	D	D	D	D	
Project Manage	D	D	D	D	
Refurbish / Upgrade	D	D	D	D	
Repair and Maintain	D	D	D	D	D
Research and Development	D	D	D	D	
Software Development / Support	D	D	D	D	
Systems Definition / Development	D	D	D	D	
Systems Integration	D	D	D	D	
Test and Evaluate	D	D	D	D	D

Phase 5B.2	Capability						
Activity	Anti-Tampering Capabilities	Electronic Warfare	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)	Facilities & Infrastructure	Submarine Communication Systems
Assemble / Install	D	D	D	D	D	D	D
Design	D	O	D	D	D	D	O
Education / Training	D	D	D	D	D	D	D
In-Service / Through-life Support	D	D	D	D	D	D	D
Logistics Support	D	D	D	D	D	D	D
Manufacture / Construct	O	O	O	O	O	O	O
Modelling / Simulation	O	O	O	O	O	O	O
Project Manage	D	D	D	D	D	D	D
Refurbish / Upgrade	D	D	D	D	D	D	D
Repair and Maintain	D	D	D	D	D	D	D
Research and Development	O	O	O	O	O	O	O
Software Development / Support	D	D	D	D	D	D	D
Systems Definition / Development	D	D	D	D	D	D	D
Systems Integration	D	D	D	D	D	D	D
Test and Evaluate	D	D	D	D	D	D	D

Phase 6	Capability				
Activity	Acoustic Technologies & Systems	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management	Systems Integration (High End, System of Systems)
Assemble / Install	D			D	D
Design	O			D	D
Education / Training	D				D
In-Service / Through-life Support	D	D	D	D	D
Logistics Support	D	D	D	D	D
Manufacture / Construct	O			D	O
Modelling / Simulation	D			D	D
Project Manage	D				D
Refurbish / Upgrade	D	D	D	D	D
Repair and Maintain	D			D	D
Research and Development	O			D	O

Acquisition Category (ACAT)

Phase 3.1

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 4 Low <$100m (Towards the upper end of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 3 Moderate
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 5B.2

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 3 Moderate
Technical Difficulty	Level 2 High
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Phase 6

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 2 High $500m–$1500m (Towards the middle of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	Phase 3.1	FY 2010-11 to FY 2011-12
	Phase 5B.2	Complete
	Phase 6	FY 2009-10 to FY 2010-11
Year of Decision	Phase 3.1	FY 2011-12 to FY 2012-13
	Phase 5B.2	FY 2011-12 to FY 2012-13
	Phase 6	FY 2011-12 to FY 2012-13
Initial Operating Capability	Phase 3.1	2015 to 2017
	Phase 5B.2	2014 to 2016
	Phase 6	2015 to 2017

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phase 3.1	Deputy Director Submarines (02) 6265 2134	Project Manager SEA 1439 Phase 3.1 (08) 9553 5507
Phase 5B.2	Deputy Director Submarines (02) 6265 2134	Project Manager SEA 1439 Phase 5B.2 (02) 6266 7108
Phase 6	Deputy Director Submarines (02) 6265 2134	Generation Manager Submarine Combat Systems Program Office (02) 6265 1250

Phase Scope

This phase is intended to enhance the Maritime Tactical Wide Area Network (MTWAN) including:

- expansion into Fleet units not equipped during earlier phases;
- integration of capabilities being delivered to maritime platforms by other approved communications projects; and
- possible replacement of radios, antennae and other systems to enhance maritime communications.

Background

This project has evolved from a simple radio replacement project to providing a Local Area Network/Wide Area Network (LAN/WAN) -at-sea and finally, to include the entire Maritime Tactical Communications System. SEA 1442 forms the basis of the Networked Fleet which is a major milestone in the ADF's Network Centric Warfare (NCW) Roadmap.

Other phases include:

- Phase 2B (complete) was a Project Definition Study which refined the scope of work for Phases 3 and 4; and
- Phase 3 (in progress) is providing an enhanced ADF maritime communications capability with the introduction of the MTWAN to a number of Major Fleet Units.

Some of the communications and infrastructure is now being delivered through other projects such as JP 2008 Phase 3E Satellite Capability.

Australian Industry Opportunities

Acquisition

Opportunities for Australian industry exist in the field of naval communications. In particular project management, systems engineering, integrated logistics support, verification and validation, and systems integration into naval platforms. These skill sets will form the basis for the through-life support skills also needed from Australian industry.

The acquisition approach for this phase is likely to be open tender for the selection of a Prime Systems Integrator for the communications system and some ship integration, with other ship integration likely to be pursued through existing support mechanisms. The project will seek to maximise the use of Commercial- and Military-off-the-Shelf materiel.

Industry engagement will include consultation on requirements prior to any Request For Tender (RFT) release. Such engagement may include information sessions, workshops and opportunities to comment on draft capability definition documentation.

Through-life Support

The industry requirements will be based on developing and maintaining sufficient capability within Australian industry to undertake a full range of through-life support activities. In-service support may be tendered as part of the acquisition RFT with the intention of possibly selecting a single supplier for both acquisition and sustainment.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability			
	Communications Security	Protection of Networks, Computers & Information	Naval Communications	Naval Platform Integration
Assemble / Install	D	D	D	D
Design	D	D	D	D
Education / Training	D	D	D	D
In-Service / Through-life Support	D	D	D	D
Logistics Support	D	D	D	D
Manufacture / Construct		D	D	D
Modelling / Simulation	D	D		
Project Manage	D	D	D	D
Refurbish / Upgrade	D	D	D	D
Repair and Maintain	D	D	D	D
Software Development / Support	D	D	D	
Systems Definition / Development	D	D	D	D
Systems Integration	D	D	D	D
Test and Evaluate	D	D	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the middle of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	FY 2009-10 to FY 2010-11
Year-of-Decision	FY 2012-13 to FY 2014-15
Initial Operating Capability	2014 to 2016

Points of Contact

Capability Staff:
Deputy Director
Communications 2
(02) 6265 1316

Defence Materiel Organisation:
Project Director SEA 1442
(02) 6265 7515

Project Website:
www.defence.gov.au/dmo/esd/sea1442/sea1442.cfm

Phase Scope

Phase 4A seeks to either upgrade or replace the current ANZAC Class CENTAUR Electronic Support (ES) system to maintain regional ES capability parity.

Phase 4B seeks to replace the ageing AN/SPS-49 radar system with a modern, digital Air Search Radar that complements the capabilities and functionality of the Phased Array Radar system delivered under Phase 2 (approved).

Background

Phase 2 (approved) will provide the ANZAC Class with an enhanced self protection capability, as well as the ability to protect closely escorted assets such as amphibious ships, auxiliary support vessels and merchant vessels. Phase 2B includes the development of new Phased Array Radar capabilities.

Phase 4 continues the improvement and upgrade of the ANZAC Class sensor capability to align with modern threats. In particular, Phase 4A is intended to address the forecast supportability issues of the current ES system. This sensor is critical to the provision of long range warning and in its contribution to force level warfare. Phase 4B is intended to replace the AN/SPS-49 long range volume search radar capability which is critical to the provision of long range warning and for its contribution to unit and force level air warfare.

Australian Industry Opportunities

Acquisition

To the extent it can be achieved, there is a desire to align procurement activity of the ES system for ANZAC and LHD and, if possible, AWD. Industry engagement has occurred through the issue of a Request for Proposal (RFP). The replacement solution could include further development of Australian niche products to complement the replacement solution, or evolution of overseas equipment; project managed and supported in Australia.

Through-life Support

All principal through-life support management, integration and support, routine servicing and defect analysis and rectification are intended to be through Australian industry.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in these phases include:

Phase 4A	**Capability**		
Activity	Electronic Warfare	Secure Test Facilities & Test Ranges	Systems Integration (High End, System of Systems)
Assemble / Install	D		
Design		D	
Education / Training	D		
In-Service / Through-life Support	D	D	
Logistics Support	D	D	
Manufacture / Construct		D	D
Repair and Maintain	D		
Research and Development	D	D	
Software Development / Support	D	D	
Systems Integration	D		
Test and Evaluate	D		

Phase 4B	Capability	
Activity	Radar (HF & PAR)	Surface Naval Vessels
Assemble / Install	D	D
Design	D	D
Education / Training	D	D
In-Service / Through-life Support	D	D
Logistics Support	D	D
Manufacture / Construct	D	D
Modelling / Simulation	D	D
Project Manage	D	D
Refurbish / Upgrade	D	D
Repair and Maintain	D	D
Research and Development	D	D
Software Development / Support	D	D
Systems Definition / Development	D	D
Systems Integration	D	D
Test and Evaluate	D	D

Acquisition Category (ACAT)

Phase 4A

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 2 High
Schedule	Level 2 High
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Phase 4B

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m-$500m (Towards the upper end of the band)
Project Management Complexity	Level 3 Moderate
Schedule	Level 4 Low
Technical Difficulty	Level 3 Moderate
Operation and Support	Level 3 Moderate
Commercial	Level 3 Moderate

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	Phase 4A	FY 2009-10 to FY 2010-11
	Phase 4B	FY 2011-12 to FY 2012-13
Year-of-Decision	Phase 4A	FY 2011-12 to FY 2012-13
	Phase 4B	FY 2013-14 to FY 2015-16
Initial Operating Capability	Phase 4A	2013 to 2015
	Phase 4B	2017 to 2019

Points of Contact

Phase:	Capability Staff:	Defence Materiel Organisation:
Phase 4A	Staff Officer Electronic Warfare (02) 6265 5101	Director Maritime Electronic Warfare Systems Program Office (02) 6265 1624
Phase 4B	Deputy Director Systems (02) 6265 5466	Director ANZAC Systems Program Office (08) 9591 9850

Phase Scope

This phase is intended to introduce an initial deployable Mine Counter Measures (MCM) capability. It is based on the acquisition of a system of organic MCM components that can be embarked in the ships of a deploying task group, and employed to overcome mine threats encountered during task group operations.

Background

Deployable MCM will provide maritime forces with the capability to accomplish mine detection, classification, identification, avoidance and when necessary, neutralisation. It will be the initial means by which task groups will implement self-protective MCM along intended routes, through choke points and within objective areas. This capability will be complemented by the current dedicated MCM force, which will consolidate MCM effort within the area of operations.

Australian Industry Opportunities

Acquisition

Although the industry requirements are yet to be developed, they are expected to include:

- identification of system-based solutions in the field of deployable MCM;
- systems integration including integration of Military- or Commercial-off-the-Shelf (MOTS or COTS) systems;
- systems engineering, project management, system acquisition and support, integration and test of equipment and services; and
- software development that may be required to support the integration of the various subsystems into the overall solution.

The expendable mine neutralisation system capability is likely to be a fibre guided weapon with shaped or blast charge warhead, used to neutralise ground, moored or surface mines. The preference to acquire an in-service MOTS solution limits the opportunities for Australian industry. Local industry involvement may include project management, system acquisition, certification and support activities, integration and testing of equipment and services.

Through-life Support

Full through-life support will be needed and more specific requirements for each type of MCM systems will be determined during the scoping studies of this phase. Industry requirements are likely to be based around developing and maintaining sufficient capability within Australian industry to undertake a limited range of through-life maintenance and support activities. This requirement is expected to be spread across a number of subcontractors dealing with one or more prime contractors for the acquired systems.

Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability	
	Acoustic Technologies & Systems	Guided Weapons
Assemble / Install	D	
Design	O	
Education / Training	D	
In-Service / Through-life Support	D	D
Logistics Support	D	D
Manufacture / Construct	O	
Modelling / Simulation	D	
Project Manage	D	O
Refurbish / Upgrade	D	
Repair and Maintain	D	O
Research and Development	D	
Software Development / Support	D	
Systems Definition / Development	D	D
Systems Integration	D	D
Test and Evaluate	D	D

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 3 Moderate $100m–$500m (Towards the lower end of the band)
Project Management Complexity	Level 4 Low
Schedule	Level 4 Low
Technical Difficulty	Level 4 Low
Operation and Support	Level 2 High
Commercial	Level 4 Low

The ACAT Level assessed for this Phase is ACAT III.

Planned Schedule Highlights

First Pass Approval	FY 2010-11 to FY 2011-12
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2015 to 2017

Points of Contact

Capability Staff:
Staff Officer Mine Warfare and Clearance Diving
(02) 6265 6477

Defence Materiel Organisation:
Mine Hunter Coastal Project Officer
(02) 9926 2686

Explosive Ordnance Component:
Director Emerging Projects
Guided Weapons Branch
(02) 6265 1464

PROPOSALS BY ACQUISITION CATEGORY

Project Number	Project Name	Page No.
ACAT Level IV		
AIR 5077 Ph 4	AEW&C Sustainment Study	23
DEF 7013 Ph 4	Joint Intelligence Support System	62
JP 129 Ph 4	Tier 1 Unmanned Aerial Vehicle (UAV)	68
JP 2090 Ph 1C	Combined Information Environment	121
JP 2110 Ph 1A	Chemical, Biological, Radiological, Nuclear Defence	130
SEA 1350 Ph 1	Navy Surface and Subsurface Ranges	175
SEA 1351 Ph 1	Replacement East Coast Tugs	177
SEA 1357 Ph 1	Close-In Weapons System (CIWS) Phalanx Block Upgrade	183
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PROPOSALS BY AUSTRALIAN INDUSTRY OPPORTUNITIES

Project		Capability																												
		Acoustic Technologies & Systems	AEW&C Systems	Anti-Tampering Capabilities	Armoured Vehicles	Combat Clothing & Personal Equipment	Communications Security	Composite & Exotic Materials	Electronic Warfare	Guided Weapons	Infantry Weapons & Remote Weapons Stations	Protection of Networks, Computers & Information	Radar (HF and PAR)	Rotary & Fixed Wing Aircraft	Secure Test Facilities & Test Ranges	Selected Ballistic Munitions & Explosives	Signature Management	Submarines	Support of Mission & Safety Critical Software	Surface Naval Vessels.	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management.	Systems Integration (High End, System of Systems)	Targeting and Precision Navigation	Facilities and Infrastructure	Other
AIR 5077 Ph 4	AEW&C Sustainment Study		•																								•
AIR 5232 Ph 1	Air Combat Officer Training System													•													•
AIR 5276 CAP 2	AP-3C Capability Assurance Program	•					•		•										•				•				
AIR 5397 Ph 2	Upgrade Australian Military Airspace Communications and Control System (AMACCS)																						•		•		
AIR 5405 Ph 1	Replacement Mobile Regional Operations Centre																										•
AIR 5416 Ph 4B1	C-130J Radar Warning Receiver (RWR)								•					•													
AIR 5416 Ph 4B2	C-130J Large Aircraft Infrared Countermeasures (LAIRCM)								•					•													
AIR 5428 Ph 1	Pilot Training System													•													
AIR 5431 Ph 1	Deployable Air Traffic Management and Control System																									•	
AIR 5431 Ph 2/3	Fixed Base Air Traffic Management and Control System																									•	
AIR 5432 Ph 1	Communications, Navigation, Surveillance/Air Traffic Management																									•	
AIR 5438 Ph 1A	Lead-In Fighter Capability Assurance Program													•								•			•		
AIR 5440 Ph 1	C-130J Block Upgrade Program 7.0													•													
AIR 5440 Ph 2	C-130J Block Upgrade Program 8.0													•													
AIR 6000 Ph 2A/2B	New Air Combat Capability – 3 Squadrons	•				•	•	•	•	•		•		•		•	•		•		•			•	•	•
AIR 6000 Ph 3	Weapons for New Air Combat Capability									•						•											

Project		Acoustic Technologies & Systems	AEW&C Systems	Anti-Tampering Capabilities	Armoured Vehicles	Combat Clothing & Personal Equipment	Communications Security	Composite & Exotic Materials	Electronic Warfare	Guided Weapons	Infantry Weapons & Remote Weapons Stations	Protection of Networks, Computers & Information	Radar (HF and PAR)	Rotary & Fixed Wing Aircraft	Secure Test Facilities & Test Ranges	Selected Ballistic Munitions & Explosives	Signature Management	Submarines	Support of Mission & Safety Critical Software	Surface Naval Vessels.	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management.	Systems Integration (High End, System of Systems)	Targeting and Precision Navigation	Facilities and Infrastructure	Other
AIR 6000 Ph 5	Future Air-to-Air Weapons for New Air Combat Capability and Super Hornet									•																
AIR 7000 Ph 2B	Maritime Patrol Aircraft Replacement	•						•	•					•					•		•		•		•	
AIR 8000 Ph 1	Battlefield Airlift – Additional C-130J													•												
AIR 8000 Ph 2	Battlefield Airlift – Caribou Replacement													•												
AIR 9000 Ph 5C	Additional Heavy Lift Helicopter								•					•					•		•				•	
AIR 9000 Ph 7	Helicopter Aircrew Training System						•	•						•					•	•	•	•	•	•	•	•
AIR 9000 Ph 8	Future Naval Aviation Combat System	•	•				•	•	•	•				•		•	•		•			•		•		
AIR 9000 SCAP1	Seahawk Capability Assurance Program 1						•							•												
AIR 9000 SCAP2	Seahawk Capability Assurance Program 2													•					•							
DEF 7013 Ph 4	Joint Intelligence Support System											•							•		•	•	•			•
JP 66 Ph 1	Replacement for Air Defence Targets							•						•							•	•	•	•	•	
JP 90 Ph 1	ADF Identification Friend or Foe																									•
JP 129 Ph 4	Tier 1 Unmanned Aerial Vehicle (UAV)							•						•								•	•	•	•	
JP 154 Ph 1	Joint Counter Improvised Explosive Device								•						•										•	•
JP 154 Ph 2	Joint Counter Improvised Explosive Device								•						•								•		•	•
JP 157 Ph 1	Replacement Refuelling Trucks																									•
JP 1544 Ph 1	Project Eden – Document Handling System																									•

Project		Capability																												
		Acoustic Technologies & Systems	AEW&C Systems	Anti-Tampering Capabilities	Armoured Vehicles	Combat Clothing & Personal Equipment	Communications Security	Composite & Exotic Materials	Electronic Warfare	Guided Weapons	Infantry Weapons & Remote Weapons Stations	Protection of Networks, Computers & Information	Radar (HF and PAR)	Rotary & Fixed Wing Aircraft	Secure Test Facilities & Test Ranges	Selected Ballistic Munitions & Explosives	Signature Management	Submarines	Support of Mission & Safety Critical Software	Surface Naval Vessels.	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management.	Systems Integration (High End, System of Systems)	Targeting and Precision Navigation	Facilities and Infrastructure	Other
JP 1770 Ph 1	Rapid Environmental Assessment											•							•			•	•			•
JP 1771 Ph 1	Geomatic Support System											•							•			•	•			•
JP 2008 Ph 3H	Military Satellite Capability – Wideband Terrestrial Terminals																									•
JP 2008 Ph 5B	Military Satellite Capability – Wideband Terrestrial Infrastructure																						•			•
JP 2025 Ph 6	Jindalee Operational Radar Network (JORN)											•	•								•		•	•		•
JP 2030 Ph 8	ADF Joint Command Support Environment																						•			•
JP 2044 Ph 3A.1	Project Eagle Eye																						•	•		
JP 2044 Ph 4	Digital Topographical Systems (DTS) Upgrade																						•	•		
JP 2047 Ph 3	Wide Area Communications Network Replacement						•					•										•	•		•	
JP 2048 Ph 3	Amphibious Watercraft Replacement																			•						
JP 2048 Ph 5	Landing Craft Heavy Replacement																			•						
JP 2060 Ph 3	ADF Deployable Health Capability																					•			•	
JP 2064 Ph 3	Geospatial Information Infrastructure & Services											•							•			•	•			
JP 2065 Ph 2	Integrated Broadcast System								•					•				•		•			•			
JP 2065 Ph 3	Integrated Broadcast System								•					•				•		•			•			
JP 2068 Ph 2B.2	Computer Network Defence																						•			
JP 2069 Ph 2	High Grade Cryptographic Equipment						•																			•
JP 2070 Ph 4	AP-3C Light Weight Torpedo Integration									•				•												
JP 2072 Ph 2A	Battlespace Communications System (Land)						•					•														•

Project		Acoustic Technologies & Systems	AEW&C Systems	Anti-Tampering Capabilities	Armoured Vehicles	Combat Clothing & Personal Equipment	Communications Security	Composite & Exotic Materials	Electronic Warfare	Guided Weapons	Infantry Weapons & Remote Weapons Stations	Protection of Networks, Computers & Information	Radar (HF and PAR)	Rotary & Fixed Wing Aircraft	Secure Test Facilities & Test Ranges	Selected Ballistic Munitions & Explosives	Signature Management	Submarines	Support of Mission & Safety Critical Software	Surface Naval Vessels.	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management.	Systems Integration (High End, System of Systems)	Targeting and Precision Navigation	Facilities and Infrastructure	Other
JP 2072 Ph 2B	Battlespace Communications System (Land)						•					•											•			•
JP 2072 Ph 3	Battlespace Communications System (Land)						•					•											•			•
JP 2077 Ph 2D	Improved Logistics Information Systems																		•		•	•	•			
JP 2078 Ph 2	Hyper-Spectral Imaging											•							•		•	•	•			•
JP 2080 Ph 2B.1	Defence Management Systems Improvement – Personnel Systems Modernisation																				•	•	•			
JP 2080 Ph 3	Defence Management Systems Improvement – Finance System																				•	•	•			
JP 2085 Ph 2/3	Explosive Ordnance Warstock															•										
JP 2089 Ph 2B	Tactical Information Exchange Domain (Data Links)													•					•							
JP 2089 Ph 3	Tactical Information Exchange Domain (Data Links)													•					•						•	
JP 2090 Ph 1C	Combined Information Environment											•										•	•		•	
JP 2096 Ph 1	Surveillance Enhancement											•							•		•	•	•			•
JP 2097 Ph 1B	REDFIN – Enhancements to Special Operations Capability																								•	•
JP 2099 Ph 1	Identity Management – Project CERTE			•			•					•			•								•		•	
JP 2110 Ph 1A	Chemical, Biological, Radiological, Nuclear Defence					•																				•
JP 2110 Ph 1B	Chemical, Biological, Radiological, Nuclear Defence					•																				•
JP 3011 Ph 1	Non-Lethal Weapons																									•

Project		Capability																												
		Acoustic Technologies & Systems	AEW&C Systems	Anti-Tampering Capabilities	Armoured Vehicles	Combat Clothing & Personal Equipment	Communications Security	Composite & Exotic Materials	Electronic Warfare	Guided Weapons	Infantry Weapons & Remote Weapons Stations	Protection of Networks, Computers & Information	Radar (HF and PAR)	Rotary & Fixed Wing Aircraft	Secure Test Facilities & Test Ranges	Selected Ballistic Munitions & Explosives	Signature Management	Submarines	Support of Mission & Safety Critical Software	Surface Naval Vessels.	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management.	Systems Integration (High End, System of Systems)	Targeting and Precision Navigation	Facilities and Infrastructure	Other
JP 3021 Ph 1	Joint Combined Training Capability (JCTC)								•																					
JP 3024 Ph 1	Woomera Range Remediation																							•						
JP 3025 Ph 1	Deployable Incidence Response Regiment (IRR) Capability					•																								•
JP 3027 Ph 1	JDAM Enhancements									•																				
JP 3028 Ph 1	Defence Simulation Program	•	•		•		•		•	•	•	•		•	•	•		•		•	•	•	•	•		•				•
JP 5408 Ph 3	ADF Navigation Warfare (NAVWAR) Capability													•				•		•				•						
LAND 17 Ph 1	Artillery Replacement			•	•		•	•			•								•					•	•					
LAND 53 Ph 1BR	NINOX – Night Fighting Equipment Technology Refresh																									•				
LAND 75 Ph 3.4	Battlefield Command Support System				•														•		•	•	•		•					
LAND 75 Ph 4	Battlefield Command Support System				•														•		•	•	•							
LAND 112 Ph 4	ASLAV Enhancement				•												•													
LAND 121 Ph 4	Overlander																													
LAND 121 Ph 5A	Overlander																													
LAND 125 Ph 3A	Soldier Enhancement Version 2 – C4I Component					•		•			•													•						
LAND 125 Ph 3B	Soldier Enhancement Version 2 – Survivability					•		•			•													•						
LAND 125 Ph 3C	Soldier Enhancement Version 2 – Lethality					•		•			•													•						
LAND 125 Ph 4	Soldier Enhancement Version 3					•		•			•						•							•						
LAND 136 Ph 1	Land Force Mortar Replacement										•					•			•											
LAND 146 Ph 2	Combat Identification for Land Forces				•	•											•							•						

Project		Acoustic Technologies & Systems	AEW&C Systems	Anti-Tampering Capabilities	Armoured Vehicles	Combat Clothing & Personal Equipment	Communications Security	Composite & Exotic Materials	Electronic Warfare	Guided Weapons	Infantry Weapons & Remote Weapons Stations	Protection of Networks, Computers & Information	Radar (HF and PAR)	Rotary & Fixed Wing Aircraft	Secure Test Facilities & Test Ranges	Selected Ballistic Munitions & Explosives	Signature Management	Submarines	Support of Mission & Safety Critical Software	Surface Naval Vessels.	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management.	Systems Integration (High End, System of Systems)	Targeting and Precision Navigation	Facilities and Infrastructure	Other
LAND 155 Ph 1	Enhanced Gap Crossing Capability																					•			•	
LAND 998 Ph 1	Replacement Aviation Fire Trucks																								•	•
SEA 1000 Ph 1A	Future Submarine – Concept Design	•						•	•	•							•	•	•		•	•	•	•	•	
SEA 1000 Ph 1B	Future Submarine – Preliminary Design	•						•	•	•							•	•	•		•	•	•	•	•	
SEA 1000 Ph 1C	Future Submarine – Detailed Design	•						•	•	•							•	•	•		•	•	•	•	•	
SEA 1180 Ph 1	Patrol Boat, Mine Hunter Coastal and Hydrographic Ship Replacement Project	•						•									•		•	•						
SEA 1350 Ph 1	Navy Surface and Subsurface Ranges	•													•		•				•	•			•	
SEA 1351 Ph 1	Replacement East Coast Tugs																			•						
SEA 1352 Ph 1	Evolved Sea Sparrow Missile (ESSM) Upgrade and Inventory Replenishment									•																
SEA 1354 Ph 1	Submarine Escape Rescue and Abandonment Systems (SERAS)																	•								
SEA 1357 Ph 1	Close-In Weapons System (CIWS) Phalanx Block Upgrade																			•			•		•	
SEA 1358 Ph 1	Mini Typhoon for ANZAC Class										•									•						
SEA 1397 Ph 5A	Nulka Missile Decoy Enhancements								•										•			•	•			
SEA 1397 Ph 5B	Nulka Missile Decoy Enhancements								•										•			•	•			
SEA 1408 Ph 2	Torpedo Self-defence	•																		•						
SEA 1430 Ph 5	Digital Hydro Display System Upgrade											•							•		•	•	•			•
SEA 1439 Ph 3.1	Collins Obsolescence Management																	•	•			•	•		•	

Project		Acoustic Technologies & Systems	AEW&C Systems	Anti-Tampering Capabilities	Armoured Vehicles	Combat Clothing & Personal Equipment	Communications Security	Composite & Exotic Materials	Electronic Warfare	Guided Weapons	Infantry Weapons & Remote Weapons Stations	Protection of Networks, Computers & Information	Radar (HF and PAR)	Rotary & Fixed Wing Aircraft	Secure Test Facilities & Test Ranges	Selected Ballistic Munitions & Explosives	Signature Management	Submarines	Support of Mission & Safety Critical Software	Surface Naval Vessels.	System Assurance Capabilities (H'ware & S'ware)	System Life Cycle Management.	Systems Integration (High End, System of Systems)	Targeting and Precision Navigation	Facilities and Infrastructure	Other
SEA 1439 Ph 5B.2	Collins Continuous Improvement Program			•					•												•	•	•		•	•
SEA 1439 Ph 6	Collins Sonar Replacement	•																	•		•	•	•			
SEA 1442 Ph 4	Maritime Communication Modernisation						•					•										•	•			•
SEA 1448 Ph 4A	ANZAC Electronic Support System Improvements								•						•								•			
SEA 1448 Ph 4B	ANZAC Air Search Radar Replacement												•							•						
SEA 1778 Ph 1	Deployable MCM – Organic Mine Counter Measures	•								•																

(The printed table groups all columns after the two project columns under the heading "Capability".)

PROPOSAL CONTACT OFFICERS

AIR 5077 Phase 4	AEW&C Sustainment Study	**Capability Staff:** Deputy Director Battlespace Management (02) 6265 5561	**Defence Materiel Organisation:** Director Project Management Unit AEW&C Systems Program Office (02) 4928 5220
AIR 5232 Phase 1	Air Combat Officer Training System	**Capability Staff:** Deputy Director Training (02) 6265 5450	**Defence Materiel Organisation:** Directorate of Emerging Aerospace Projects Project Manager 1 – Fixed Wing (02) 6265 5534
AIR 5276 CAP 2	AP-3C Capability Assurance Program	**Capability Staff:** Staff Officer Maritime Patrol and Response 2 (02) 6265 5447	**Defence Materiel Organisation:** Director P3 Block Upgrade Program (08) 8393 3318
AIR 5397 Phase 2	Upgrade Australian Military Airspace Communications and Control System (AMACCS)	**Capability Staff:** Deputy Director Battlespace Management (02) 6265 5561	**Defence Materiel Organisation:** Director Project Development & Integration Surveillance and Control Branch (02) 6265 6291
AIR 5405 Phase 1	Replacement Mobile Regional Operations Centre	**Capability Staff:** Staff Officer Battlespace Management 1 (02) 6265 2216	**Defence Materiel Organisation:** Director Project Development & Integration Surveillance and Control Branch (02) 6265 6291
AIR 5416 Phase 4B1 Phase 4B2	C-130J Radar Warning Receiver (RWR) C-130J Large Aircraft Infrared Countermeasures (LAIRCM)	**Capability Staff:** Deputy Director Aircraft Survivability (02) 6265 5734	**Defence Materiel Organisation:** Director Airborne Self Protection Systems Program Office (02) 6265 1615
AIR 5428 Phase 1	Pilot Training System	**Capability Staff:** AIR 5428 Desk Officer (02) 6265 5121	**Defence Materiel Organisation:** Project Manager AIR 5428 (03) 9256 3434
AIR 5431 Phase 1 Phase 2/3	Deployable Air Traffic Management and Control System Fixed Base Air Traffic Management and Control System	**Capability Staff:** Staff Officer Battlespace Management 3 (02) 6266 7317	**Defence Materiel Organisation:** Director Project Development & Integration Surveillance and Control Branch (02) 6265 6291
AIR 5432 Phase 1	Communications, Navigation, Surveillance/Air Traffic Management	**Capability Staff:** Staff Officer Battlespace Management 2 (02) 6265 7530	**Defence Materiel Organisation:** Director Project Development & Integration Surveillance and Control Branch (02) 6265 6291
AIR 5438 Phase 1A	Lead-In Fighter Capability Assurance Program	**Capability Staff:** Deputy Director Firepower (02) 6265 5568	**Defence Materiel Organisation:** Director Lead-In Fighter Management Unit (02) 4928 6906
AIR 5440 Phase 1 Phase 2	C-130J Block Upgrade Program 7.0 C-130J Block Upgrade Program 8.0	**Capability Staff:** Deputy Director Combat Mobility (02) 6265 1073	**Defence Materiel Organisation:** Project Director AIR 5440 Airlift Systems Program Office (02) 4588 1165
AIR 6000 Phase 2A/2B Phase 3 Phase 5	New Aerospace Combat Capability – 3 Squadrons Weapons for New Air Combat Capability Future Air-to-Air Weapons for New Air Combat Capability and Super Hornet	**Capability Staff:** Program Manager New Air Combat Capability (02) 6127 0001 Deputy Director Combat Enablers Aerospace Development Branch (02) 6265 5442	**Defence Materiel Organisation:** Director Commercial New Air Combat Capability (02) 6127 0086 Director Emerging Projects Guided Weapons Branch (02) 6265 1464
AIR 7000 Phase 2B	Maritime Patrol Aircraft Replacement	**Capability Staff:** Deputy Director Maritime Patrol and Response (02) 6265 3852	**Defence Materiel Organisation:** Project Manager AIR 7000 Phase 2B (02) 6265 1628
AIR 8000 Phase 1 Phase 2	Battlefield Airlift – Additional C-130J Battlefield Airlift – Caribou Replacement	**Capability Staff:** Deputy Director Combat Mobility (02) 6265 1073	**Defence Materiel Organisation:** Director New Airlift Program Office (02) 6127 2614

AIR 9000 Phase 5C	Additional Heavy Lift Helicopter	**Capability Staff:** Staff Officer Army Aviation 5 (02) 6265 6435	**Defence Materiel Organisation:** Project Manager AIR 9000 Phase 5C (02) 6265 6611
AIR 9000 Phase 7	Helicopter Aircrew Training System	**Capability Staff:** Deputy Director Maritime Aviation (02) 6265 6435	**Defence Materiel Organisation:** Project Manager AIR 9000 Phase 7 (02) 4424 1676
AIR 9000 Phase 8	Future Naval Aviation Combat System	**Capability Staff:** Deputy Director Maritime Aviation (02) 6265 6435	**Defence Materiel Organisation:** Director Emerging Aerospace Projects (02) 6265 6298
AIR 9000 SCAP 1 SCAP 2	Seahawk Capability Assurance Program 1 Seahawk Capability Assurance Program 2	**Capability Staff:** Deputy Director Maritime Aviation (02) 6265 6435	**Defence Materiel Organisation:** Manager Seahawk Capability Assurance Program (02) 4424 3349
DEF 7013 Phase 4	Joint Intelligence Support System	**Capability Staff:** Director Intelligence & Geospatial Development (02) 6265 3489	**Defence Materiel Organisation:** Director Military Geographic Information Systems Program Office (02) 6265 5268
JP 66 Phase 1	Replacement for Air Defence Targets	**Capability Staff:** Staff Officer Future Strike Systems (02) 6265 5592	**Defence Materiel Organisation:** JP 66 Project Office (07) 5467 8165 SRSPO.JP66@defence.gov.au
JP 90 Phase 1	ADF Identification Friend or Foe	**Capability Staff:** Staff Officer Battlespace Management 2 (02) 6265 7530	**Defence Materiel Organisation:** Navigation Warfare Engineer 1 Navigation Warfare Systems Program Office (02) 6265 7798
JP 129 Phase 4	Tier 1 Unmanned Aerial Vehicle (UAV)	**Capability Staff:** Staff Officer Unmanned Aerial Systems 2 (02) 6265 2386	**Defence Materiel Organisation:** Directorate of Emerging Aerospace Projects (02) 6265 6298
JP 154 Phase 1 Phase 2	Joint Counter Improvised Explosive Device Joint Counter Improvised Explosive Device	**Capability Staff:** Staff Officer Electronic Warfare (02) 6265 1884	**Defence Materiel Organisation:** JP 154 Project Manager (02) 6265 2743
JP 157 Phase 1	Replacement Refuelling Trucks	**Capability Staff:** Staff Officer Joint Theatre Distribution (02) 6265 4934	**Defence Materiel Organisation:** Land Systems Division Emerging Project Team (03) 9282 6933
JP 1544 Phase 1	Project Eden – Document Handling System		**Chief Information Officer Group:** Project Director Common Services Document and Records Management (02) 6266 4577
JP 1770 Phase 1	Rapid Environmental Assessment	**Capability Staff:** Deputy Director Patrol and Hydrographic (02) 6265 6467	**Defence Materiel Organisation:** Director Military Geographic Information Systems Program Office (02) 6265 5635
JP 1771 Phase 1	Geomatic Support System	**Capability Staff:** Deputy Director Imagery and Geospatial Information Systems (02) 6265 3897	**Defence Materiel Organisation:** Director Military Geographic Information Systems Program Office (02) 6265 5635
JP 2008 Phase 3H Phase 5B	Military Satellite Capability – Wideband Terrestrial Terminals Military Satellite Capability – Wideband Terrestrial Infrastructure	**Capability Staff:** Deputy Director Long Range Communications (02) 6265 6502	**Defence Materiel Organisation:** Director Satellites Space Systems Program Office (02) 6265 4155

JP 2025 Phase 6	Jindalee Operational Radar Network (JORN)	**Capability Staff:** Deputy Director Battlespace Management (02) 6265 5561	**Defence Materiel Organisation:** Officer Commanding Over The Horizon Radar Systems Program Office (08) 8259 4001
JP 2030 Phase 8	ADF Joint Command Support Environment	**Capability Staff:** Deputy Director Command and Control Systems (02) 6265 4086	**Defence Materiel Organisation:** Director Joint Command Support Environment (02) 6270 8332
JP 2044 Phase 3A.1 Phase 4	Project Eagle Eye Digital Topographical Systems (DTS) Upgrade	**Capability Staff:** Deputy Director Imagery and Geospatial Information Systems (02) 6265 3897	**Defence Materiel Organisation:** Director Military Geographic Information Systems Program Office (02) 6265 5635
JP 2047 Phase 3	Wide Area Communications Network Replacement		**Chief Information Officer Group:** Project Director (02) 6265 3217
JP 2048 Phase 3 Phase 5	Amphibious Watercraft Replacement Landing Craft Heavy Replacement	**Capability Staff:** Staff Officer Amphibious Mobility (02) 6265 2429 Staff Officer Amphibious and Afloat Support (02) 6265 4726	**Defence Materiel Organisation:** Program Manager Amphibious Deployment and Sustainment Capability (02) 6266 7040
JP 2060 Phase 3	ADF Deployable Health Capability	**Capability Staff:** Staff Officer Health (02) 6265 7689	**Defence Materiel Organisation:** Land Systems Division Emerging Project Team (03) 9282 4307
JP 2064 Phase 3	Geospatial Information Infrastructure and Services	**Capability Staff:** Deputy Director Imagery and Geospatial Information Systems (02) 6265 3897	**Defence Materiel Organisation:** Director Military Geographic Information Systems Program Office (02) 6265 5635
JP 2065 Phase 2 Phase 3	Integrated Broadcast System Integrated Broadcast System	**Capability Staff:** Deputy Director Intelligence Systems (02) 6265 1222	**Defence Materiel Organisation:** Project Director JP 2065 (02) 6265 3011
JP 2068 Phase 2B.2	Computer Network Defence	**Capability Staff:** Director Network Application Development (02) 6265 7983	
JP 2069 Phase 2	High Grade Cryptographic Equipment	**Capability Staff:** Director Network Application Development (02) 6265 7983	**Defence Materiel Organisation:** Project Manager JP 2069 (02) 6266 1893
JP 2070 Phase 4	AP-3C Light Weight Torpedo Integration	**Capability Staff:** Deputy Director Combat Enablers Aerospace Development Branch (02) 6265 5442	**Defence Materiel Organisation:** Director Emerging Projects Guided Weapons Branch (02) 6265 1464
JP 2072 Phase 2A Phase 2B Phase 3	Battlespace Communications System (Land) Battlespace Communications System (Land) Battlespace Communications System (Land)	**Capability Staff:** Staff Officer Mobile Communications – Land (02) 6265 6501	**Defence Materiel Organisation:** JP 2072 Project Director (02) 6265 4183
JP 2077 Phase 2D	Improved Logistics Information Systems	**Capability Staff:** Deputy Director Materiel Logistic Information Systems (02) 6265 1101	**Defence Materiel Organisation:** Project Director JP 2077 Phase 2D (03) 9256 3199
JP 2078 Phase 2	Hyper-Spectral Imaging	**Capability Staff:** Deputy Director Space Systems (02) 6265 2970	**Defence Materiel Organisation:** Director Military Geographic Information Systems Program Office (02) 6265 5635

JP 2080 Phase 2B.1 Phase 3	Defence Management Systems Improvement – Personnel Systems Modernisation Defence Management Systems Improvement – Finance System		**Chief Information Officer Group:** Project Director (02) 6266 4780
JP 2085 Phase 2/3	Explosive Ordnance Warstock	**Capability Staff:** Deputy Director Explosive Ordnance (02) 6265 1003	**Defence Materiel Organisation:** **Guided Weapons:** Deputy Director Emerging Projects (02) 6265 1464 **Non-Guided Explosive Ordnance:** Deputy Director Project Assurance (02) 4737 0807
JP 2089 Phase 2B Phase 3	Tactical Information Exchange Domain (Data Links) Tactical Information Exchange Domain (Data Links)	**Capability Staff:** Staff Officer Communications Air (02) 6265 7215	**Defence Materiel Organisation:** Project Director JP 2089 (02) 6266 0722
JP 2090 Phase 1C	Combined Information Environment	**Capability Staff:** Staff Officer Coalition Infrastructure (02) 6265 1316	**Defence Materiel Organisation:** Director Coalition Networks and Wide Area (02) 6128 7176
JP 2096 Phase 1	Surveillance Enhancement	**Capability Staff:** Director Intelligence and Geospatial Development (02) 6265 3489	**Defence Materiel Organisation:** Director Military Geographic Information Systems Program Office (02) 6265 5635
JP 2097 Phase 1B	REDFIN – Enhancements to Special Operations Capability	**Capability Staff:** Deputy Director Special Operations (02) 6265 5215	**Defence Materiel Organisation:** Project Director JP 2097 Phase 1B (03) 9282 3957
JP 2099 Phase 1	Identity Management – Project CERTE	**Chief Information Officer Group:** (Sponsor) Director Electronic Business Integration (02) 6128 7592	**Chief Information Officer Group:** (Acquisition & Sustainment) Project Manager Application Development Branch (02) 6266 3993
JP 2110 Phase 1A Phase 1B	Chemical, Biological, Radiological, Nuclear Defence Chemical, Biological, Radiological, Nuclear Defence	**Capability Staff:** Staff Officer Nuclear, Biological and Chemical Defence (02) 6265 7850	**Defence Materiel Organisation:** Land Systems Division Emerging Project Team (03) 9282 6933
JP 3011 Phase 1	Non-Lethal Weapons	**Capability Staff:** Staff Officer Small Arms (02) 6265 1863	**Defence Materiel Organisation:** Land Systems Division Emerging Project Team (03) 9282 7165
JP 3021 Phase 1	Joint Combined Training Capability (JCTC)	**Capability Staff:** Director Network Infrastructure Development (02) 6265 2079	**Defence Materiel Organisation:** Director Airborne Self Protection Systems Program Office (02) 6265 1615
JP 3024 Phase 1	Woomera Range Remediation	**Capability Staff:** Director Network Infrastructure Development (02) 6265 2079	**Defence Materiel Organisation:** Deputy Dirtector JP 3024 (08) 8393 2206
JP 3025 Phase 1	Deployable Incident Response Regiment (IRR) Capability	**Capability Staff:** Staff Officer Nuclear, Biological and Chemical Defence (02) 6265 7850	**Defence Materiel Organisation:** Land Systems Division Emerging Project Team (03) 9282 6933
JP 3027 Phase 1	JDAM Enhancement	**Capability Staff:** Deputy Director Combat Enablers Aerospace Development Branch (02) 6265 5442	**Defence Materiel Organisation:** Director Emerging Projects Guided Weapons Branch (02) 6265 1464
JP 3028 Phase 1	Defence Simulation Program	**Capability Staff:** JP 3028 Desk Officer (02) 6265 3451	**Defence Materiel Organisation:** Director Aerospace Simulators and Special Purpose Aircraft (02) 6127 2775

JP 5408 Phase 3	ADF Navigation Warfare (NAVWAR) Capability	**Capability Staff:** Deputy Director Combat Enablers Aerospace Development Branch (02) 6265 5442	**Defence Materiel Organisation:** Project Manager JP 5408 Navigation Warfare Systems Program Office (02) 6265 1192
LAND 17 Phase 1	Artillery Replacement	**Capability Staff:** Staff Officer Fire Support (02) 6265 1734	**Defence Materiel Organisation:** Project Director LAND 17 (03) 9282 5832
LAND 53 Phase 1BR	NINOX – Night Fighting Equipment Technology Refresh	**Capability Staff:** Staff Officer Small Arms (02) 6265 4349	**Defence Materiel Organisation:** Project Director Surveillance (03) 9282 6057
LAND 75 Phase 3.4 Phase 4	Battlefield Command Support System Battlefield Command Support System	**Capability Staff:** Staff Officer LAND 75 (02) 6265 7809	**Defence Materiel Organisation:** Project Manager LAND 75 (02) 6266 7432
LAND 112 Phase 4	ASLAV Enhancement	**Capability Staff:** Staff Officer Combat (Heavy) (02) 6265 4360	**Defence Materiel Organisation:** Project Manager ASLAV Phase 4 (03) 9282 3926
LAND 121 Phase 4 Phase 5A	Overlander Overlander	**Capability Staff:** Deputy Director Mobility (02) 6265 7837	**Defence Materiel Organisation:** Program Manager Overlander (03) 9282 7658
LAND 125 Phase 3A Phase 3B Phase 3C Phase 4	Soldier Enhancement Version 2 – C4I Component Soldier Enhancement Version 2 – Survivability Soldier Enhancement Version 2 – Lethality Soldier Enhancement Version 3	**Capability Staff:** Staff Officer Soldier Combat Systems (02) 6265 2810	**Defence Materiel Organisation:** Project Director LAND 125 (03) 9282 6486
LAND 136 Phase 1	Land Force Mortar Replacement	**Capability Staff:** Staff Officer Intelligence, Surveillance, Target Acquisition and Reconnaissance (02) 6265 6519	**Defence Materiel Organisation:** Land Systems Division Emerging Projects Team (03) 9282 4307
LAND 146 Phase 2	Combat Identification for Land Forces	**Capability Staff:** Staff Officer Air (02) 6265 3875	**Defence Materiel Organisation:** LAND 146-2 Project Manager (03) 9622 2801
LAND 155 Phase 1	Enhanced Gap Crossing Capability	**Capability Staff:** Staff Officer Engineers (02) 6265 4819	**Defence Materiel Organisation:** Land Systems Division Emerging Project Team (03) 9282 7165
LAND 998 Phase 1	Replacement Aviation Fire Trucks	**Capability Staff:** Staff Officer Engineers (02) 6265 4819	**Defence Materiel Organisation:** Director Combat Support Vehicle Systems Program Office (03) 9282 4181
SEA 1000 Phase 1A Phase 1B Phase 1C	Future Submarine – Concept Design Future Submarine – Preliminary Design Future Submarine – Detailed Design	**Capability Staff:** Future Submarine Project Coordinator (02) 6265 6178	**Defence Materiel Organisation:** SEA 1000 Project Director (02) 6265 3519
SEA 1180 Phase 1	Patrol Boat, Mine Hunter Coastal and Hydrographic Ship Replacement Project	**Capability Staff:** Deputy Director Mine Warfare and Clearance Diving (02) 6265 5913	**Defence Materiel Organisation:** Director Maritime Acquisition Support (02) 6265 7757
SEA 1350 Phase 1	Navy Surface and Subsurface Ranges	**Capability Staff:** Staff Officer Mine Warfare and Clearance Diving (02) 6265 6477	**Defence Materiel Organisation:** Director Maritime Ranges Systems Program Office and Sonar Group (02) 6265 2341
SEA 1351 Phase 1	Replacement East Coast Tugs	**Capability Staff:** Staff Officer Mine Warfare and Clearance Diving (02) 6265 6477	**Defence Materiel Organisation:** Director Maritime Acquisition Support (02) 6265 7757
SEA 1352 Phase 1	Evolved Sea Sparrow Missile (ESSM) Upgrade and Inventory Replenishment	**Capability Staff:** Deputy Director Systems (02) 6265 5466	**Defence Materiel Organisation:** Director Emerging Projects Guided Weapons Branch (02) 6265 1464

SEA 1354 Phase 1	Submarine Escape Rescue and Abandonment Systems (SERAS)	**Capability Staff:** Deputy Director Amphibious and Afloat Support (02) 6265 3415	**Defence Materiel Organisation:** Director COLLINS Systems Program Office (08) 9553 2494
SEA 1357 Phase 1	Close-In Weapons System (CIWS) Phalanx Block Upgrade	**Capability Staff:** Staff Officer Above Water Warfare (02) 6265 6630	**Defence Materiel Organisation:** Director FFG Systems Program Office (02) 9359 6285
SEA 1358 Phase 1	Mini Typhoon for ANZAC Class	**Capability Staff:** Staff Officer Above Water Warfare (02) 6265 6630	**Defence Materiel Organisation:** Director ANZAC Systems Program Office (08) 9591 9850
SEA 1397 Phase 5A Phase 5B	Nulka Missile Decoy Enhancements Nulka Missile Decoy Enhancements	**Capability Staff:** Staff Officer Electronic Warfare (02) 6265 5101	**Defence Materiel Organisation:** Director Maritime Electronic Warfare Systems Program Office (02) 6265 1624
SEA 1408 Phase 2	Torpedo Self-defence	**Capability Staff:** Staff Officer Under Water Warfare (02) 6265 6371	**Defence Materiel Organisation:** Director Maritime Acquisition Support (02) 6265 2596
SEA 1430 Phase 5	Digital Hydro Display System Upgrade	**Capability Staff:** Deputy Director Patrol and Hydrographic (02) 6265 6467	**Defence Materiel Organisation:** Director Military Geographic Information Systems Program Office (02) 6265 5635
SEA 1439 Phase 3.1 Phase 5B.2 Phase 6	Collins Obsolescence Management Collins Continuous Improvement Program Collins Sonar Replacement	**Capability Staff:** Deputy Director Submarines (02) 6265 2134	**Defence Materiel Organisation:** Project Manager SEA 1439 Phase 3.1 (08) 9553 5507 Project Manager SEA 1439 Phase 5B.2 (02) 6266 7108 Generation Manager Submarine Combat Systems Program Office (02) 6265 1250
SEA 1442 Phase 4	Maritime Communication Modernisation	**Capability Staff:** Deputy Director Communications 2 (02) 6265 1316	**Defence Materiel Organisation:** Project Director SEA 1442 (02) 6265 7515
SEA 1448 Phase 4A Phase 4B	ANZAC Electronic Support System Improvements ANZAC Air Search Radar Replacement	**Capability Staff:** Staff Officer Electronic Warfare (02) 6265 5101 Deputy Director Systems (02) 6265 5466	**Defence Materiel Organisation:** Director Maritime Electronic Warfare Systems Program Office (02) 6265 1624 Director ANZAC Systems Program Office (08) 9591 9850
SEA 1778 Phase 1	Deployable MCM – Organic Mine Counter Measures	**Capability Staff:** Staff Officer Mine Warfare and Clearance Diving (02) 6265 6477	**Defence Materiel Organisation:** Mine Hunter Coastal Project Officer (02) 9926 2686 Explosive Ordnance Component: Director Emerging Projects Guided Weapons Branch (02) 6265 1464