Australian Government

Department of Defence

Defence Capability Plan

2004 - 2014

Public Version

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2004-2014

Public Version

Foreword

Senator the Hon Robert Hill
Minister for Defence

The *2004-2014 Defence Capability Plan: Public Version* (DCP 2004-14) comes at the conclusion of the most significant review of Defence's capability requirements since the Government's Defence White Paper, *Defence 2000: Our Future Defence Force*. In the four years since *Defence 2000*, Australia's strategic environment has changed significantly. Global terrorism and the spread of weapons of mass destruction have emerged as prominent threats to Australia's national security. In addition, some adverse trends in our immediate region have continued.

Australia's National Security: A Defence Update 2003 reviewed the implications of our changed strategic environment for our Defence posture and concluded that while the principles set out in the Defence White Paper remain sound, some rebalancing of capability and expenditure would be necessary to take account of these changes. This rebalancing occurred via the exhaustive 2003 Defence Capability Review, and has resulted in the plan of major capital investment outlined in the DCP 2004-14.

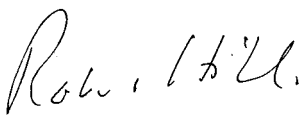
The DCP 2004-14 builds on the Government's 2001 commitment to keep Australian industry abreast of Defence's acquisition planning so that it can effectively perform its role as a crucial component of our national Defence capability. It is a concrete example of the Government's recognition that industry requires some level of certainty and visibility of our Defence planning parameters in order to provide the most appropriate and effective capabilities for the Australian Defence Force (ADF).

While indicative only, the information contained within this DCP will enable industry to:

- obtain early information and broad guidance on Defence's long-term capability plans;
- identify the skills, technology and infrastructure development requirements needed to support defence capability;
- identify opportunities for involvement in defence capability delivery and support;
- better understand Defence's capability requirements; and
- provide meaningful contributions to Defence's capability definition processes.

The DCP 2004-14 is a source of valuable reference material. Importantly though, it is also an instrument for facilitating the ongoing cooperation and successful partnering between Defence and industry that is required to provide the ADF with the finest equipment and support possible - equipment and support that will help us face the challenges posed by our changing world.

I commend this document to Australian defence industry.



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About This Plan

The Defence Capability Plan: Public Version 2004-2014 (DCP 2004-14) provides a brief account of major capital equipment proposals that are planned to be approved in the period 2004 to 2014.

Details relating to a small number of classified and sensitive proposals have been withheld. These proposals represent less than two percent of the total forecast expenditure.

Proposals generally consist of a number of self-contained phases. Each will be reviewed and approved separately by Government. Planning for the later phases of some proposals is still too immature to provide specific details on each phase.

Potential industry partners should note that all proposals can undergo substantial changes; just as the DCP 2004-14 differs from its predecessors, so too will any future versions. Changing strategic circumstances, new technologies and changed priorities will influence the specific proposals contained in the Plan as well as the overall composition of the Plan. Accordingly, details provided about unapproved proposals should be regarded as indicative only, and industry should consult closely with Defence before acting on the information. Contact points for individual proposals have been provided in the DCP 2004-14.

Contact with industry will generally commence well before the Year-of-Decision as proposal sponsors and managers undertake pre-approval study activity and prepare the necessary departmental documentation. Early contact with industry in the capability definition stages is facilitated through the various Environmental Working Groups established under the Capability Development Advisory Forum. The Capability Staff contacts provided in the DCP 2004-14 can provide further information on the timing and nature of Industry involvement.

The majority of proposals are expected to include substantial Australian content, during both the acquisition and through-life support stages of a proposal's life cycle, in support of Australia's self-reliance objectives.

DCP 2004-14 contains equipment acquisition proposals planned to be approved in the next 10 years (and a number 2003/04 proposals not yet approved) covering the range of Defence capability, including Land Forces, Air Combat, Maritime Forces (both surface and submarines), 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 homepage at www.defence.gov.au/dmo.

The DCP 2004-14 contains project specific information in the following subsets:

- **This Phase** - describes what is to be acquired under this phase of the project;
- **Proposal Background** - details how each specific project phase relates to the overall capability requirement;
- **Defence Needs of Australian Industry** - outlines industry sectors likely to be called upon to provide goods and services to the proposal;
- **Australian Industry Involvement** - identifies opportunities for Australian Industry Involvement in the acquisition and through-life-support stages of the proposal;
- **Potential Prime Contractors** - lists potential primes, if identifiable;
- **Estimated Schedule** - provides indicative Years-of-Decision and In-service Delivery bands;
- **Estimated Capital Expenditure** - provides indicative capital expenditure bands;
- **Other Unapproved Phases** - if applicable; and
- **Contact Details** - for both the proposal sponsor (usually Defence's Capability Systems Division) and the capability acquirer (Defence Materiel Organisation).

The proposals are listed in alphanumeric order (ie AIR, DEF, JP, LAND and SEA proposals in number order). Indexes are also provided. These categorise proposals by estimated expenditure band and indicative Year-of-Decision.

The estimated phase expenditure details will assist in providing a broad guide to planning, and will encourage early involvement of industry in dialogue on Defence's future capability proposals. The estimated expenditure is provided in 2003-04 prices and is in Australian dollars.

The expenditure information is grouped into the following expenditure bands:

Less than $10m	$150m to $200m	$1000m to $1500m
$10m to $20m	$200m to $250m	$1500m to $2000m
$20m to $30m	$250m to $350m	$2000m to $2500m
$30m to $50m	$350m to $450m	$2500m to $3500m
$50m to $75m	$450m to $600m	$3500m to $4500m
$75m to $100m	$600m to $750m	$4500m to $6000m
$100m to $150m	$750m to $1000m	More than $6000m

The expenditure figures reflect the total estimated expenditure (including internal Defence costs) of bringing the new capability into service. In addition to the prime system expenditure, it includes such elements as Government Furnished Material, Integrated Logistics Support (including initial stocks of spares, training, publications, facilities, and test and support equipment), and administrative expenditure. This expenditure can represent substantial proportions of the total expenditure on the proposal. As a rule of thumb, the main contract typically comprises around two-thirds of the total proposal expenditure, although the actual amount will vary depending on the nature of the proposal.

The estimated expenditure information is provided to give an indication of the scope and magnitude of specific proposals. The estimates for individual proposals are refined as the plan develops through the Defence's capability development and tendering processes. The expenditure information provided should be regarded as indicative only, and should not be relied upon for detailed planning or commitment.

Points of contact (both within the Capability Staff and Defence Materiel Organisation) are provided should additional information on specific proposals be required. Project information should in the first instance be sought from the Capability Staff contact.

Industry Sector Implications

The following charts provide a broad indication of the estimated Defence expenditure over the period from FY2003/04 to FY 2013/14 for proposals included in DCP 2004-14. The charts do not include already approved projects.

This estimated expenditure has been aggregated and broken down into five broad industry sectors:

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

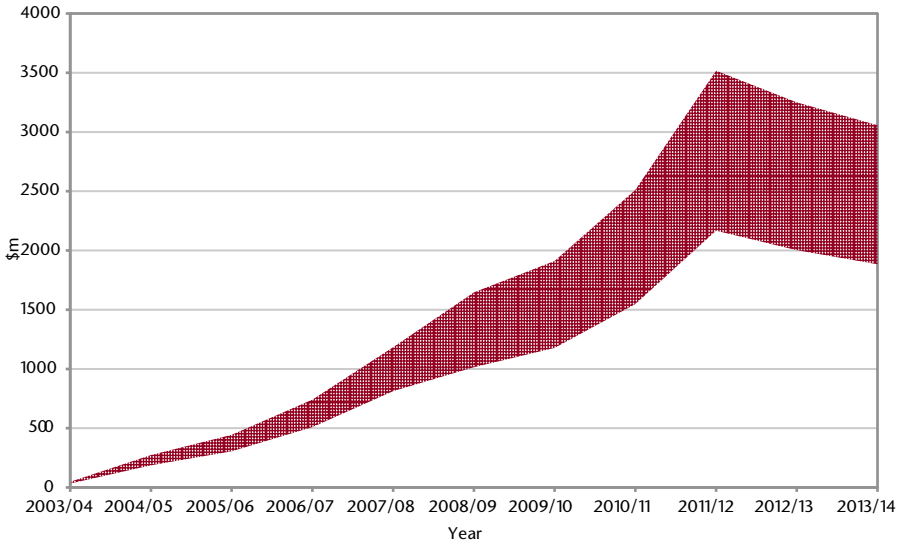
The proposals listed in this document are still in varying stages of planning. Many have yet to be fully defined in both capability and possible equipment solution terms. So these graphs show an estimated range of expenditure in each industry sector over the coming decade.

Proposals have been attributed to industry sectors primarily on the basis of their Defence environment (AIR, DEF, JP, LAND or SEA), as they were for earlier versions of the DCP. Estimated expenditure within the aerospace, maritime, vehicles and land, and weapons and munitions sectors are represented in Figures 1, 2, 3 and 4 respectively.

In relation to the electronic systems sector, the situation is complicated by the fact that many aerospace, maritime, land and weapons proposals include a large 'embedded' electronics component. Consequently, two figures are presented for the electronic systems sector. Figure 5 illustrates estimated expenditure based on clearly discernible electronic systems proposals, as per Figures 1 through 4. Figure 6 illustrates estimated expenditure taking into account electronic systems expenditure embedded within other environmental proposals. As can be seen in Figure 6, electronic systems work embedded in other proposals will significantly increase estimated expenditure within the electronic systems sector (with a corresponding reduction in other environmental areas).

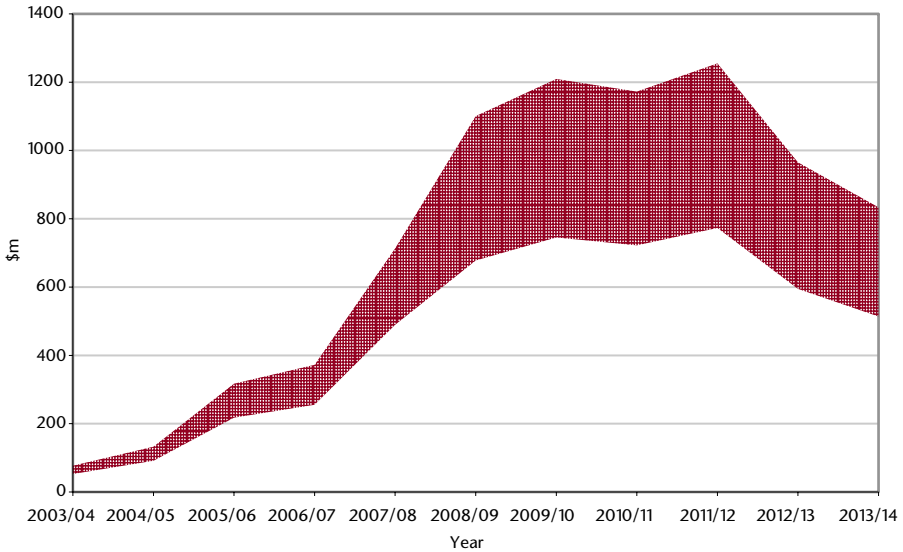
Figures 7 and 8 show broad estimates of the proportion of total industry activity represented by the proposals in DCP 2004-14 that is expected to take place in each industry sector over the period. Figure 7 illustrates this when industry sector attributions are made on the basis of proposals' Defence environment (as discussed above). Figure 8 shows the proportions when the Electronic Systems and Weapons and Munitions activity 'embedded' in other environmental proposals is identified and presented as such (as is the case for Figure 6).

Figure 1. Aerospace



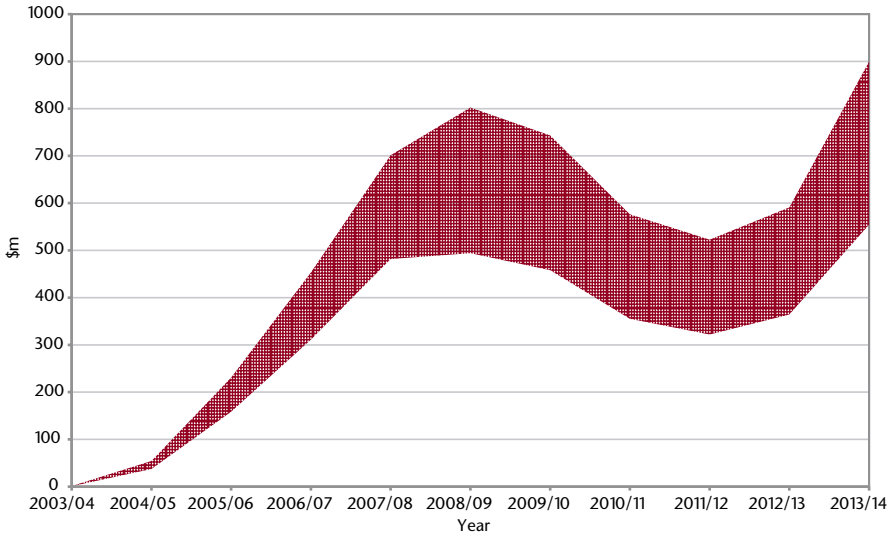
Aerospace proposals are the largest area of expenditure on new projects over the next decade. The figure indicates that expenditure is expected to increase over the nominated period as new platforms are acquired and introduced into service.

Figure 2. Maritime



Maritime expenditure for new projects is expected to rise dramatically till 2009/10 as new platforms are commenced. Figure 2 indicates that expenditure will taper off from 2011/12. This fall in expenditure reflects the high up-front costs associated with major naval shipbuilding rather than a significant reduction in sector activity.

Figure 3. Vehicles and Land



Vehicles and Land projects are generally of relatively short duration. This is illustrated in Figure 3 with expenditure on new projects increasing rapidly to 2008/09 and then falling away as the initial group of proposals is completed. Estimated expenditure rises again at the end of the nominated period.

Figure 4. Weapons and Munitions

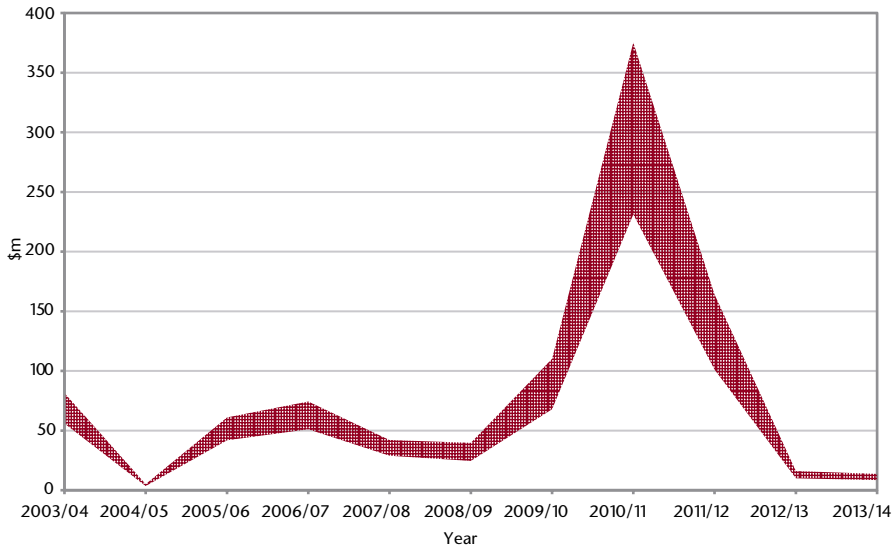


Figure 4 illustrates a sharp peak in estimated expenditure for new projects within the Weapons and Munitions sector in 2010/11. Other than this peak, estimated expenditure within this sector is relatively constant over the nominated period.

Figure 5. Electronic Systems

(Clearly Discernible Electronics Proposals)

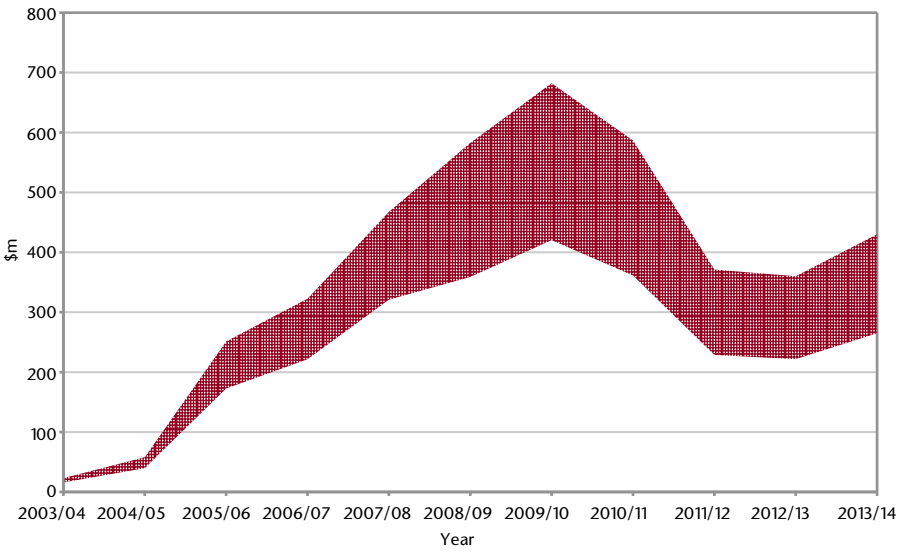


Figure 5 illustrates that estimated expenditure on new 'electronics' specific proposals increases sharply over the next six years, with a sharp fall after this time. This reduction probably reflects uncertainty in electronic system requirements after this time due to the rate of technological change.

Figure 6. Electronic Systems

(Incorporating estimates of Electronic Systems sector activity embedded in Aerospace, Vehicles and Land Systems, and Maritime sectors)

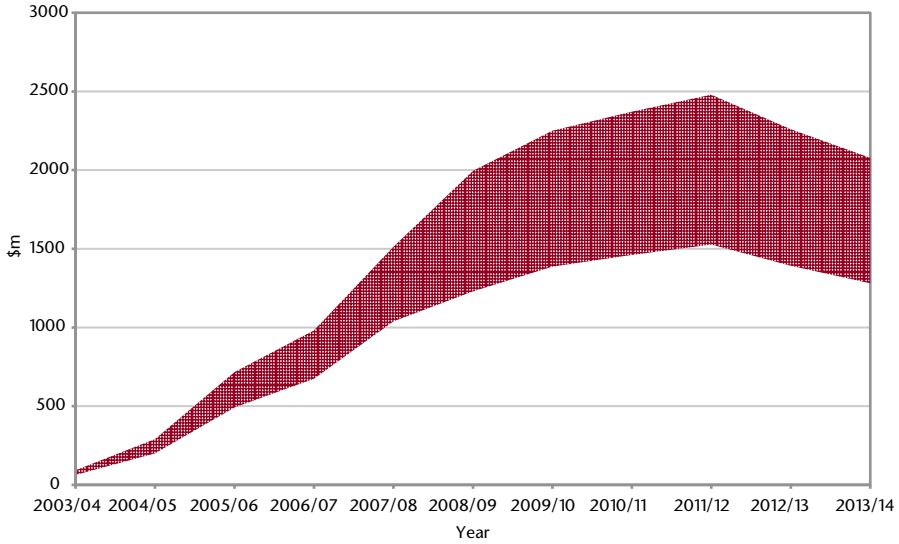


Figure 6 illustrates total estimated new expenditure within the Electronic Systems sector taking into account the electronic systems work assumed to be embedded within other environmental proposals. The figure indicates that expenditure will increase and then remain relatively constant over the coming decade. It also shows that estimated Electronic Systems activity is larger than all other industry sectors when attributed in this fashion.

Figure 7. DCP Related Estimated Industry Sector Activity 2003/04 to 2013/14 - Proportional Presentation

(Proposals attributed to industry sectors primarily on the basis of their Defence environment)

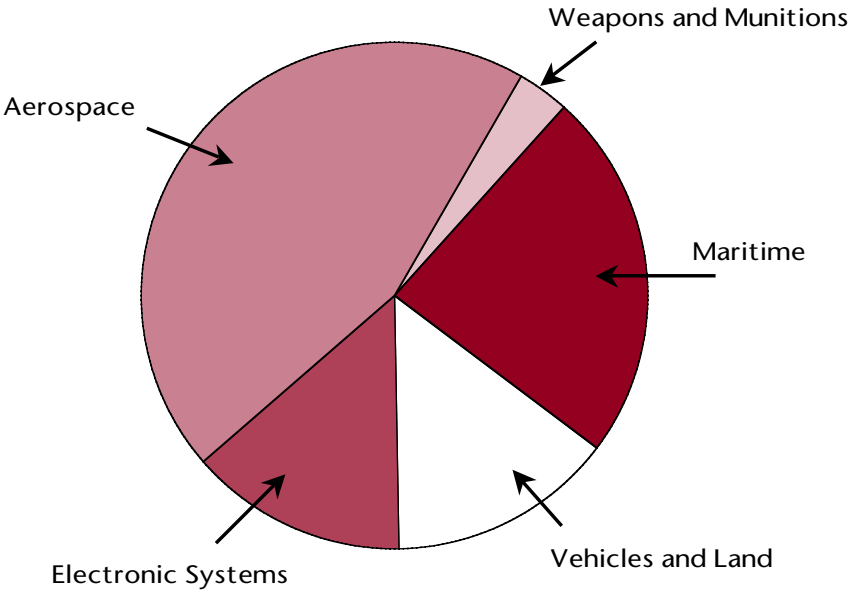
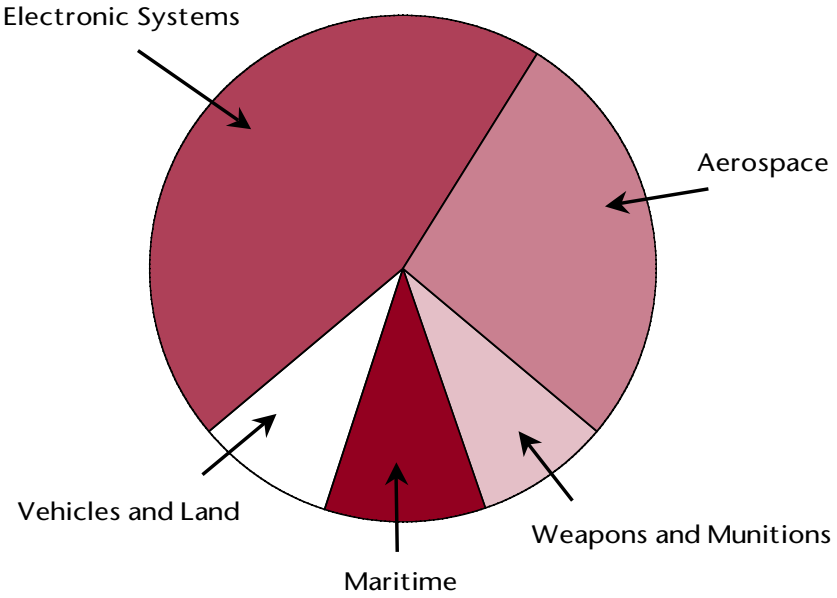


Figure 8. DCP Related Estimated Industry Sector Activity 2003/04 to 2013/14 - Proportional Presentation

(Embedded Electronic Systems and Weapons and Munitions activity discretely identified)



Many proposals described in the DCP 2004-14 require expertise in a number of industry sectors. The table below gives an indication of which industry sectors are expected to be involved with each proposal in DCP 2004-14.

Proposal Number	Phase	Phase Name	Maritime	Vehicles & Land	Aerospace	Weapons & Munitions	Electronics
AIR 5276	Phase 5	P-3C Orion EO Enhancement					◆
AIR 5276	Phase 6	Data Links for AP-3C Orion					◆
AIR 5276	Phase 8B	AP-3C Electronic Support Measure - Acquisition			◆		◆
AIR 5276	Phase 8C	AP-3C Technology Insertion/ Component Purchase			◆		◆
AIR 5276	Phase 9	AP-3C Orion Component Enhancements			◆		
AIR 5376	Phase 2.3	F/A-18 EWSP					◆
AIR 5376	Phase 2.4	F/A-18 Forward Looking Infra-red Capability			◆		◆
AIR 5376	Phase 3.2C	Hornet Structural Refurbishment Stage 2 - additional			◆		
AIR 5405	Phase 1	Replacement Mobile Region Operations Centre					◆
AIR 5409	Phase 1	Bomb Improvement Program				◆	◆
AIR 5416	Phase 3	Enhanced EWSP for F-111 (RWR)			◆		◆
AIR 5416	Phase 4	C-130J EWSP			◆		◆
AIR 5418	Phase 1	Follow-on Stand-Off Weapon Capability			◆	◆	◆
AIR 5427	Phase 1	Transportable Air Operations Towers		◆			◆
AIR 5428	Phase 1	Pilot Training System			◆		◆
AIR 5431	Phase 1	Replacement of Alenia Radar System					◆
AIR 5432	Phase 1	Communications, Navigation, Surveillance/Air Traffic Management					◆
AIR 6000	Phase 2A	New Aerospace Combat Capability			◆		◆
AIR 6000	Phase 2B	New Aerospace Combat Capability			◆		◆
AIR 6000	Phase 2C	New Aerospace Combat Capability			◆		◆
AIR 7000	Phase 1	Multi-mission Unmanned Aerial Vehicle (MUAV)			◆		◆
AIR 7000	Phase 2	Maritime Patrol Aircraft Capability			◆		◆

Proposal Number	Phase	Phase Name	Maritime	Vehicles & Land	Aerospace	Weapons & Munitions	Electronics
AIR 8000	Phase 1	C-130H Refurbishment			◆		◆
AIR 8000	Phase 2	Battlefield Airlifter			◆		◆
AIR 9000	Phase 2	Additional Trooplift Helicopters			◆		◆
AIR 9000	Phase 3B	Seahawk Mid-Life Upgrade - Initial Design Activity			◆	◆	◆
AIR 9000	Phase 3C	Seahawk Mid-Life Upgrade			◆	◆	◆
AIR 9000	Phase 4	Black Hawk Mid-Life Upgrade			◆		◆
AIR 9000	Phase 5A	Chinook Upgrade - Early Engine Replacement			◆		
AIR 9000	Phase 5B	Chinook Upgrade			◆		◆
AIR 9001	Phase 1	Training Helicopter Lease			◆		
DEF 224	Phase 2B	Force Level Electronic Warfare		◆			
DEF 224	Phase 3	Force Level Electronic Warfare		◆			
DEF 7013	Phase 4	Joint Intelligence Support System					◆
JP 1	Phase R	Harpoon Missiles Upgrade	◆		◆	◆	◆
JP 66	Phase 1	Replacement for Air Defence Targets			◆		◆
JP 90	Phase 1	ADF Identification Friend or Foe					◆
JP 126	Phase 2	Joint Theatre Distribution System		◆			◆
JP 129	Phase 2	Airborne Surveillance for Land Operations			◆		◆
JP 2008	Phase 3F	Military Satellite Communications					◆
JP 2008	Phase 4	Military Satellite Communications					◆
JP 2025	Phase 5	JORN Upgrade					◆
JP 2030	Phase 8	ADF Joint Command Support Environment					◆
JP 2030	Phase 9	ADF Joint Command Support Environment					◆
JP 2044	Phase 3A	Space Based Surveillance Capability					◆
JP 2044	Phase 3B	Space Based Surveillance Capability					◆
JP 2047	Phase 2A	Defence Wide Area Communications Network					◆
JP 2047	Phase 2B	Wide Area Communications Network					◆
JP 2047	Phase 2C	Wide Area Communications Network					◆

Proposal Number	Phase	Phase Name	Maritime	Vehicles & Land	Aerospace	Weapons & Munitions	Electronics
JP 2047	Phase 3	Wide Area Communications Network Replacement					◆
JP 2048	Phase 2	Amphibious and Afloat Support Study	◆				◆
JP 2048	Phase 3	Amphibious Watercraft Replacement	◆				◆
JP 2048	Phases 4A&4B	Amphibious Deployment and Sustainment (ADAS)	◆				◆
JP 2048	Phase 4C	Strategic Lift Capability	◆				◆
JP 2060	Phase 2B	Enhanced Deployable Medical Capability		◆			
JP 2060	Phase 3	ADF Deployable Medical Capability		◆			
JP 2064	Phase 3	Geospatial Information Infrastructure and Services					◆
JP 2065	Phase 2	Integrated Broadcast System					◆
JP 2065	Phase 3	Integrated Broadcast System					◆
JP 2068	Phase 2A	DNOC - Defence Network Management System (DNMS)					◆
JP 2068	Phase 2B	Computer Network Defence					◆
JP 2069	Phase 1B	High Grade Cryptographic Equipment					◆
JP 2069	Phase 2	High Grade Cryptographic Equipment					◆
JP 2072	Phase 2	Battlespace Communications System (Land)		◆			◆
JP 2072	Phase 3	Battlespace Communications System (Land)		◆			◆
JP 2077	Phase 2B	Improved Logistics Information Systems					◆
JP 2080	Phase 2A	Defence Management Systems Improvement					◆
JP 2080	Phase 2B	Defence Management Systems Improvement					◆
JP 2080	Phase 3	Defence Management Systems Improvement					◆
JP 2080	Phase 4	Defence Management Systems Improvement					◆

Proposal Number	Phase	Phase Name	Maritime	Vehicles & Land	Aerospace	Weapons & Munitions	Electronics
JP 2085	Phase 1B	Explosive Ordnance Warstock				◆	
JP 2085	Phase 2	Explosive Ordnance Warstock				◆	
JP 2085	Phase 3	Explosive Ordnance Warstock				◆	
JP 2089	Phase 2	Tactical Information Exchange Domain (Data Links)					◆
JP 2089	Phase 3	Tactical Information Exchange Domain (Data Links)					◆
JP 2090	Phase 1B	Combined Information Environment					◆
JP 2095	Phase 1	Aviation Fire Trucks		◆			
JP 2096	Phase 1	Surveillance Enhancement					◆
JP 2097	Phase 1	REDFIN - Enhancements to Special Operations Capability	◆	◆	◆	◆	◆
JP 5408	Phase 2B	ADF GPS Enhancement					◆
JP 5408	Phase 3A	ADF GPS Enhancement - Risk Study					◆
JP 5408	Phase 4A	ADF GPS Enhancement - Risk Study					◆
JP 8001	Phase 2B	HQAST - Collocation		◆			◆
JP 8001	Phase 3C.3	Accredited Secure Intelligence Facility		◆			◆
LAND 17		Artillery Replacement - 105mm & 155mm				◆	◆
LAND 40	Phase 2	Direct Fire Support Weapon				◆	◆
LAND 53	Phase 1BR	NINOX - Night Fighting Equipment Replacement					◆
LAND 58	Phase 3	Weapon Locating Radar Life of Type Extension					◆
LAND 75	Phase 3.4	Battlefield Command Support System					◆
LAND 75	Phase 4	Battlefield Command Support System					◆
LAND 91	Phase 6	Small Arms Life of Type Extension				◆	
LAND 112	Phase 4	ASLAV Enhancement		◆			◆
LAND 121	Phase 3A	Overlander - Field Vehicles & Trailers		◆			

Proposal Number	Phase	Phase Name	Maritime	Vehicles & Land	Aerospace	Weapons & Munitions	Electronics
LAND 121	Phase 3B	Overlander - Field Vehicles & Trailers		◆			
LAND 125	Phase 2B	Soldier Combat System - Preliminary Design		◆			
LAND 125	Phase 2C	Soldier Combat System - Final Design		◆			
LAND 125	Phase 3	Soldier Combat System - Acquisition		◆		◆	◆
LAND 125	Phase 4	Soldier Combat System - Further Acquisition		◆		◆	◆
LAND 144	Phase 1	Counter Mine Capability		◆			◆
LAND 146	Phase 1	Combat Identification for Land Forces		◆			◆
LAND 400	Phase 1	Survivability of Ground Forces		◆			◆
LAND 907	Phase 1	Main Battle Tank Replacement		◆		◆	◆
SEA 1390	Phase 4B	FFG SM-1 Missile Replacement	◆			◆	◆
SEA 1390	Phase 5	MK-92 Radar Support Equipment					◆
SEA 1428	Phase 4	Evolved Seasparrow Missiles				◆	◆
SEA 1439	Phase 5B	Collins Continuous Improvement Program	◆				◆
SEA 1439	Phase 6	Collins Sonar Replacement	◆				◆
SEA 1442	Phase 3	Maritime Communication & Information Management Architecture Modernisation - Initial Capability					◆
SEA 1442	Phase 4	Maritime Communication & Information Management Architecture Modernisation - Major Capability					◆
SEA 1448	Phase 2B	ANZAC ASMD Upgrade - Fire Control Radar	◆				◆
SEA 1654	Phase 2A	Maritime Operational Support Capability - WESTRALIA Replacement	◆				◆

Proposal Number	Phase	Phase Name	Maritime	Vehicles & Land	Aerospace	Weapons & Munitions	Electronics
SEA 1654	Phase 2B	Maritime Operational Support Capability - Auxiliary Oiler Replacement	◆				◆
SEA 1654	Phase 3	Maritime Operational Support Capability - SUCCESS Replacement	◆				◆
SEA 4000	Phase 1C	Air Warfare Destroyer Study	◆				
SEA 4000	Phase 2	Air Warfare Destroyer - Design Activity	◆				◆
SEA 4000	Phase 3	Air Warfare Destroyer	◆			◆	◆

AIR 5276

Phase 5 P-3C Orion EO Enhancement
Phase 6 Data Links for AP-3C Orion
Phase 8B AP-3C Electronic Support Measure - Acquisition
Phase 8C AP-3C Technology Insertion/Component Purchase
Phase 9 AP-3C Orion Component Enhancements

These Phases

Phase 5 will replace the Infra-red Detection System on the Royal Australian Air Force (RAAF) AP-3C aircraft with a modern electro-optic system.

Phase 6 will update the data links on AP-3C Orion Maritime Patrol Aircraft to improve the communication of digital information between units.

Phase 8B will update components of the AP-3C Orion Maritime Patrol Aircraft electronic warfare system to ensure it remains effective until its withdrawal around 2015.

Phase 8C provides for replacement of critical components of the electronic warfare system to ensure it remains effective until the planned withdrawal date of the AP-3C Orion aircraft.

Phase 9 will replace/upgrade the radar, mission simulator and data management system in the AP-3C Orion fleet to ensure that the capability provided remains effective until its planned withdrawal date of 2015.

Proposal Background

AIR 5276 is a multi-phased proposal to update the Air Force P-3 Orion Maritime Patrol Aircraft. Phases 2 and 3 are underway, providing a major upgrade to the aircraft's combat systems and supporting simulators. Phase 4, Electronic Warfare Self Protection was cancelled in 2000.

Projects currently planned to continue the upgrade of the AP-3C include:

- Phase 5 which provides for replacement of existing Infra-red Detection System;
- Phase 6 which seeks to upgrade the aircraft's communications suite and data links;
- Phase 7 which was looking forward to the eventual replacement of the AP-3C has been renamed as AIR 7000 Phase 2;
- Phase 8 (A,B&C) which was previously known as the ESM Phase. This will seek to upgrade the ALR 2001 Electronic Support Measures (ESM), and provide sufficient replacement components for the system to remain operational until the planned withdrawal date of 2015; and
- Phase 9 seeks to address AP-3C obsolescence issues out to the planned withdrawal date of the AP-3C. Obsolescence issues currently include the radar, operational mission simulator, acoustic system and data management system.

Defence Needs of Australian Industry

Identified needs that may relate to Phases 5, 6, 8B and 8C include:

- Avionics;
- Sensors;
- Information systems; and
- Systems engineering.

Identified needs that may relate to Phase 9 include:

- Avionics;
- Sensors;
- Information systems;
- System simulation; and
- Systems engineering.

Australian Industry Involvement

Acquisition

A Through Life Support (TLS) Prime Contractor is expected to be engaged to support integration of new capabilities onto the AP-3C Weapon System. The TLS Prime Contractor and its subcontractors will be expected to integrate individual projects under a Block Upgrade concept.

Through-life Support

The TLS Prime Contractor will be expected to provide TLS for the AP-3C Weapon System. It is anticipated that all elements delivered through this project will be supported through the TLS Prime Contractor.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 5 - FY 2004/05
	Phase 6 - FY 2006/07
	Phase 8B - FY 2004/05
	Phase 8C - FY 2005/06 to 2007/08
	Phase 9 - FY 2006/07
In-service Delivery	Phase 5 - 2009 to 2011
	Phase 6 - 2010 to 2012
	Phase 8B - 2007 to 2009
	Phase 8C - 2007 to 2009
	Phase 9 - 2007 to 2009

Estimated Phase Expenditure

Phase 5 - $30m to $50m

Phase 6 - $100m to $150m

Phase 8B - $75m to $100m

Phase 8C - $10m to $20m

Phase 9 - $150m to $200m

Points of Contact

Capability Staff:

Phases 5, 6 and 9 -
Squadron Leader Rob Brownie
(02) 6265 5447

Phases 8B and 8C -
Squadron Leader Gary Lewis
(02) 6265 2115

Defence Materiel Organisation:

Ms Katrina Burzynski
(08) 8393 3582

These Phases

Phase 2.3 involves an upgrade of the F/A-18 Electronic Warfare Self Protection (EWSP) including replacement of Radar Warning Receivers and Radio Frequency Jammers.

Phase 2.4 allows for the upgrade of the Hornet electro-optic imaging weapons system.

Phase 3.2C will involve the more extensive refurbishment of additional aircraft should extension of the Planned Withdrawal Date (PWD) be required.

Proposal Background

AIR 5376 comprises three phases overall:

Phase 1 has now been completed. Installed improvements comprise enhancement of the aircraft's communications anti-jamming capability, upgrade of the mission computers, installation of an additional data bus, improvement in target identification and improvement in navigation and situational awareness. Phase 1 also implemented upgrades to the associated F/A-18 maintenance, software and training support infrastructure.

Phase 2 seeks to incorporate advanced avionics and weapon systems into the F/A-18, and includes:

- Phase 2.1 (complete) replacement of the Fire Control Radar and introduction of an Enhanced Interference Blanking Unit (EIBU);
- Phase 2.2 (previously approved) incorporation of a secure jamming-resistant Link 16 Data Transfer System, a full Colour Display Upgrade, a Digital (Moving) Map System (DMS), the Joint Helmet Mounted Cuing System (JHMCS), and the upgrade of the Counter Measures Dispensing System (CMDS);
- Phase 2.3 in which the F/A-18 Electronic Warfare Self Protection (EWSP) will be upgraded, including upgrade/replacement of the Radar Warning Receivers and Radio Frequency Jammers; and
- Phase 2.4 which seeks to improve the detection, identification, precision targeting and damage assessment phases of RAAF F/A-18 counter air, strike and offensive air support operations currently supported by the AN/AAS-38 Nite Hawk targeting Forward Looking Infra-Red (FLIR) pod.

Phase 3 seeks to restore the structural life of the Royal Australian Air Force (RAAF) F/A-18 Hornet airframe to enable the fleet to reach its original 2012-2015 planned withdrawal date. This phase comprises two structural refurbishment programs as follows:

- Phase 3.1 (previously approved) involves the design, development and installation of minor structural modifications and inspections required halfway through the fatigue life of the aircraft. This will address the most immediate structural deficiencies and ensure structural integrity through to Phase 3.2;
- Phase 3.2B (previously approved) involves a program featuring the replacement of a number of discrete structural components and replacement of the aircraft centre barrel on the minimum required number of aircraft. Once installed, these modifications will allow the aircraft to reach its planned withdrawal date; and

- Phase 3.2C is a provision for additional aircraft to undergo the structural refurbishment program should it be required given further understanding of the fatigue life of the F/A-18 and delivery schedule for the AIR 6000 New Air Combat Capability.

Defence Needs of Australian Industry

Identified needs that may relate to Phase 2.3 include:

- Aircraft systems;
- Aircraft avionics;
- Electronic warfare; and
- Equipment installation.

Identified needs that may relate to Phase 2.4 include:

- Test and evaluation;
- Maintenance support; and
- Software integration.

Identified needs that may relate to Phase 3.2C include:

- Aircraft systems;
- Aircraft structures; and
- Structural integrity and testing.

Australian Industry Involvement

Phase 2.3 - Until equipment source selection is achieved the Australian Industry Involvement benefit cannot be determined. Opportunities may exist in the area of equipment supply, aircraft installation, and system support.

Phase 2.4 - This program replaces the current F/A-18 NITE Hawk Forward Looking Infra Red (FLIR) pod with a proven, self contained, current generation targeting and laser designation system. Given the non-developmental nature of the procurement, our limited Hornet fleet size and a limited FLIR pod procurement, the scope for Australian Industry Involvement may be limited to maintenance support, and test and evaluation.

Phase 3.2C - The upgrades are based on existing designs limiting opportunities for Australian Industry Involvement in design and development. The modification work will be conducted in Australia if this is cost effective.

Acquisition

Phase 2.3 - Australian industry involvement will depend on equipment selection.

Phase 2.4 - Candidate systems are of overseas origin limiting opportunities for Australian industry involvement.

Through-life Support

Phase 2.3 - Opportunities may exist in the area of aircraft installation, and system support.

Phase 2.4 - In country support will be sought where it is practical and cost effective.

Potential Prime Contractors

Phase 2.3 - Until Operational Evaluation and equipment source selection is achieved, potential Prime Contractors can not be determined.

Phase 2.4 - The preference is for a proven solution.

Phase 3.2B and C - Depending on cost effectiveness the work could be performed in Australia by the Hornet Industry Coalition.

Phase Schedule Highlights

Year-of-Decision	Phase 2.3 - FY 2003/04
	Phase 2.4 - FY 2003/04
	Phase 3.2C - FY 2005/06
In-service Delivery	Phase 2.3 - 2007 to 2009
	Phase 2.4 - 2006 to 2008
	Phase 3.2C - 2009 to 2011

Estimated Phase Expenditure

Phase 2.3 - $350m to $450m

Phase 2.4 - $100m to $150m

Phase 3.2C - $150m to $200m

Points of Contact

Capability Staff:

Wing Commander Joe Iervasi
(02) 6265 4897

Defence Materiel Organisation:

Wing Commander William Malkin
(02) 4928 6901

This Phase

The project will acquire new equipment for the Mobile Region Operations Centre (MROC), currently operated by 114 Mobile Control and Reporting Unit (114MCRU) based at RAAF Darwin.

Proposal Background

The Royal Australian Air Force (RAAF) No 114 Mobile Control and Reporting Unit at RAAF Base Darwin operates the system that provides the ADF with this capability. This system comprises the Tactical Air Defence System and a MROC. The Tactical Air Defence System life-of-type is 2004. An interim upgrade to a number of components is being undertaken to ensure a Mobile Region Operations Centre capability remains available from the current system, until its replacement under this phase. Where possible, AIR 5405 intends to leverage off other existing projects such as AIR 5333 - Vigilare, LAND 121 - Field Vehicle Fleet Modernisation, etc to ensure commonality and interoperability with existing or emerging capabilities.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Air defence control and reporting systems;
- Air operations command support systems;
- Communications and information systems; and
- System transportability and mobility.

Australian Industry Involvement

Most new opportunities for Australian industry reside in the development of the overall MROC design, integration of the system components, and ongoing maintenance of the system.

Acquisition

Areas on which requirements are anticipated to focus include:

- Development of the overall MROC design;
- Integration of the new system with a range of existing sensor and data systems;
- Integration of communications systems;
- Test and evaluation; and
- Tactical deployability and logistics supportability in remote locations.

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 necessary to sustain this mobile/deployable system.

Potential Prime Contractors

No potential prime contractors have been identified at this stage, although links to other projects such as AIR 5333 - Vigilare, LAND 121 - Field Vehicle Fleet Modernisation, etc are likely, once they have been successfully progressed.

Phase Schedule Highlights

Year-of-Decision	FY 2006/07
In-service Delivery	2009 to 2011

Estimated Phase Expenditure

$50m to $75m

Points of Contact

Capability Staff:

Squadron Leader Antony Martin
(02) 6265 5561

Defence Materiel Organisation:

Mr David Ockerby
(02) 6265 4958

This Phase

This project will provide all-weather improved accuracy for the ADF current inventory of MK-80 series general-purpose bombs.

Proposal Background

AIR 5409 Bomb Improvement Program (BIP) seeks to acquire a system that will provide all-weather, autonomous, accurate delivery of ADF MK-80 and BLU-109 series bombs against a broad spectrum of targets.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Guided weapons;
- Aircraft weapon systems; and
- Avionics.

Australian Industry Involvement

Acquisition

Although the industry requirements will be guided by the information gained through the capability definition stage, the areas on which requirements are anticipated to focus include:

- Aircraft systems integration;
- Software development and maintenance for aircraft systems, weapon systems, mission planning systems and combat models;
- Support for live-fire weapons trials, exercises, test evaluation and analysis;
- Integration, training and support for mission planning, procedural training and rehearsal systems; and
- Preparation, storage, handling and transport of weapon system.

Through-life Support

The 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.

Potential Prime Contractors

Companies which have provided responses that were assessed as providing suitable systems and which could become prime contractor for this proposal include:

- Boeing, Raytheon and Lockheed Martin.

Phase Schedule Highlights

Year-of-Decision	FY 2004/05
In-service Delivery	2008 to 2010

Estimated Phase Expenditure

$50m to $75m

Points of Contact

Capability Staff:

Squadron Leader Dave Hockley
(02) 6265 5540

Defence Materiel Organisation:

Commander John Crathern
(02) 6265 7752

This Phase

This phase will provide for the enhancement of the F-111 Electronic Warfare Self Protection (EWSP) capability by upgrading the Radar Warning systems.

Proposal Background

AIR 5416 (Echidna) is a multi-phased proposal to develop comprehensive EWSP capabilities for selected ADF aircraft. Other phases of Echidna include:

- Phase 1 is in progress and includes the full scale engineering development of the ALR-2002 Radar Warning receiver by BAE Systems Australia and elements of an ADF-wide countermeasures development and validation capability for in-service and soon to be introduced EWSP equipment;
- Phase 1 Stage 3 is in progress and covers the provision of ballistic protection measures for the Black Hawk aircraft;
- Phase 1A is in progress and includes elements of an ADF-wide countermeasures development and validation capability for current in-service and soon to be introduced EWSP equipment not covered in Phase 1;
- Phase 2 (previously approved) will cover the implementation of the Black Hawk, Chinook and C-130H EWSP capabilities defined during the Phase 1 IDA; and
- Phase 4 will reduce the risk of the C-130J in combat operations by fitment of aircraft survivability equipment including aircraft armour, radar and missile warning equipment and chaff and flare dispensing equipment.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Electronic warfare;
- Avionics and platform level integration; and
- Information systems.

Australian Industry Involvement

There are limited opportunities for Australian industry to become involved in the project as the majority of the existing F-111 EWSP systems acquired are from overseas suppliers and do not lend themselves to large scale in country support infrastructure development especially when coupled with the limited remaining operational service life of the F-111.

Acquisition

There is limited scope for the involvement of Australian industry in any acquisition activity as the emphasis of the project is on sustainment until the operational life of type of the F-111 is reached.

Through-life Support

Although limited, increased involvement of Australian industry can be envisaged with the sustainment of the EWSP systems through to the planned withdrawal of the F-111.

Potential Prime Contractors

Not applicable.

Phase Schedule Highlights

Year-of-Decision	FY 2003/04
In-service Delivery	2006 to 2008

Estimated Phase Expenditure

$30m to $50m

Other Unapproved Phases

See also AIR 5416 Phase 4.

Points of Contact

Capability Staff:

Squadron Leader Gary Lewis
(02) 6265 2115

Defence Materiel Organisation:

Mr Laurie Bode
(02) 6265 1615

This Phase

This phase will provide Electronic Warfare Self Protection (EWSP) for the C130-J aircraft comprising radar warning, basic chaff-dispensing, missile warning and infrared counter-measure systems.

Proposal Background

AIR 5416 (Echidna) is a multi-phased proposal to develop comprehensive EWSP capabilities for selected ADF aircraft. Other phases of Echidna include:

- Phase 1 is in progress and includes the full scale engineering development of the ALR-2002 Radar Warning receiver by BAE Systems Australia and elements of an ADF-wide countermeasures development and validation capability for in-service and soon to be introduced EWSP equipment;
- Phase 1 Stage 3 is in progress and covers the provision of ballistic protection measures for the Black Hawk aircraft;
- Phase 1A is in progress and includes elements of an ADF-wide countermeasures development and validation capability for current in-service and soon to be introduced EWSP equipment not covered in Phase 1;
- Phase 2 (previously approved) will cover the implementation of the Black Hawk, Chinook and C-130H EWSP capabilities defined during the Phase 1 IDA; and
- Phase 3 builds upon the capability baseline established under AIR 5391 Phase 6 F-111 Interim EWSP, by providing enhancement of the F-111 EWSP capability, including an upgrade of the Radar Warning system.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Electronic warfare;
- Avionics and platform level integration; and
- Information systems.

Australian Industry Involvement

There are limited opportunities for Australian industry to become involved in the project as the majority of the existing C-130H EWSP systems that will also be installed on the C-130J under Echidna Phase 4 are acquired from overseas suppliers and are off-the-shelf and do not lend themselves to large scale in country support infrastructure development.

Acquisition

There is limited scope for the involvement of Australian industry in any acquisition activity as the emphasis of the project is on utilising the current C-130H or existing Lockheed Martin designs and equipment where possible. Installation and set-to work of the equipment is proposed to be undertaken by Australian industry.

Through-life Support

As the C-130H and C-130J fleets will utilise in the main common EWSP equipments, due to the increased quantities of equipment types in country, the potential for Australian industry to establish in country equipment support facilities will be enhanced.

Potential Prime Contractors

Not applicable.

Phase Schedule Highlights

Year-of-Decision FY 2005/06

In-service Delivery 2008 to 2010

Estimated Phase Expenditure

$100m to $150m

Other Unapproved Phases

See also AIR 5416 Phase 3.

Points of Contact

Capability Staff:

Flight Lieutenant Cam Leslie
(02) 6265 4444

Defence Materiel Organisation:

Mr Laurie Bode
(02) 6265 1615

This Phase

This phase will acquire longer range stand-off Air-to-Surface weapons for the AP-3C Orion and F/A-18 aircraft.

Proposal Background

AIR 5418 (FOSOW) seeks to improve ADF strike capability against well-defended targets whilst enhancing the survivability of the F/A-18 and AP-3C (primarily through a long stand-off range weapon). The FOSOW target set includes fixed and relocatable targets on land, and moving targets in the littoral (ships).

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Aircraft weapons systems;
- Guided weapons;
- Avionics; and
- Information systems.

Australian Industry Involvement

The limited releasability and export controls for sales of this system to Australia and other countries are unlikely to provide export opportunities for Australian companies. There may be increased involvement in the through-life support of the system and its individual components subject to cost effectiveness considerations.

Acquisition

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

- Aircraft systems integration;
- Integration, training and support for mission planning, procedural training and rehearsal systems;
- Preparation, storage, handling and transport of weapon systems;
- Software development and maintenance for aircraft systems, weapon systems, mission planning systems and combat models; and
- Support for live-fire weapons trials, exercises, test evaluation and analysis.

Through-life Support

Full through-life support is needed and more specific requirements will be determined by the capability definition stage. Industry requirements will be based around developing and maintaining sufficient capability to undertake the necessary through-life maintenance and support activities within Australia.

Potential Prime Contractors

Companies that have provided responses that were assessed as providing suitable systems and which could become prime contractors for this proposal are:

- Lockheed Martin Missiles and Fire Control, Boeing and TAURUS Systems GmbH.

Phase Schedule Highlights

Year-of-Decision	FY 2004/05
In-service Delivery	2007 to 2009

Estimated Phase Expenditure

$350m to $450m

Points of Contact

Capability Staff:

Squadron Leader Dave Hockley
(02) 6265 5540

Defence Materiel Organisation:

Commander John Crathern
(02) 6265 7752

This Phase

This project proposes to acquire up to 3 Transportable Air Operations Towers to support tactical Air Traffic Control (ATC) aerodrome services. The transportable towers will be used in support of deployed, tactical air operations from airfields without fixed ATC tower facilities.

Proposal Background

The Royal Australian Air Force No 1 Combat Communications Squadron is responsible for deploying the existing Mobile Air Traffic Control [Tower] Systems (MATCS) which are then operated by No 44 Wing ATC staff. The acquisition of new transportable Air Operations Towers will allow for the replacement of the existing fleet, which will soon reach its planned withdrawal date.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Mobile air traffic control tower facilities; and
- Communications and information systems.

Australian Industry Involvement

Opportunities may arise for the provision and support of mobile aerodrome services.

Acquisition

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

- Provision of mobile tower facilities;
- Integration of commnications and display systems;
- Test and evaluation; and
- Tactical deployability and logistics supportability in remote locations.

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 this mobile/deployable system.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2005/06
In-service Delivery	2008 to 2010

Estimated Phase Expenditure

$20m to $30m

Points of Contact

Capability Staff:

Flight Lieutenant Trish Atkinson
(02) 6265 7530

Defence Materiel Organisation:

Mr David Ockerby
(02) 6265 4958

This Phase

This project will provide the ADF with a system for efficiently training pilots to a standard commensurate with the platforms and roles that will be evident in the ADF from the end of this decade.

Defence Needs of Australian Industry

Yet to be determined.

Australian Industry Involvement

Yet to be determined.

Acquisition

Yet to be determined.

Through-life Support

Yet to be determined.

Potential Prime Contractors

Yet to be determined.

Phase Schedule Highlights

Year-of-Decision FY 2007/08

In-service Delivery 2010 to 2012

Estimated Phase Expenditure

$600m to $750m

Point of Contact

Capability Staff:

Flight Lieutenant Christensen
(02) 6265 4809

This Phase

This phase covers the acquisition of replacement radars for the air traffic control (ATC) systems at RAAF Bases Tindal and East Sale, the Army Aviation Centre Oakey and potentially a new backup secondary surveillance radar at RAAF Base Darwin for the provision of ATC radar services.

Proposal Background

No 44 Wing at RAAF Williamtown provides ATC radar services at RAAF Bases Tindal and East Sale and the Army Aviation Centre Oakey using Alenia radars that are integrated into ADATS. The supportability of the Alenia radars is becoming increasingly difficult with LOT expected to be 2010/11.

44WG also provides 24-hour radar services at RAAF Base Darwin using ADATS radars. However, the 24-hour service requirement does not permit down time for maintenance and, therefore, a backup secondary surveillance radar capability is required to ensure safety and continuous operations in the event of maintenance or system failure.

This project will replace the existing Alenia radars and provide a new backup secondary surveillance radar capability for Darwin with a system that is compatible with either or both of the ATC or Air Defence systems to ensure commonality of operational systems and, particularly, technical support.

The AIR 5431 solution needs to meet international best practice ATC radar system certification standards.

The radars will need to integrate with current ATC and Air Defence systems, including AIR 5186 - Australian Defence Air Traffic System (ADATS), AIR 5333 - Vigilare and AIR 5375 - Tactical Air Defence Radars. The radars will also need to integrate with the national Air Traffic Management System.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Air traffic control radar systems.

Australian Industry Involvement

While the radars are not expected to be sourced in Australia, an opportunity exists for Ausralian industry to manage the replacement of the radars and undertake construction, installation and testing activities.

Acquisition

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

- Removal and disposal of existing radars;
- Provision of new air traffic/surveillance radars;
- Integration of the new radars into the ADATS system; and
- Test and evaluation.

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 these three/four systems.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2006/07

In-service Delivery 2010 to 2012

Estimated Phase Expenditure

$30m to $50m

Points of Contact

Capability Staff:

Squadron Leader Antony Martin
(02) 6265 5561

Defence Materiel Organisation:

Mr David Ockerby
(02) 6265 4958

This Phase

This project will identify the various capabilities needed for the ADF's space, air, maritime and ground based systems to ensure that airspace use and Air Traffic Management is optimised for both military and civil users.

Proposal Background

AIR 5432 aims to identify and acquire or enhance various capabilities of the ADF's space, air, maritime and ground-based systems to ensure that airspace use and air traffic management is optimised for both military and civilian users. The proposal will examine a broad range of capability options and enhancements that would provide an on-going capability.

The precise nature and composition of the ensuing acquisition phases will be determined by the capability definition phase.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Air traffic management systems;
- Air defence systems;
- Flight management systems;
- Communications;
- Navigation systems;
- Surveillance;
- Information systems;
- Simulation and modelling; and
- Avionics.

Australian Industry Involvement

Initially, there will be an opportunity for Australian industry to undertake a project definition study during Phase 1 to determine the scope of future phases of the project. Further oportunities will depend on the scope of planned implementation resulting from the initial study.

Acquisition

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

- Undertaking a project definition study;
- Integration of new systems with a range of existing sensor and data systems; and
- Test and evaluation.

Through-life Support

The industry requirements will 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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2007/08

In-service Delivery 2010 to 2012

Estimated Phase Expenditure

$30m to $50m

Points of Contact

Capability Staff:

Squadron Leader Richard Pizzuto
(02) 6265 2216

Defence Materiel Organisation:

Mr David Ockerby
(02) 6265 4958

These Phases

Phase 2A will acquire the first tranche of new multi-role combat aircraft to replace F/A-18 Hornets and the F-111s as they are withdrawn from service.

Phase 2B will acquire another tranche of new multi-role combat aircraft to replace F/A-18 Hornets as they are withdrawn from service. This phase may be considered and approved together with Phase 2A .

Phase 2C acquires the final tranche of new multi-role combat platforms.

Proposal Background

AIR 6000 Phase 2 is the acquisition phase of the proposal. It aims to introduce a new air combat capability with the functions of air dominance and strike currently provided by the ADF F/A-18 and F-111 aircraft fleets. Current planned withdrawal dates for these platforms are 2012-2015 and 2010 respectively. The stated Government expectation is that the manned component of this capability will be provided by the Lockheed Martin F-35 Joint Strike Fighter. Detailed definition and analysis activities necessary to determine the optimum force mix solution and provide Government the information to support an initial Acquisition Approval will be conducted during AIR 6000 Phase 1: Definition, Analysis and Risk Mitigation.

Defence Needs of Australian Industry

Defence needs to deliver cost effective Defence Capability through sustainment of critical industry capabilities related to combat aircraft. This leads to a focus on involvement in technology areas of JSF, including engineering design, software development and electronic warfare; placing the fleet management on a more commercial footing through provision of strategic support capabilities; early engagement, through scientific collaboration, in design and development of next generation technologies for upgrades to the JSF aircraft. Achieving this through Australian industry increasingly sustained on a commmercial basis will also require local industry participation in manufacture and supply of JSF components and equipment. The specific nature of these needs is being evolved as the design of the aircraft matures.

Australian Industry Involvement

Australia seeks to become part of the global supply chain for large international aeropspace industries - consistent with the Australian Defence Aerospace Sector Strategic Plan and the Australian Aerospace Industry Action Agenda - and as such has not sought any traditional Australian Industry Involvement in this project. Specifically in the JSF program, Australia seeks to maximise Australian industry participation currently through the System Development & Demonstration (SDD) phase, and subsequently in the planned Low Rate Initial Production (LRIP), Full Rate Production (FRP) and through life support phases of the JSF program. This participation is undertaken in competition with other Partner Nations' industries on a best value basis.

Acquisition

The aim is to maximise the quality and quantity of work for Australian industry throughout the life of the JSF project, and in doing so embed Australian industry into the JSF global supply chain.

Through-life Support

Australia is seeking to participate in the global support arrangements for the JSF aircraft and as such is seeking to establish an Australian-based regional support capability for the JSF serving not only Australian aircraft but those operated and deployed into the region by the US and other nations.

Potential Prime Contractors

If Government proceeds with procurement of the JSF, the prime contractor will be Lockheed Martin Aeronautic Systems, partnered with Northrop Grumman and BAE SYSTEMS. Pratt and Whitney and General Electric are contracted to develop and supply engines.

Phase Schedule Highlights

Year-of-Decision	Phase 2A - FY 2006/07
	Phase 2B - FY 2010/11 to 2012/13 (may be combined with Phase 2A)
	Phase 2C - FY 2014/15 to 2016/17
In-service Delivery	Phase 2A - 2012 to 2014
	Phase 2B - 2015 to 2017
	Phase 2C - 2018 to 2020

Estimated Phase Expenditure

Phase 2A - $4500m to $6000m

Phase 2B - $4500m to $6000m

Phase 2C - $2500m to $3500m

Points of Contact

Capability Staff:

Group Captain Mark Skidmore
(02) 6265 5537

Defence Materiel Organisation:

Project Office: Mr Bill Greenwood
(02) 6265 7478

Industry Team: Mr Mike Lyons
(02) 6265 5172

Proposal Background

The Life of Type (LOT) for the AP-3C is being driven by the increasing cost of addresing airframe fatigue and corrosion, aircraft system supportability and mission system obsolescence. The airframe and aircraft systems, including engines, hydraulics, electrical and fuel systems will become more costly to support as the aircraft ages. And although mission system obsolescence is being addressed under Project AIR 5276, a further upgrade would be required to extend its usefulness beyond 2015. Either a major refurbishment or replacement of the AP-3C capability will be required by its planned withdrawal date (PWD) of 2015.

AIR 7000 will consider the future of the AP-3C in the context of future ADF requirements for Maritime Patrol and response. This will include the exploration of a broad range of options including aircraft refurbishment/remanufacture or replacement, and the use of unmanned aerial vehicles as an adjunct to manned platforms. While the project will be initially focused on the acquisition of a capability centred on maritime patrol and response roles, it has potential to expand into other electronic and land surveillance roles.

Australia already has in place a framework for collaborative development with the US that allows for cooperation on related US Navy Multi-Mission Maritime Aircraft (MMA) and Broad Area Maritime Surveillance UAV (BAMS-UAV) programs, as well as cooperation with the USAF Global Hawk Program.

Point of Contact

Capability Staff:

Wing Commander Warren Nelson
(02) 6265 5559

This Phase

This phase involves the study and purchase of a long endurance Unmanned Aerial Vehicles (UAV) for maritime patrol and other surveillance.

Proposal Background

This Phase incorporates all aspects of the project previously known as JP2062 and will consider and further develop options leading to the acquisition of a unmanned aerial system that can perform all-weather, long endurance surveillance and reconnaissance tasks over maritime and land environments.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Surveillance and Reconnaissance;
- UAV aircraft;
- Imagery;
- Sensors;
- Avionics; and
- Communications and information systems.

Australian Industry Involvement

Acquisition

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

- Development and implementation of an integrated ground-based command and control and mission planning environment;
- Development and implementation of a data exploitation, display and dissemination system; and
- Development and integration of indigenous payloads.

Through-life Support

Full through life support is required. Opportunities should exist for through life support of the strategic surveillance unmanned aerial vehicle system in the traditional areas of airframe, engine, platform utilities and ground-based systems. Main focus areas would be Deeper Maintenance, possibly some Operational Level maintenance, supply support and inventory management.

Australian industry involvement opportunities will be further defined over the next six to twelve months.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2004/05 (Study Phase)

In-service Delivery 2009 to 2011

Estimated Phase Expenditure

$750m to $1000m

Other Unapproved Phases

See also AIR 7000 Phase 2.

Points of Contact

Capability Staff:

Wing Commander Warren Nelson
(02) 6265 5559

Defence Materiel Organisation:

Wing Commander Darren May
(02) 6265 2118

This Phase

This phase involves the study and acquisition of the manned aircraft component of the maritime patrol capability that will replace the AP-3C Orion aircraft.

Proposal Background

This Phase incorporates all aspects of the project previously known as AIR 5276 Phase R and will aim to acquire a manned Maritime Patrol Aircraft system capable of performing maritime patrol and response tasks.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Surveillance and Reconnaissance;
- Aircraft systems;
- Aircraft weapon systems;
- Imagery;
- Sensors;
- Avionics; and
- Communications and information systems.

Australian Industry Involvement

Yet to be determined.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2006/07 (Study Phase)

In-service Delivery 2013 to 2015

Estimated Phase Expenditure

$3500m to $4500m

Other Unapproved Phases

See also AIR 7000 Phase 1.

Points of Contact

Capability Staff:

Wing Commander Warren Nelson
(02) 6265 5559

Defence Materiel Organisation:

Wing Commander Bruce Skipworth
(02) 6265 1613

These Phases

Phase 1 involves refurbishment of the Royal Australian Air Force (RAAF) C-130H Hercules transport aircraft to extend the platform Life of Type out until at least 2020.

Phase 2 will enhance the ADF airlift capability. Options are still being explored.

Proposal Background

AIR 8000 Phase 1 aims to refurbish the Royal Australian Air force C-130H Hercules transport aircraft. This proposal would see a major refurbishment of the existing C-130H fleet to extend the platform Life of Type out until at least 2020. As well as any required structural modification, the refurbishment would provide Global Air Traffic management (CNS/ATM) compliant avionics and systems, and also provide for a commonality upgrade to the Full Flight Simulator.

AIR 8000 Phase 2 seeks to acquire a Battlefield Airlifter (BFA) capability. This capability will focus on the provision of an inter-theatre and intra-theatre airlift solution which will operate primarily at lower altitudes (below 10,000 feet for intra-theatre operations) and be capable of operating from a wide range of rudimentary airstrips. Phase 2 may also have to provide appropriate training support,which could include the provision of a Full Flight Simulator. Notably, the BFA capability will require careful consideration of the interaction between rotary-wing assets and light /medium fixed wing platforms in the tactical environment.

Defence Needs of Australian Industry

Identified needs that may relate to Phase 1 include:

- A revised Life-of-Type study, including corrosion and wiring studies;
- Refurbishment of aircraft structures, avionics and wiring;
- Development of training systems, including simulator modification or supply; and
- Specialist test and evaluation, engineering and logistics services.

Identified needs that may relate to Phase 2 include:

- Aircraft systems;
- Avionics;
- Structures;
- Aero-mechanicals;
- Propulsion;
- EWSP systems;
- Simulation and other training systems; and
- Specialist independent services covering test and evaluation, engineering and logistics.

Australian Industry Involvement

Acquisition

The industry requirements will be guided by information gained through the preliminary stages/definition studies of the proposal.

Through-life Support

The industry requirements will be based around developing and maintaining an appropriate level of capability within Australian industry to provide through-life support.

Potential Prime Contractors

Phase 1 potential prime contractors are likely to have previous experience in the refurbishment of transport aircraft.

Phase 2 potential prime contractors are those already producing light tactical aircraft.

Phase Schedule Highlights

Year-of-Decision	Phase 1 - FY 2009/10 to 2011/12
	Phase 2 - FY 2006/07
In-service Delivery	Phase 1 - 2013 to 2015
	Phase 2 - 2010 to 2012

Estimated Phase Expenditure

Phase 1 - $450m to $600m

Phase 2 - $750m to $1000m

Points of Contact

Capability Staff:

Wing Commander Ian Honey
(02) 6265 5524

Defence Materiel Organisation:

Wing Commander Bruce Skipworth
(02) 6265 1613

Proposal Background

The Program aims to rationalise the helicopter fleets over time, reduce the number of platform types operated and encourage investment in Australian industry to help build a sustainable aerospace industrial base that can provide high levels of support to the ADF and compete as part of the global supply chain. AIR 9000 Program phases currently include:

- Phase 1 - Continued ADF Helicopter Master Plan Development and Program Management;
- Phase 2 - Acquisition of Additional Troop-Lift Helicopters (ATH);
- Phase 3 - Seahawk Mid Life Upgrade;
- Phase 4 - Black Hawk Upgrade/Replacement; and
- Phase 5 - Chinook Upgrade.

Additional future requirements may include the acquisition of helicopters to support the Air Warfare Destroyer and replacement of the ADF helicopter training system (as a follow on to the interim AIR 9001 Training Helicopter Lease).

Defence Needs of Australian Industry

Identified needs that may relate to the design, engineering and support services required to modify, adapt, integrate, test and evaluate:

- Aircraft systems and structures;
- Mission, weapons, avionics, communications and information systems and software;
- Aircraft propulsion systems and software; and
- Training systems, simulators, training aids and software.

Australian Industry Involvement

Acquisition

Australian Industry Involvement will be provided under the umbrella of long term strategic agreements with suitable commercial entities. The areas in which requirements are anticipated to focus include:

- Rationalisation options for ADF Helicopter Platforms;
- Initiatives to optimise aircraft configurations and component commonality;
- Initiatives for optimising logistics infrastructure and support arrangements; and
- Simulator and Training Aids.

Through-life Support

Life of type support is expected to be provided under long term contracts with suitable commercial entities.

Potential Prime Contractors

Companies that have expressed an interest in being a prime contractor/strategic partner for elements of this proposal include:

- Sikorsky, Australian Aerospace and Agusta Westland.

Point of Contact

Defence Materiel Organisation:

Mr Andrew Wood
(02) 6265 7611

This Phase

This phase will acquire additional helicopters for troop lift.

Proposal Background

AIR 9000 Phase 2 seeks to acquire an additional squadron (about 12 aircraft) of troop lift helicopters to provide extra mobility for forces on operations. In particular, the helicopters will enhance the ADF capability to operate off the troop ships, HMAS Manoora and HMAS Kanimbla. These ships underwent a modification program in order to meet a requirement to conduct troop transport, search and rescue, vertical replenishment and medical evacuation missions by day and night.

The Australian Army currently operates 36 S-70A-9 Black Hawk helicopters with primary roles of Airmobile Operations and Special Missions. The current Army Black Hawk aircraft is not optimised for ship-borne operations and is not designed or built to withstand the fatigue and corrosion associated with sustained embarked operations. The Royal Australian Navy (RAN) operates seven Sea King helicopters that provide a utility lift capability in support of the fleet. The Sea King aircraft is not optimised for combat operations over land.

This phase will enhance capability in the Airmobile Operation and Special Mission roles through operations of the Additional Troop Lift Helicopters from HMAS Manoora and HMAS Kanimbla.

The solution for AIR 9000 Phase 2 will be a Military-Off-the-Shelf helicopter, taking into account commonality with future fleets.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Aircraft systems;
- Avionics;
- Aircraft structures;
- Simulators;
- Aircraft propulsion; and
- Training aids.

Australian Industry Involvement

Phase 2 is the first of the AIR 9000 projects to be implemented and aims to acquire additional troop-lift helicopters and establish the associated simulation, training and support systems. It also aims to obtain optimum logistics and other commonality between Phase 2 and subsequent phases of the Program.

Acquisition

The areas on which requirements are anticipated to focus include:

- Aircraft systems engineering and integration;
- Simulator;
- Training aids; and
- ILS Support.

Through-life Support

Full through-life support is expected to be established through the prime contractor..

Potential Prime Contractors

Companies that have expressed an interest in being a prime contractor/strategic partner for this proposal include:

- Sikorsky, Australian Aerospace and Agusta Westland.

Phase Schedule Highlights

Year-of-Decision	FY 2003/04
In-service Delivery	2007 to 2009

Estimated Phase Expenditure

$750m to $1000m

Other Unapproved Phases

See also AIR 9000 Phases 3B, 3C, 4, 5A and 5B.

Points of Contact

Capability Staff:

Lieutenant Colonel Shayne Elder
(02) 6265 5519

Defence Materiel Organisation:

Captain Mark Remmers, RAN
(02) 6265 7449

Colonel Gary Michajlow
(07) 4691 7800

These Phases

Phase 3B is an Initial Design Activity to reduce risk for the subsequent acquisition phase. The need for an Initial Design Activity will be re-examined following analysis of the recommendations that flow from the Project Definition Study (PDS).

Phase 3C will provide a mid-life upgrade to the Seahawk addressing aircraft capabilities, through-life support costs, operational availability, commonality and Life of Type issues.

Proposal Background

SEA 1405 Phases 1 and 2 are in progress and will provide an Electronic Support Measures and Forward Looking Infra-Red capability.

AIR 9000 Phase 3 will include:

- Phase 3A (previously approved) is a Project Definition Study (PDS) being conducted with the assistance of the Defence Science and Technology Organisation, to consider options for the later phases;
- Phase 3B is an Initial Design Activity which would implement the approved outcomes of the Project Definition Study. The need for an Initial Design Activity will be re-examined following analysis of the recommendations that flows from the PDS; and
- Phase 3C will provide a mid-life upgrade to the Seahawk addressing aircraft capabilities, Through-Life Support costs, operational availability, commonality and Life of Type issues.

The upgrade program will also include the modification of the S-70B-2 Simulator (formerly Project SEA 1151 Phase 2) and supporting infrastructure, as well as the integration of the MU-90 lightweight torpedo being acquired under JP 2070.

The ADF Helicopter Strategic Master Plan, will provide the guidelines to ensure the capability is developed to achieve optimum mission effectiveness with maximum commonality with other aircraft configurations (either within the ADF or with other major fleet operators world-wide).

Defence Needs of Australian Industry

Identified needs that may relate to this proposal include:

- Aircraft systems;
- Avionics;
- Aircraft structures; and
- Aircraft propulsion.

Australian Industry Involvement

Acquisition

The industry requirements for Phase 3B will be guided by the information gained through the PDS.

The industry requirements for Phase 3C will be guided by the information gained through Phase 3B (IDA).

Through-life Support

The industry requirements will be based around developing and maintaining sufficient capability within Australian industry to undertake through-life support.

Potential Prime Contractors

The decision will depend on the scope of any strategic partnership agreed in Phase 2.

Phase Schedule Highlights

Year-of-Decision	Phase 3B - FY 2006/07
	Phase 3C - FY 2007/08
In-service Delivery	Phase 3B - N/A
	Phase 3C - 2009 to 2011

Estimated Phase Expenditure

Phase 3B - $10m to $20m

Phase 3C - $750m to $1000m

Other Unapproved Phases

See also AIR 9000 Phases 2, 4, 5A and 5B.

Points of Contact

Capability Staff:

Lieutenant Commander Peter Saunders
(02) 6265 3179

Defence Materiel Organisation:

Mr Denis Hughes
(02) 6265 7556

Captain Stephen Pearson, RAN
(02) 4424 3333

This Phase

This phase will address the modernisation or replacement of the Australian Army's fleet of 36 S-70A-9 Black Hawk helicopters.

Proposal Background

AIR 9000 Phase 4 will address current and future capability deficiencies of the Black Hawk weapon system. The ADF Helicopter Strategic Master Plan, developed during AIR 9000 Phase 1, will provide the guidelines to ensure the capability is developed to achieve optimum mission effectiveness with maximum commonality of components with other aircraft configurations (either within the ADF or other major fleet operators world-wide).

Defence Needs of Australian Industry

The AIR 9000 Program aims to rationalise the helicopter fleets over time, reduce the number of platform types operated and leverage substantial investment in Australian industry under the umbrella of long term strategic agreements with suitable commercial entities. This would be assisted through coordinated support strategies between phases, in particular between phase 2 and this phase, and with other existing projects. Identified needs that may relate to this phase include:

- Aircraft systems;
- Avionics;
- Aircraft structures; and
- Aircraft propulsion.

Australian Industry Involvement

Acquisition

Acquisitions under phases of AIR 9000 will satisfy capability requirements through off-the-shelf solutions wherever appropriate. Australian industry involvement will emphasise access to the world supply chain for spares and support, providing a more sustainable activity base than provided by local requirements alone. Strategic relationships will be developed with industry where that strengthens the sustainability of Defence capability.

Through-life Support

The industry requirements will be based around developing and maintaining sufficient capability within Australian industry to undertake through-life support.

Potential Prime Contractors

Companies that have expressed an interest in being a potential prime contractor/strategic partner for this proposal include:

- Sikorsky, Australian Aerospace, and Agusta Westland.

Phase Schedule Highlights

Year-of-Decision FY 2005/06

In-service Delivery 2010 to 2012

Estimated Phase Expenditure

$1000m to $1500m

Other Unapproved Phases

See also AIR 9000 Phases 2, 3B, 3C, 5A and 5B.

Points of Contact

Capability Staff:

Lieutenant Colonel Shayne Elder
(02) 6265 5519

Defence Materiel Organisation:

Captain Mark Remmers, RAN
(02) 6265 7449

Colonel Gary Michajlow
(07) 4691 7800

These Phases

Phase 5A will upgrade the engines presently installed on the ADF CH-47D Chinook aircraft. This will reduce operating costs and improve operational performance ahead of the planned Chinook mid-life upgrade.

Phase 5B will address the modernisation of the Australian Army's fleet of six CH-47D medium lift helicopters.

Proposal Background

AIR 6007 saw the original acquisition of four Chinook helicopters, while AIR 130 Phase 1 purchased an additional two Chinook helicopters, bringing the fleet size to six helicopters. AIR 9000 Phase 5 aims to address current and future capability deficiencies of the Chinook weapon system. There are two sub phases with the separation of the Engine replacement to take advantage of the opportunity to maintain the engines in a standard configuration, for whole of life cost savings.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Aircraft systems;
- Avionics;
- Aircraft structures; and
- Aircraft propulsion.

Australian Industry Involvement

In accordance with Aerospace Sector Plan, and general AIR 9000 intent previously described.

Acquisition

Phase 5A will involve acquisition of a military off-the-shelf solution common with the US Army, limiting opportunities for Australian industry involvement in design and development. Modification installation will be conducted in Australia where this is cost effective.

Through-life Support

The industry requirements will be based around developing and maintaining sufficient capability within Australian industry to undertake through-life support.

Potential Prime Contractors

The decision will depend on the scope of any strategic partnershipship agreed in Phase 2.

Phase Schedule Highlights

Year-of-Decision	Phase 5A - FY 2004/05
	Phase 5B - FY 2009/10 to 2011/12
In-service Delivery	Phase 5A - 2007 to 2009
	Phase 5B - 2011 to 2013

Estimated Phase Expenditure

Phase 5A - $30m to $50m

Phase 5B - $350m to $450m

Other Unapproved Phases

See also AIR 9000 Phases 2, 3B, 3C, and 4.

Points of Contact

Capability Staff:

Lieutenant Colonel Shayne Elder
(02) 6265 5519

Defence Materiel Organisation:

Captain Mark Remmers, RAN
(02) 6265 7449

Colonel Gary Michajlow
(07) 4691 7800

This Phase

This project will provide an improved training system for Navy for the duration of the lease.

Proposal Background

AIR 9001 seeks to provide supplementation to the funding required in the formative years to set up a commercially leased helicopter training system for Navy.

Defence Needs of Australian Industry

AIR 9001 Ph1 seeks to take advantage of the AIR 9000 Program. Project AIR 9001 Ph1 will, in part, contribute to the rationalisation of aircraft types by replacing the existing AS350BA and Sea King types with a single type under a leasing agreement.

Australian Industry Involvement

In accordance with Aerospace Sector Plan, and general AIR 9000 intent previously described.

Acquisition

The acquisition is seeking a largely commercial off the shelf solution which limits opportunity for Australian industry involvement to management or coordination.

Through-life Support

The prime contractor is expected to make maximum use of Australian Industry in support of the Weapons System where this is cost effective.

Potential Prime Contractors

Selection of a prime contractor will depend in part on the scope of any strategic alliance to emerge from the AIR 9000 program.

Phase Schedule Highlights

Year-of-Decision FY 2005/06

In-service Delivery 2006 to 2008

Estimated Phase Expenditure

$30m to $50m

Points of Contact

Capability Staff:

Lieutenant Commander Ian Chapman
(02) 6265 6202

Defence Materiel Organisation:

Captain Stephen Pearson, RAN
(02) 4424 3333

These Phases

Phases 2B and 3 will upgrade and replace ADF Force Level Electronic Warfare (EW) capabilities.

Proposal Background

DEF 224 (Bunyip) is a multi-phased project to upgrade and replace ADF Force Level EW equipment. The proposal seeks to provide the ADF with an integrated force level signals intelligence and EW capability to support operational and tactical commanders. Technology is undergoing rapid change and to keep pace with this a rolling program of capability acquisition is planned. This capability is important for the protection of deployed ADF units. The capability will support a commander's ability to achieve decision superiority.

The remaining phases of DEF 224 include:

- Phase 2A (previously approved), which is an interim upgrade and Life of Type extension of existing force level EW sensor equipment to overcome high priority capability deficiencies;
- Phase 2B is the first major acquisition phase of the proposal. It will provide additional capability and enhancements to support concurrent operations. It is supported by a study phase; and
- Phase 3, which will meet emerging needs with incremental technology enhancements to maintain a credible capability.

Defence Needs of Australian Industry

DEF 224 is to provide a range of leading edge, complex and classified electronics capabilities in low quantities. It is envisaged that the project will need assistance from Australian industry in the form of specific sub system studies, platform installation design and implementation, and in-country support of capabilities.

Australian Industry Involvement

It is estimated that the level of Australian industry involvement will be of the order of one third of the overall project budget.

Acquisition

It is envisaged that although the overall project will be managed in an integrated manner, there will be a range of sub-systems acquisition strategies dependent on: existing in-service capabilities; security; complexity; schedule; and individual service factors of each sub-system. Strategies include tenders to industry, internal development with industry support, and Foreign Military Sales.

Through-life Support

The proposed through life support concept is to utilise common support arrangements for common systems. However, the majority of the capabilities are electronics and IT based and support will predominantly be fault repairs and training.

Potential Prime Contractors

It is highly unlikely that there will be a single prime contractor for the project or project phases. However, it is envisaged that the project may have industry partners or panels for acquisition.

Phase Schedule Highlights

Year-of-Decision	Phase 2B - FY 2003/04
	Phase 3 - FY 2009/10 to 2011/12
In-service Delivery	Phase 2B - 2007 to 2009
	Phase 3 - 2011 to 2013

Estimated Phase Expenditure

Phase 2B - $150m to $200m

Phase 3 - $150m to $200m

Points of Contact

Capability Staff:

Mr Keith Hunter
(02) 6265 4301

Defence Materiel Organisation:

Mr Geoff Cropper
(02) 6265 4215

This Phase

This phase will provide for further development and evolution of the Joint Intelligence Support System (JISS) for the support of the Australian Defence intelligence community.

Proposal Background

DEF 7013 is a multi-phased proposal to acquire a system of shared databases and support applications networked between organisations that have a role in the intelligence process at the Strategic, Operational and Tactical levels of command. It will allow the rapid acquisition of intelligence data from all sources, storage, fusion and transformation into value-added intelligence, and transfer that intelligence, in a timely manner, to those commanders and command support systems that require it.

Other phases of DEF 7013 include:

- Phase 1 is complete. The phase consisted of the establishment of the initial network and the development and installation of the high priority databases and the evaluation of a number of Government-Off-the-Shelf (GOTS) databases;
- Phase 2 is in progress. The phase expands the JISS to a fully operational capability with the addition of a mature infrastructure, the development of a number of information repositories and the evaluation of analytical tools;
- Phase 3A is complete. The phase provided for the development of a deployable capability for JISS;
- Phase 3B is in progress. The phase extends the JISS to the tactical level, provides a more mature deployable and transportable capability, and further develops the system to support the intelligence community; and
- Phase 4 takes greater cognisance of the ADF's migration towards networked enabled operations and the increased demands levied upon the intelligence enterprise to perform effectively within reducing decision cycles.

Defence Needs of Australian Industry

Australian industry involvement will be critical to delivering innovative solutions focussing on optimising knowledge exploitation in the intelligence enterprise.

Australian Industry Involvement

In providing solutions to DEF 7013 Phase 4, Australian industry can best contribute by developing the capacity to deliver and sustain knowledge exploitation capabilities matched to the specific needs of the Australian Defence Intelligence community.

Acquisition

It is expected that the acquistion prime contractor will be an established Australian entity with experience and expertise in the field of knowledge exploitation. The selected prime 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 will be a key element of the future Defence Intelligence Information Environment.

Potential Prime Contractors

Not yet determined

Phase Schedule Highlights

Year-of-Decision	FY 2008/09 to 2010/11
In-service Delivery	2010 to 2012

Estimated Phase Expenditure

$30m to $50m

Points of Contact

Capability Staff:

Squadron Leader Pete Wooding
(02) 6265 1170

Defence Materiel Organisation:

Mr Cliff Meyer
(02) 6265 4403

This Phase

This phase will provide a technology refresh for the ADF's primary maritime strike weapon, the Harpoon anti-ship missile.

Proposal Background

Transition to Harpoon Block II offers increased weapon capability and ensures a continued ASM missile capability.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Guided weapons;
- Aircraft weapon systems; and
- Avionics.

Australian Industry Involvement

This project seeks to acquire an upgrade of current missile stocks to the Harpoon Block 2 standard.

Acquisition

Acquisition will be by a commercial contract direct to the OEM.

Through-life Support

Limited

Potential Prime Contractors

Missile upgrade will be contracted direct to the OEM.

Phase Schedule Highlights

Year-of-Decision	Yet to be determined
In-service Delivery	Yet to be determined

Estimated Phase Expenditure

$30m to $50m

Points of Contact

Capability Staff:

Lieutenant Commander Simon Carroll
(02) 6265 6630

Defence Materiel Organisation:

Commander John Crathern
(02) 6265 7752

This Phase

This phase will address a shortfall in ADF air defence targets by introducing a new air target system, which provides effective operational training and test and evaluation (T&E) capability for the ADF.

Proposal Background

Current ADF air target capabilities do not meet the ADF's evolving training and T&E needs. The current ADF air targets are not representative of the forecast threat beyond 2005 and cannot perform the profiles required to provide realistic and effective operational training or T&E. This project initially aims to conduct an ADF-wide aerial target requirements definition study to determine the future aerial target requirements for the ADF.

Defence Needs of Australian Industry

Yet to be determined.

Australian Industry Involvement

Yet to be determined.

Potential Prime Contractors

Yet to be determined.

Phase Schedule Highlights

Year-of-Decision FY 2007/08

In-service Delivery 2008 to 2010

Estimated Phase Expenditure

$20m to $30m

Point of Contact

Capability Staff:

Wing Commander Stephen Meredith
(02) 6265 5442

This Phase

This project will enable acquisition of an updated version of the combat identification system for ADF aircraft and ships.

Proposal Background

The ADF needs a means by which sea-borne platforms, air-borne platforms, and ground based units with an air defence capability can co-operatively identify themselves to each other and to units of allied and coalition forces to prevent fratricide or blue on blue engagements.

The capability is currently provided by the Mode 4 Mark XII identification, friend or foe (IFF) system. The ADF will examine options under this project for the extent to which the current IFF system needs to be updated to reflect allied identification system changes.

Defence Needs of Australian Industry

Yet to be determined.

Australian Industry Involvement

Yet to be determined.

Acquisition

Yet to be determined.

Through-life Support

Yet to be determined.

Potential Prime Contractors

Yet to be determined.

Phase Schedule Highlights

Year-of-Decision FY 2006/07

In-service Delivery 2007 to 2009

Estimated Phase Expenditure

$150m to $200m

Points of Contact

Capability Staff:

Squadron Leader Antony Martin
(02) 6265 5561

Defence Materiel Organisation:

Mr David Cochrane
(02) 6265 5774

This Phase

This phase will acquire equipment to improve the ADF capability to control and deliver support to forces on operations.

Proposal Background

JP 126 will adopt a joint and whole-of-capability approach to address a number of deficiencies in the ADF's ability to conduct logistics operations. Recent operations in Bougainville and East Timor have reinforced these capability deficiencies, particularly in relation to asset visibility, logistic command and control, management information systems, physical delivery platforms and handling equipment, particularly at interfaces, nodes and terminals.

The proposal comprises three phases:

- Phase 0 was the preliminary phase, which set the proposal context and confirmed the scope and conceptual requirements of the joint theatre distribution system. Phase 0 was completed in mid-2001;
- Phase 1 (previously approved) is a three year Project Definition Study and is currently in progress. This phase aims to conduct a detailed and comprehensive series of studies of theatre distribution systems, processes and assets to identify cost and capability options to minimise the risk of proceeding to Phase 2; and
- Phase 2 is the acquisition and implementation phase, as described above. To allow for more definition of some capability options, Phase 2 is likely to be split in to two sub-phases. The first sub-phase (2A) is likely to focus on physical network and communication and information systems network capability options while the second sub-phase (2B) is likely to focus on control network options.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Transport and distribution systems
- Combat service support systems
- Logistics management systems
- Command support systems
- Communications and information systems

Australian Industry Involvement

Acquisition

Although the industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal, the areas on which requirements are anticipated to focus include:

- Conceptual and preliminary design of distribution systems; and
- Design and development of:
  - Delivery platforms and associated packaging and materials handling development;
  - Terminal (interface) processes and equipment; and
  - Logistic management information.

Through-life Support

Full through-life support is needed and more specific requirements will be determined during the preliminary stages/definition studies of the proposal.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2006/07
In-service Delivery	2008 to 2010

Estimated Phase Expenditure

$150m to $200m

Points of Contact

Capability Staff:

Major Glyn Llanwarne
(02) 6265 6033

Defence Materiel Organisation:

Mr David Bloomer
(03) 9282 7173

This Phase

This phase will enhance the ADF aerial surveillance capabilities for land operations and selected maritime operations by acquiring Tactical Unmanned Aerial Vehicles (TUAVs) tailored for focal area surveillance.

Proposal Background

JP 129 seeks to enhance the ADF's ability to detect, locate, identify, and monitor targets of interest. The capability required is an airborne surveillance system to cover focal areas of interest.

JP 129 Phase 1 was completed in mid-2001 as a risk mitigation phase designed to assist in providing options for systems representative of a mature surveillance system. Additionally, it sought to develop the JP 129 concept and mitigate the technical and financial acquisition risks.

JP 129 Phase 2 will acquire a TUAV system capable of providing airborne surveillance, reconnaissance, and target acquisition to support land operations. These TUAVs are anticipated to be in-service by 2007.

At present, the proposal intends to acquire non-developmental systems based on proven designs. Additionally, the importance of a number of new technologies and draft standards relating to TUAV systems has been recognised.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Surveillance and reconnaissance;
- TUAV aircraft;
- Ground Control Station;
- Imagery exploitation and dissemination;
- Sensors;
- Avionics;
- Communications and information systems;
- Integration; and
- Simulation/training

Australian Industry Involvement

Acquisition

The areas on which requirements are anticipated to focus include:

- Tactical UAV systems.
- Near real time imagery exploitation and intelligence fusion systems;
- TUAV payloads including electro-optic/infra-red sensors;

- Image analysis and mission planning software;
- Sensor information database management;
- Air-to-ground data-link infrastructure; and
- Integration of modular sensors and avionics into air vehicles.

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. Full through-life support is needed and is likely to be provided through a combination of Army field support and Deeper Maintenance support infrastructure provided through industry. More specific requirements are yet to be determined.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2003/04
In-service Delivery	2008 to 2010

Estimated Phase Expenditure

$100m to $150m

Points of Contact

Capability Staff:

Major Martin Power
(02) 6265 5119

Defence Materiel Organisation:

Wing Commander Darren May
(02) 6265 2118

These Phases

Phase 3F will upgrade the existing terrestrial infrastructure to improve the operational performance of the ADF satellite network.

Phase 4 will seek to implement the ADF mature Military Satellite Communications (MILSATCOM) architecture covering both the space and ground segments.

Proposal Background

JP 2008 is a multi-phased proposal to develop satellite communications capabilities for long distance strategic and tactical communications in support of ADF assets throughout Australia's region of interest. Previous phases of JP 2008 include:

- Phase 1 is complete and comprised studies undertaken in support of the development of a mobile satellite communications capability;
- Phase 2 is in progress and is acquiring a satellite communications capability for mobile assets;
- Phase 3A is complete and was a study into the feasibility of options for a suitable interim satellite communications system to meet ADF requirements;
- Phase 3C is in progress and has developed a Theatre Broadcast System concept and technology demonstrator for high, medium and low data rate satellite broadcast capabilities;
- Phase 3D is in progress and covers the provision of a Defence satellite communications capability on the Optus C1 satellite; and
- Phase 3E is in progress and will provide a minimum amount of terrestrial infrastructure equipment to utilise the Defence satellite communications capabilities being provided under Phase 3D.

Defence Needs of Australian Industry

Identified needs that may relate to this Phase 3F include:

- Communications systems; and
- Information systems.

Identified needs that may relate to Phase 4 include:

- Communications technology;
- Spectrum coordination;
- Information technology;
- Alternative platform technologies; and
- Satellite technology.

Australian Industry Involvement

Acquisition

For Phase 3F the industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal. The areas on which requirements are anticipated to focus include:

- Upgrading of existing, and/or supply and installation of new terrestrial infrastructure.

The industry requirements for Phase 4 will be defined by the information gained through studies as part of this phase. The study will investigate the feasibility of options for a mature satellite communications capability for the ADF.

Through-life Support

For both Phase 3F and 4 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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 3F - FY 2005/06
	Phase 4 - FY 2011/12 to 2013/14
In-service Delivery	Phase 3F - 2006 to 2008
	Phase 4 - 2013 to 2015

Estimated Phase Expenditure

Phase 3F - $30m to $50m

Phase 4 - $450m to $600m

Points of Contact

Capability Staff:

Squadron Leader Nicholas Clarke
(02) 6265 7535

Defence Materiel Organisation:

Mr Greg McKinnon
(02) 6265 4155

This Phase

This phase involves the initial enhancement of the Jindalee Over-the-horizon Radar Network (JORN) system. The key areas of enhancement relate to signals processing, algorithm improvements, data fusion/integration and distribution, and man-machine interface improvements.

Proposal Background

This proposal seeks to build on the capabilities of the JORN system delivered in 2003. The delivered JORN will be based on requirements developed over 10 years ago. Since that time, Over-the-Horizon Radar (OTHR) development and operational experience has occurred through the use of the Jindalee Facility at Alice Springs. This experience has enabled Defence to identify technical and operational areas within JORN that could be readily enhanced.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Sensors;
- Communications systems; and
- Information systems.

Australian Industry Involvement

This phase is expected to be fully carried out by Australian industry. Industry involvement in this phase will enhance the world-class OTHR experience-base within this country.

Acquisition

Although industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal, the areas on which requirements are anticipated to focus include:

- Software development and integration; and
- Minor hardware development.

Through-life Support

The industry requirements will be based around developing and maintaining sufficient capability within Australian industry to undertake the through-life maintenance and support activities required to sustain JORN for several decades.

Potential Prime Contractors

Potential prime contractors are likely to be chosen from Australian companies with established OTHR expertise, prospectively supported by SME(s) offering relevant niche products or capabilities.

Phase Schedule Highlights

Year-of-Decision FY 2003/04

In-service Delivery 2006 to 2008

Estimated Phase Expenditure

$50m to $75m

Points of Contact

Capability Staff:

Lieutenant Colonel Mike Bradford
(02) 6265 3897

Defence Materiel Organisation:

Mr Robin Thurston
(02) 6266 4456

These Phases

Phase 8 will build upon the capability delivered under previous phases of JP 2030, and in particular, extend the functionality through the development of applications that support the planning and conduct of ADF military operations.

Phase 9 will further establish the framework for the Joint Command Support Environment (JCSE) that will continue to consolidate existing Command Support Systems into a single integrated environment linking all elements of the ADF.

Proposal 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 (JCSS), Maritime Command Support System (MCSS), Air Command Support System (ACSS), Special Operations Command Support System (SOCSS) and the Battlefield Command Support System (BCSS) (currently Project LAND 75).

Phases 1-6 of JP 2030 delivered a 'core' command support system to support the planning and conduct of joint operations. This system was delivered to Australian Defence Headquarters, Headquarters Australian Theatre, Headquarters Air Command, Headquarters Northern Command, and the Deployable Joint Force Headquarters. JP 2030 Phase 7 was commenced in late 1999 and covers further rollout and enhancement of JCSS and ACSS, and will continue until mid-2005.

Defence Needs of Australian Industry

Identified needs that may relate to both Phase 8 and Phase 9 include:

- Fixed and deployable command support systems;
- Information systems; and
- Information technology infrastructure.

Australian Industry Involvement

Acquisition

Although the industry requirements are yet to be developed, the areas on which requirements are anticipated to focus for both Phase 8 and Phase 9 include:

- System engineering, including decomposing and implementing Operational Concept Documents;
- System design and development, including software application development;
- Systems integration, including integration of Commercial- Off- the- Shelf applications;
- Supply and installation of hardware; and
- Information systems/technology consultancy.

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.

Potential Prime Contractors

Potential Prime Contractors are likely to include existing Australian based suppliers of C2 capability, including ADI, Kaz, Saab, and SfS.

Phase Schedule Highlights

Year-of-Decision	Phase 8 - FY 2006/07
	Phase 9 - FY 2010/11 to 2012/13
In-service Delivery	Phase 8 - 2007 to 2009
	Phase 9 - 2011 to 2013

Estimated Phase Expenditure

Phase 8 - $100m to $150m

Phase 9 - $100m to $150m

Points of Contact

Capability Staff:

Lieutenant Colonel Chris Shine
(02) 6265 4086

Defence Materiel Organisation:

Mr Terry Oldfield
(02) 6265 7726

These Phases

Phase 3A will upgrade or replace the equipment acquired under Phase 2B as necessary to maintain access to imagery.

Phase 3B will continue to upgrade or replace the equipment acquired under Phase 2B as necessary to maintain access to imagery.

Proposal Background

JP 2044 is a multi-phased proposal to develop a Defence space-based surveillance capability. The proposal comprises three phases:

- Phase 1 was removed as a separate proposal;
- Phase 2 was restructured into Phase 2A and 2B (previously approved). Phase 2A provided some system updates and risk reduction activities in preparation for the main acquisition phase. Phase 2B is underway and will undertake the major acquisition of information technology, communications and training infrastructure to support a space-based surveillance capability; and
- Phase 3 will provide for capability upgrades, and has also been split into two sub-phases to allow an appropriately staged acquisition and update program. This will maintain relevancy, effectiveness and efficiency with rapidly changing technologies and related opportunities.

Defence Needs of Australian Industry

Local support will likely be limited to supply of commercial computer equipment and system infrastructure.

Australian Industry Involvement

Limited opportunity for local involvement.

Acquisition

Some opportunity as sub-contractor for prime contractor.

Through-life Support

It is expected local industry could contribute to system support and maintenance activities.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 3A - FY 2008/09 to 2010/11
	Phase 3B - FY 2010/11 to 2012/13
In-service Delivery	Phase 3A - 2010 to 2012
	Phase 3B - 2012 to 2014

Estimated Phase Expenditure

Phase 3A - $50m to $75m

Phase 3B - $50m to $75m

Points of Contact

Capability Staff:

Lieutenant Colonel Mike Bradford
(02) 6265 3897

Defence Materiel Organisation:

Mr Keith Fanner
(02) 6265 5667

These Phases

Phase 2A involves ensuring compliance with Government and security directives and providing Low Grade encryption to the restricted network.

Phase 2B will continue the integration work commenced in Phase 2A and incrementally enhance network capabilities to provide increased capacity and range of services to support the planning conduct and sustainment of operations as well as routine Defence business. Phase 2C will continue the evaluation of the wide area communications network and especially review the current switching infrastructure.

Phase 3 will further upgrade the Defence Wide Area Communications Network (DWACN) through equipment upgrade and/or technology enhancements for improved network performance and network management.

Proposal Background

JP 2047 is a multi-phased proposal to develop network communications capabilities for long distance strategic communications in support of ADF assets throughout Australia's region of interest.

Previous phases of JP 2047 include:

- Phase 0, now complete, encompassed a Project Definition Study and a network security and survivability study to provide input to the capability requirements for later phases;
- Phase 1A, in progress, is upgrading selected sites within Australia. The upgrade includes:
  - Telecommunications switching equipment upgrade and installation to provide a scalable switching backbone capable of utilising broadband carrier services;
  - Encryption equipment installation employing payload encryption capable of utilising broadband carrier services for the SECRET security domain; and
  - Upgrade to the existing Defence Network Operations Centre tools as necessary to effectively manage the upgraded network.
- Phase 2 will include a number of sub phases including:
  - Phase 2A is a consolidation stage that seeks to:
    - Strengthen the enhancements of Phase 1A;
    - Implement virtual private networking and policy based features on the network; and
    - Provide enhanced encryption services on both the RESTRICTED and SECRET domains.
  - Phase 2B/2C are development stages that will:
    - Build on and study the enhancements of Phase 2A;
    - Undertake technology studies for the future enhancement of the DWACN's protocols, transmission, and switching equipment; and
    - Provide guidance and directions to ongoing development.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Communications systems; and
- Information technology systems.

Australian Industry Involvement

Acquisition

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

- System design, development and integration of both software and hardware in order to enhance Australia's operational capability and future developments in communications technology.

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 ANZ-based telecommunications sector.

Potential Prime Contractors

No potential prime contractors for either Phase 2 or 3 have been identified at this stage.

It is anticipated that the prime contractor will be drawn from the ANZ-based telecommunications industry.

Phase Schedule Highlights

Year-of-Decision	Phase 2A - FY 2003/04
	Phase 2B - FY 2006/07
	Phase 2C - FY 2009/10 to 2011/12
	Phase 3 - FY 2010/11 to 2012/13
In-service Delivery	Phase 2A - 2005 to 2007
	Phase 2B - 2008 to 2010
	Phase 2C - 2010 to 2012
	Phase 3 - 2012 to 2014

Estimated Phase Expenditure

Phase 2A - $10m to $20m

Phase 2B - $10m to $20m

Phase 2C - Less than $10m

Phase 3 - $250m to $350m

Points of Contact

Capability Staff:

Mr Claude D'Abrera
(02) 6265 5228

Defence Materiel Organisation:

Mr Daryl Mouser
(02) 6266 1932

These Phases

Phase 2 is a Project Definition Study to identify options for replacing the current ADF amphibious transport capability and the current afloat support capability under Project SEA 1654 Phases 2 and 3.

Phase 3 will replace the existing ADF landing craft capability inherent in Navy Heavy Landing Craft (LCH) and Army Medium Landing Craft (LCM8) and LPA Watercraft, as part of the Amphibious Deployment and Sustainment system.

Phases 4A and 4B will provide the Amphibious Deployment and Sustainment (ADAS) capability including 2 amphibious ships to replace HMAS Tobruk and one Amphibious Transport (LPA). These phases may be combined and approved together, and will provide the ADF with increased amphibious deployment and sustainment capability to support an enhanced deployed force.

Phase 4C will acquire a Strategic Lift capability to provide the ADF with the means to conduct strategic sealift in support of enhanced deployed force.

Proposal Background

This project will provide the ADF with increased amphibious deployment and sustainment capability to support a land force. Each phase, 4A and 4B, will have a significant aviation and organic watercraft capability to support effective discharge and support of land forces. This will include multiple aircraft landing spots per ship in addition to a floodable well deck facility and a significant command and control capability.

JP 2048 comprises four phases:

- Phase 1A is in progress and will acquire a watercraft system to be used in conjunction with the LPAs - HMAS Kanimbla and HMAS Manoora.
- Phase 2 is a Project Definition Study (PDS) to identify options for replacing the current Australian Defence Force (ADF) amphibious transport capability and the current afloat support capability under Project SEA 1654 Phases 2 and 3.
- Phase 3 is designed to provide the Amphibious Deployment and Sustainment (ADAS) capability with a new breed of amphibious watercraft that will integrate with the platform chosen in Ph 4A/4B and be able to transport personnel and equipment from large amphibious ships to shore without utilising fixed port facilities, or prepared landing areas. This will provide a significant lift capability and further enhance the flexibility of the ADAS. These new watercraft will replace the existing capability inherent in the current generation of LCM-8, LCH watercraft, and the new LPA watercraft.
- Phase 4 incorporates the previous JP 2048 Phase 4 and the JP 2027 Phase 4. This phase has three sub-phases as follows:
- Phase 4A will replace the Heavy Landing Ship (LSH) HMAS Tobruk when it reaches the end of its service life in 2010 with a new class of larger amphibious vessel.

- Phase 4B will see the replacement of one of the Amphibious Transports (LPA) with a similar larger amphibious vessel to Phase 4A in 2013.
- Phase 4C will see the second LPA replaced with a strategic sealift capability in 2016. This capability will 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.

Defence Needs of Australian Industry

Identified needs that may relate to Phase 2 include:

- Determination of amphibious platform build locations and infrastructure requirements within Australia; and
- Assistance with overseas design requirements interpretation.

Identified needs that may relate to Phase 3 include:

- Production of landing craft which comprise one element of the total Amphibious Deployment and Sustainment system .

Identified needs that may relate to Phases 4 include:

- Design interpretation;
- Ship production;
- Ships propulsion systems;
- Ships electrical and electronic systems;
- Ship environmental systems; and
- In-service support.

Australian Industry Involvement

Phase 2 - This study phase may involve advice from Australian industry on in country ship building requirements for large amphibious operations vessels.

Phase 3 - The Government's strong preference is to build these ships in Australia as part of the Amphibious Deployment and Sustainment system.

Phases 4A, 4B and 4C - The Government's strong preference is to build these ships in Australia.

Acquisition

Phase 3 - The craft are considered well within the capability of the existing Australian industrial infrastructure.

Phases 4A and 4B - Although industry requirements will be guided by the information gained through the definition studies of the proposal, areas on which requirements are anticipated to focus include:

- Ability to construct large military ships in Australia; and
- Ability to adapt proven designs to achieve maximum commonality of ship systems with other ADF amphibious ships, and particularly, afloat support ships acquired through SEA 1654 - Maritime Operations Support Capability.

Phase 4C - Although industry requirements will be guided by the information gained through the definition studies of the proposal, areas on which requirements are anticipated to focus include:

- Ability to construct in Australia; and
- Ability to adapt proven designs to achieve maximum commonality of ship systems with other ADF amphibious ships (eg. Phases 4A and B), and particularly, afloat support ships acquired through SEA 1654 - Maritime Operations Support Capability.

Through-life Support

Phase 3 - 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.

Phases 4A, 4B and 4C - The 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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 2 - FY 2003/04
	Phase 3 - FY 2005/06
	Phases 4A - FY 2004/05
	Phase 4B - FY 2008/09 to 2010/11 (may be combined with Phase 4A)
	Phase 4C - FY 2013/14 to 2015/16
In-service Delivery	Phase 2 - N/A
	Phase 3 - 2009 to 2011
	Phase 4A - 2010 to 2012
	Phase 4B - 2012 to 2014
	Phase 4C - 2016 to 2018

Estimated Phase Expenditure

Phase 2 - Less than $10m

Phase 3 - $150m to $200m

Phases 4A and 4B - $1500m to $2000m in total

Phase 4C - $150m to $200m

Points of Contact

Capability Staff:

Commander Tim Crawford
(02) 6265 5114

Defence Materiel Organisation:

Mr Gary McFarlane
(02) 6265 3367

These Phases

Phase 2B addresses treatment aspects, surface and air evacuation, disease and injury prevention, facilities and equipment, staff competencies, health information management, and deployment flexibility.

Phase 3 is a continuation of the re-engineering and improvement of the ADF's deployable health capability commenced in Phase 2. The Project will continue to acquire new health technologies/systems and replace components of the deployable health capability.

Proposal Background

JP 2060 is comprised of five distinct elements:

- Phase 0, completed in 2001, was the preliminary phase;
- Phase 1 (previously approved), completed in 2003, was a Project Definition Study;
- Phase 2A (previously approved), is an early acquisition of Portable Ultrasound systems and Intermediate Fidelity Mannequin Systems;
- Phase 2B (described above); and
- Phase 3 (described above).

Defence Needs of Australian Industry

Identified needs that may relate to Phase 2B include:

- Health systems;
- Information technology (eg 'tele-health');
- Transportable and lightweight shelter systems; and
- Health logistics systems.

Needs of Australian industry for Phase 3 are yet to be defined as this project is in its infancy.

Australian Industry Involvement

Whilst some of the medical equipment required for Phase 2B is only manufactured outside Australia, opportunities exist for Australian industry in the provision of local logistic support. Greater opportunities exist for Australian industry in the provision of health support equipments such as information technology, shelters and health logistics.

Acquisition

Equipment for Phase 2B will be procured from multiple sources using multiple tenders. Opportunities for Australian Industry will exist within the various specialist areas covering:

- Medical;
- Environmental health;
- Health logistics;
- Shelter systems; and
- Health information technologies.

Tenders for Phase 2B are expected to cover a range of complexity of items from commercial off-the-shelf products to products that will need to be developed to meet special ADF requirements.

Through-life Support

Initial assessment for Phase 2B has indicated that the ADF will be best serviced by utilising Australian industry for through-life support of equipments procured under this project. Through-life support for most medical items is likely to involve provision of basic scheduled maintenance and inspection, through to heavy repair and supply support. Through-life support of health logistics items is likely to involve Australian industry for heavy maintenance activities with light maintenance conducted by ADF maintenance resources. Provision of health consumable items is likely to provide opportunities for Australian industry.

Potential Prime Contractors

This capability will be pursued as a number of separate acquisitions using discrete tenders and contracts, consequently a prime contractor is not relevant.

Phase Schedule Highlights

Year-of-Decision	Phase 2B - FY 2003/04
	Phase 3 - FY 2011/12 to 2013/14
In-service Delivery	Phase 2B - 2006 to 2008
	Phase 3 - 2014 to 2016

Estimated Phase Expenditure

Phase 2B - $50m to $75m

Phase 3 - $250m to $350m

Points of Contact

Capability Staff:

Major Brett Laboo
(02) 6265 2815

Defence Materiel Organisation:

Mr Russell Scott
(03) 9282 4385

This Phase

This phase will provide geospatial information database upgrades and improve end-user applications and reach.

Proposal Background

JP 2064 is a multi-phased proposal to develop a geospatial information infrastructure and services capability that provides web-enabled access to geospatial information, geospatial information resource discovery mechanisms, and geospatial services (ie tailored responses to customer requests for information). The proposal will cover all aspects of production, storage, dissemination, and service provision. The proposal will implement solutions in all security domains and across both fixed and wireless communications means to users in barracks/ base/harbour and when deployed. Access to data via this mechanism will become the principal means by which command support systems and other systems obtain the geospatial information that they require.

Simply expressed JP 2064 "will provide users with ready visibility of and access to geospatial information".

JP 2064 comprises four phases:

- Phase 1 is completed and has enhanced the geospatial production capability;
- Phase 2 (previously approved) will provide Defence information systems network users with a single coherent picture of the total range of authorised trusted geospatial information products and provide simple and easy web-enabled access to such products; and
- Phase 3 will provide geospatial information database upgrades and improve end-user applications and reach.

JP 2064 replaces JP 42 - PARARE Digital Topographical Support.

Defence Needs of Australian Industry

It is expected that this requirement will be put to public tender and local contractors will submit competitive bids. There is strong local support for Phase 2 of this project which indicates Phase 3 will also be of interest to local companies.

Australian Industry Involvement

This requirement is within the capacity of local industry

Acquisition

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

- Provision of Commercial- Off- the- Shelf (COTS) hardware and software;
- Software integration; and
- Integration of hardware with existing Defence information systems networks.

Through-life Support

The 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 in conjunction.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2009/10 to 2011/12
In-service Delivery	2011 to 2013

Estimated Phase Expenditure

$250m to $350m

Points of Contact

Capability Staff:

Major Simon Buckpitt
(02) 6265 6426

Defence Materiel Organisation:

Mr Keith Fanner
(02) 6265 5667

These Phases

Phase 2 will upgrade the Australian system to maintain compatibility with the US, introduce new system capabilities, extend the ADF roll-out of the system, and build upon infrastructure developed during the first phase.

Phase 3 will further develop the capability of the existing Australian system and extend Integrated Broadcast System (IBS) facilities to additional users.

Proposal Background

JP 2065 provides the Allied IBS to Australia. IBS manages and disseminates directly to end users (warfighters), in near-real time, the tactically significant information produced by Australian and Allied Intelligence, Surveillance, Reconnaissance, and Blue Force Tracking systems. The Australian IBS vision includes an information management centre that manages and bridges information between computer networks and satellite simplex and interactive (SatCom) components with suitable gateways to real time tactical data links. This capability forms an important component to Defence's Tactical Information Exchange Environment and US Coalition Interoperability.

Defence Needs of Australian Industry

Yet to be determined.

Australian Industry Involvement

Yet to be determined.

Acquisition

Yet to be determined.

Through-life Support

Yet to be determined.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 2 - FY 2006/07
	Phase 3 - FY 2010/11 to 2012/13
In-service Delivery	Phase 2 - 2008 to 2010
	Phase 3 - 2011 to 2013

Estimated Phase Expenditure

Phase 2 - $30m to $50m

Phase 3 - $10m to $20m

Points of Contact

Capability Staff:

Commander Katja Flaherty
(02) 6265 3489

Defence Materiel Organisation:

Mr David Cochrane
(02) 6265 5774

These Phases

Phase 2A will implement enhancements to the network management System and provide greater integration of disparate systems.

Phase 2B will reduce the vulnerability of Defence's information systems through the provision of advanced Computer Network Defence hardware and software including a support facility to conduct ongoing development and maintenance.

Proposal 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 JP 2068 include:

- Phase 1A (previously approved) will provide a Network Operations Centre facility at HMAS Harman in Canberra. This facilities work will be conducted through Infrastructure Division;
- Phase 1B (previously approved) trials a Defence Science and Technology Organisation developed Computer Network Defence pilot system on the Defence Restricted Network. Outcomes of this trial will be used to assess the need and functional requirements for a mature Computer Network Defence facility in JP 2068 Phase 2; and
- Phase 2 will further enhance the capabilities provided in Phase 1 by improving the management, monitoring, security and visibility of the Defence Information Environment. It will include a number of sub-phases including:
  - Phase 2A provides enhanced Enterprise Management Systems (EMS) and improved and integrated service processes. It will build upon current EMS and process work.
  - Phase 2B will adopt Computer Network Defence techniques, including the conduct of studies for deployment of tools and techniques to protect Defence's core IT&T against intrusions. It may include an enhancement of the current network management facilities at HMAS Harman to facilitate co-location and integration of Network and Security Operations functions.

Defence Needs of Australian Industry

Identified needs that may relate to both Phases 2A and 2B include:

- Information systems; and
- Information security.

Australian Industry Involvement

Acquisition

Although the industry requirements are yet to be developed, Australian industry involvement is expected in the majority of proposal activities. The areas on which requirements are anticipated to focus include:

- Procurement and integration of software and hardware into Defence Network Operations Centre along with development of relevant processes and procedures.

- Network management services.

Some commercial-off-the-shelf (COTS) hardware, software, furnishings and construction material may be sourced from overseas vendors where it provides value for money.

Through-life Support

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

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 2A - FY 2004/05
	Phase 2B - FY 2004/05
In-service Delivery	Phase 2A - 2006 to 2008
	Phase 2B - 2006 to 2008

Estimated Phase Expenditure

Phase 2A - $20m to $30m

Phase 2B - $30m to $50m

Points of Contact

Capability Staff:

Mr Claude D'Abrera
(02) 6269 5228

Defence Materiel Organisation:

Mr Daryl Mouser
(02) 6266 1932

These Phases

Phase 1B will replace in part the existing ADF fleet of High Grade Cryptographic Equipment. The proposal also includes management of the new fleet and associated keys.

Phase 2 will provide Defence with a cost effective high-grade cryptographic equipment capability beyond 2010.

Proposal Background

JP 2069 is a multi-phased proposal to acquire replacement High Grade Cryptographic Equipment for the ADF. JP 2069 comprises three phases:

- Phase 1A (previously approved) is a Project Definition Study (PDS), which will define the strategy and scope of later phases of JP 2069. This phase may also acquire any urgent equipment replacements identified in the PDS;
- Phase 1B is the initial acquisition phase and will acquire high priority replacement High Grade Cryptographic Equipment for the ADF; and
- Phase 2 is the follow-on acquisition phase, which will acquire urgently required replacement High Grade Cryptographic Equipment for the ADF. As technology underlying High Grade Cryptographic Equipment and the capabilities it supports evolves rapidly, other follow-on phases of this proposal may be required.

Defence Needs of Australian Industry

Identified industry needs that may relate to this proposal include:

- Information security;
- Communications and information systems; and
- Through life support of High Grade Cryptographic Equipment.

Australian Industry Involvement

Acquisition

Although the industry requirements are yet to be targeted and developed, requirements are anticipated to focus on:

- Participation in, and contribution to, the conduct of the PDS by subject matter experts within Australian industry. This is already occurring as part of Phase 1A;
- Design and development of niche cryptographic equipment and systems; and
- Communications and information systems.

Through-life Support

Full through-life support is needed and more specific requirements will be determined by the preliminary definition studies of the project for each type of equipment and as purchasing occurs, specific support arrangements will be established.

Potential Prime Contractors

While no potential prime contractors have been identified at this stage, the subject matter experts have been drawn from existing Australian-based companies that have High Grade Cryptographic Equipment specialists.

Phase Schedule Highlights

Year-of-Decision	Phase 1B - FY 2005/06
	Phase 2 - FY 2007/08
In-service Delivery	Phase 1B - 2005 to 2007
	Phase 2 - 2008 to 2010

Estimated Phase Expenditure

Phase 1B - $10m to $20m

Phase 2 - $20m to $30m

Points of Contact

Capability Staff:

Mr Craig Marshall
(02) 6265 4009

Defence Materiel Organisation:

Mr Steve McGrath
(02) 6266 1873

These Phases

Phase 2 will continue the rollout of modern communications infrastructure to high readiness land formations and units of the ADF. It will replace ageing analogue combat radios, trunk radios and switching infrastructure.

Phase 3 is the continued expansion of enhanced communications to support Joint Operations. This may include the introduction of real-time Tactical Data Distribution and Tactical Airborne sub-systems.

Proposal Background

JP 2072 is a multi-phased proposal to progressively define and acquire a holistic Battlespace Communications System for the ADF's land elements. While the scope of Phase 1 is developed, the exact extent, scope and timing of later phases is to be determined through further studies.

Phase 1 (previously approved) commenced in 2002-2003 and will acquire equipment to redress known, urgent capability shortfalls, as well as, enhance certain existing communication systems within the land environment. A Request for Tender for Phase 1 is anticipated to be released early 2004. Additionally, Phase 1 will look to conduct a Project Definition Study for the second and latter phases as well as develop and examine proposals for concept demonstrator systems.

Defence Needs of Australian Industry

Identified needs that may relate to both Phase 2 and 3:

- Systems engineering;
- Systems integration;
- Communications and information systems;
- Network management systems; and
- Through life support.

Australian Industry Involvement

Acquisition and sustainment are critical areas for the potential involvement of Australian Industry.

Acquisition

The industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal. It is anticipated that Australian industry will be involved in providing systems management and integration for systems acquired under this proposal. Some equipment may be procured from overseas sources, although there may be scope to acquire the equipment from Australian industry.

Through-life Support

The 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.

Potential Prime Contractors

Potential prime contractors have responded to requests for information made at an Industry Brief held July 2001 and September 2003. Identified candidates however, do not represent a definitive or formal list and the Request for Tender for a Phase 1 Prime Systems Integrator will be released to the open market.

Phase Schedule Highlights

Year-of-Decision	Phase 2 - FY 2005/06
	Phase 3 - FY 2007/08
In-service Delivery	Phase 2 - 2008 to 2010
	Phase 3 - 2009 to 2011

Estimated Phase Expenditure

Phase 2 - $350m to $450m

Phase 3 - $200m to $250m

Points of Contact

Capability Staff:

Phase 2 - Major Alice Dillon
(02) 6265 6501

Phase 3 - Major Alan Fraser
(02) 6265 1452

Defence Materiel Organisation:

Lieutenant Colonel Andrew Shegog
(02) 6265 1992

This Phase

This phase will fund the acquisition and roll-out of the Improved Logistics Information System.

Proposal Background

Logistic support is provided to the ADF through the acquisition of goods and services, and the repair, maintenance and modification of its existing equipment. The processes to conduct and manage these activities are embedded in the Defence logistics information systems. The main information technology component of these logistics information systems is the Standard Defence Supply System (SDSS).

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

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Logistics management systems;
- Information systems; and
- Project management.

Australian Industry Involvement

Acquisition

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

- System design and development, including software development;
- System integration, including integration of Commercial-Off-the-shelf (COTS) applications;
- Supply of hardware and installation; and
- Information systems consultancy.

Through-life Support

The 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.

Potential Prime Contractors

MINCOM has been identified as the Defence Alliance partner to develop Military Logisitics Information System Solution. No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2004/05
In-service Delivery	2007 to 2009

Estimated Phase Expenditure

$100m to $150m

Points of Contact

Capability Staff:

Lieutentant Colonel Marty McKone
(02) 6265 7215

Defence Materiel Organisation:

Mr Rao Ayyalasomayajula
(03) 9310 8703

These Phases

Phase 2A will improve the information available to all managers, including the interchange of management information with Defence's command support systems.

Phases 2B, 3, and 4 will upgrade the core financial and personnel computer information systems to accommodate changes in the user requirements, technical platforms and the commercial application on which they are based. Phase 2B will also complete the integration of the military pay system into the overall personnel system.

Proposal Background

Maintaining the current plethora of legacy and specialist systems within the domains of finance, personnel and logistics is inefficient, as is the lack of interconnection between the core systems and a range of other disparate management systems used within Defence. These inefficiencies and interconnection problems are an impediment to improved performance across Defence.

JP 2080 seeks to improve information available to all managers, including interchange of management information with Defence's command support systems, and with Australia's coalition partners integrate and coordinate the existing management information initiatives from individual programs and will incorporate a range of architectures, policies, procedures and standards to guide the provision of management information . This will be known as the Management Information Environment (MIE) and it will be an integral part of the Defence Information Environment (DIE).

JP 2080 is comprised of four phases:

- Phase 1 (previously approved) is in progress and will provide a number of urgent improvements to selected Defence management systems;
- Phase 2 will improve and rationalise Defence's management systems as described above; and
- Phases 3 and 4 are to ensure that systems are able to be upgraded to continue to meet the evolving Management information needs of the Australian Defence Organisation.

Defence Needs of Australian Industry

Identified needs that may relate to this proposal include:

- Management systems; and
- Information systems.

Australian Industry Involvement

Acquisition

Although the industry requirements are yet to be developed, the areas on which requirements for Phase 2A are anticipated to focus include:

- System design and development, including software development;

- System integration, including integration of Commercial-Off-the-shelf (COTS) applications;
- Supply of hardware and installation; and
- Information systems consultancy.

Industry requirements for Phase 2B will be developed in Phase 2A, but will include implementing a data warehousing and business intelligence solution.

Requirements for Phases 3 and 4 will be specified in Phase 2B.

Through-life Support

The 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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage. The prime contractor is anticipated to be drawn from the existing ANZ-based information systems industry.

Phase Schedule Highlights

Year-of-Decision	Phase 2A - FY 2003/04 Phase 2B - FY 2003/04 Phase 3 - FY 2007/08 Phase 4 - FY 2013/14 to 2015/16
In-service Delivery	Phase 2A - 2004 to 2006 Phase 2B - 2005 to 2007 Phase 3 - 2009 to 2011 Phase 4 - 2016 to 2018

Estimated Phase Expenditure

Phase 2A - Less than $10m

Phase 2B - $50m to $75m

Phase 3 - $30m to $50m

Phase 4 - $30m to $50m

Point of Contact

Capability Staff:

Mr Andrew Pellow
(02) 6265 7594

These Phases

Phase 1B will purchase reserve explosive ordnance stocks to satisfy initial outfit and contingency usage requirements for some key munitions.

Phase 2 will purchase reserve explosive ordnance stocks to satisfy work-up and some concurrent contingency requirements.

Phase 3 will purchase critical reserve explosive ordnance stocks for remaining concurrent contingency and all safety stock requirements. This phase will particularly address the stocks of newer weapons.

Proposal Background

This project seeks to reconstitute reserve stocks of explosive ordnance.

Over many years the benign strategic environment has allowed the ADF to draw down reserve stocks to meet training needs. But the more recent high operational tempo has placed additional pressures on the reserve stockholdings. These three phases will address the most critical natures. It should be noted that normal operating stock replenishment activity will continue, and that this project is aimed at re-establishing the warstock requirements.

Defence Needs of Australian Industry

Yet to be determined

Australian Industry Involvement

Yet to be determined

Potential Prime Contractors

Yet to be determined

Phase Schedule Highlights

Year-of-Decision	Phase 1B - FY 2003/04
	Phase 2 - FY 2008/09
	Phase 3 - FY 2009/10 to 2011/12
In-service Delivery	Phase 1B - 2005 to 2007
	Phase 2 - 2008 to 2010
	Phase 3 - 2012 to 2014

Estimated Phase Expenditure

Phase 1B - $150m to $200m

Phase 2 - $250m to $350m

Phase 3 - $250m to $350m

Points of Contact

Capability Staff:

Brigadier John Cantwell
(02) 6265 2888

Defence Materiel Organisation:

Commodore Peter Law
(02) 6266 0122

These Phases

JP2089 will deliver a number of Tactical Information Systems that include Tactical Digital Information Links (TADILs) comprising Link 16, which use well-defined message and implementation standards and Variable Message Format (VMF)(another system of information exchange).

Phase 2 of the Project will implement Tactical Information Exchange (TIE) solutions on the ANZAC Ships, Armed Reconnaissance Helicopter and the F/A-18s. Phase 2 will also include further definition studies related to other legacy platforms (such as ground-based elements and tactical air transport).

Phase 3 of the Project will implement TIE solutions on those legacy platforms identified during the conduct of Phase 2.

Proposal Background

The ADF has introduced a number of platforms that do not have Information connectivity with the bulk of forces in the ADF. In 2002, Defence mandated the J-series family of messages as the backbone for Information exchange. In order to now meet this requirement, some platforms will need to have either Link 16 or VMF introduced as part of their combat system. Subsequently, Defence has assessed that as a matter of priority, ARH, ANZAC and HUG should receive attention. One of the studies will be the TIE System of Systems Concept for the ADF to allow a consortium of companies to assess the ADF's current and future platforms out to 2015 and quantify how and how much will be required to ensure that all platforms are on the future networks to ensure seamless Tactical information exchange across the battlespace. Whatever solution is offered must be interoperable with the US. The outcomes of the Phase 1 Project Definition Study will define the Phase 2 scope.

Phase 2 includes a further Project Definition Study

The outcomes of the Phase 2 Project Definition Study will define the Phase 3 scope.

Defence Needs of Australian Industry

Identified needs that may relate to this proposal include:

- Knowledge & experience of Tactical Data Links; and
- Knowledge & experience of Tactical Communications Systems.

Australian Industry Involvement

Acquisition

Although the industry requirements are yet to be developed, Australian industry involvement is expected in the majority of proposal activities. The industry requirements will be guided by the information obtained through the Definition Studies.

Through-life Support

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

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 2 - FY 2004/05
	Phase 3 - FY 2007/08
In-service Delivery	Phase 2 - 2006 to 2008
	Phase 3 - 2010 to 2012

Estimated Phase Expenditure

Phase 2 - $75m to $100m

Phase 3 - $50m to $75m

Points of Contact

Capability Staff:

Squadron Leader Matt Colbert
(02) 6265 7215

Defence Materiel Organisation:

Mr Joseph Vega
(02) 6265 7407

This Phase

This phase will establish permanent connectivity between ADF and key Allied Command and Control networks and systems for electronically exchanging information and provide network infrastructure and services to support future Coalition operations.

Proposal Background

This project seeks to provide the core infrastructure and services to enable classified information exchange with traditional and non traditional Allied partners, primarily to the planning and conduct of Coalition operations in the future. JP 2090 Ph1 will rationalise and harmonise existing infrastructure and establish new infrastructure, to interconnect the Defence Restricted and Secret networks and provide deployable infrastructure for Coaltion systems. Future phases of the project will be developed and these phases will build on the core infrastructure and services established with Phase 1 to enhance and evolve the combined Information Environment. A key element of Phase 1 is the information assurance and computer network defence infrastructure to protect national and Coalition systems.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Provision of communications and information systems hardware and software, design and integration of system components.

Australian Industry Involvement

Acquisition

Industry requirements are yet to be developed.

Through-life Support

The Combined Information Environment (CIE) project infrastructure and services will augment existing Defence Restricted Network and Defence Secret Network infrastructure and will utilise existing in-service support agreements and arrangements for the through life support of the CIE capabilities.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2004/05

In-service Delivery 2006 to 2008

Estimated Phase Expenditure

$30m to $50m

Points of Contact

Capability Staff:

Mr Andrew Tape
(02) 6265 7035

Information Systems Division

Mr Steve Hansson
(02) 6266 4604

Defence Materiel Organisation:

Mr Terry Oldfield
(02) 6265 7726

This Phase

This phase will replace the current fleet of Air Force fire trucks.

Proposal Background

JP2095 Phase 1 seeks to replace the existing Air Force capability provided by the current fleet of Trident TFA (Trucks, Fire, Aircraft). The TFA is Air Force's primary airfield rescue and firefighting response vehicle, and although primarily required for fixed-based operations, also has a potential expeditionary role to major bases. It complements the capability provided by the smaller, air-transportable Titan TFGP (Truck, Fire, General Purpose) which is the mainstay for expeditionary operations.

Defence Needs of Australian Industry

Industry needs that may relate to this phase include:

- Vehicle structures and survivability.

The prime contractor is to be an established vehicle manufacturer that is supplying a significant portion of the vehicle fleet.

Australian Industry Involvement

Acquisition

The industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal.

Through-life Support

Full through-life support is needed and more specific requirements will be determined by the preliminary stages/definition studies of the proposal.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2004/05

In-service Delivery 2007 to 2009

Estimated Phase Expenditure

$10m to $20m

Points of Contact

Capability Staff:

Major Ian Pickett
(02) 6265 3983

Defence Materiel Organisation:

Lieutenant Colonel Peter Cleasby-Jones
(03) 9282 6745

This Phase

This project will focus on the correlation and fusion of the data sourced from multiple surveillance sensors available to the ADO and, most importantly, the information management (including Tasking and Dissemination) of the sensor outputs. Some Upgrades to the Jindalee Operational Radar Network may be included in this project.

Proposal Background

Continuous surveillance of our northern air and sea approaches is a high priority of the Government and successive Defence policies have articulated this requirement. The DCP contains many projects that will deliver platforms/capabilities that will contribute to this mission. The Government has also articulated a vision for an integrated national surveillance system, fusing the outputs from JORN and other sensor systems.

The focus of JP 2096 will be on the correlation and fusion of the data sourced from multiple surveillance sensors available to the ADO and, most importantly, the information management (including Tasking and Dissemination) of the sensor outputs. Numerous studies conducted by Defence over the past decade have concluded that surveillance Information Management is an issue that must be addressed.

Phase Schedule Highlights

Year-of-Decision FY 2011/12 to 2013/14

In-service Delivery 2014 to 2016

Estimated Phase Expenditure

$750m to $1000m

Point of Contact

Capability Staff:

Group Captain Tony Burke
(02) 6265 5802

This Phase

This project will enhance the capability of the Special Air Service and commandos.

Proposal Background

Project REDFIN is a multi-phased proposal that seeks to progress the ADF Special Operations capability into the next generation in order to maintain the technology edge over emerging threat elements. This will enable Special Operations Command to continue to provide options to Government beyond the capabilities of other ADF elements.

These capabilities are to cover the whole spectrum of Special Operations, including offensive operations (such as strike), special reconnaissance, special recovery, support operations and counter terrorism.

Defence Needs of Australian Industry

Industry should offer leading edge solutions to the project, with an emphasis on delivering lightweight, yet robust and flexible systems. Some systems will need to be integrated with other systems. Industry needs that may relate to this phase include:

- Sensors;
- Electro-optics;
- Command, communications, control and intelligence (C3I);
- Land mobility; and
- Systems integration.

Australian Industry Involvement

Australian Industry Involvement is sought, however many Special Operations legacy and future systems will have a high degree of interoperability with Coalition partners. While innovative research and development is encouraged, it should not be at the expense of delivery of a timely solution that meets the specific requirements for each mission critical system.

Acquisition

Some systems will need to be integrated with other systems. Systems should be delivered with full consideration of life cycle issues. Specific industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal.

Through-life Support

Full through life support is needed and more specific requirements will be determined by the preliminary stages/definition studies of the proposal.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2005/06

In-service Delivery 2010 to 2012

Estimated Phase Expenditure

$350m to $450m

Points of Contact

Capability Staff:

Major Grant Mason
(02) 6265 4643

Defence Materiel Organisation:

Mr David Cochrane
(02) 6265 5774

These Phases

Phase 2B begins intial acquisition of equipment that will enhance the ADF's ability to protect Global Positioning Systems.

Phase 3A will identify and seek to mitigate risks relating to the upgrade of Global Positioning System (GPS) equipment on additional ADF platforms.

Phase 4A will fund studies into the scope of work to upgrade ADF aircraft GPS equipment, enabling aircraft to meet civil regulatory changes whilst having confidence that Defence's GPS equipment is protected against jamming and deception.

Proposal Background

In 1993, the United States (US) Government publicly acknowledged the vulnerability of GPS capabilities to Navigation Warfare (NAVWAR). JP5408 aims to provide GPSNAVWAR protection to key ADF platforms.

JP 5408 comprises four phases:

- Phase 1 is in progress and includes 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.
- Subsequent phases (2, 3 and 4) will incrementally implement the enhancements and replacements to the ADF's GPS equipped platforms as recommended by Phase 1 studies. These following phases will be split into risk reduction and implementation sub-phases.

Civil compliance for military systems is ongoing in the project.

Defence Needs of Australian Industry

Identified needs that may relate to this Phase 2B include:

- Navigation systems;
- Electronic warfare; and
- Systems integration.

Australian Industry Involvement

Acquisition

Phase 2B industry requirements are anticipated to focus on:

- System integration; and
- Modification of existing designs and GPS fits in ADF platforms.

Due to the diverse nature of the ADF platforms that GPS is fitted to, this phase is applicable across the majority of ADF platforms and related support industries.

Through-life Support

Phase 2B 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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 2B - FY 2006/07
	Phase 3A - FY 2006/07
	Phase 4A - FY 2008/09 to 2010/11
In-service Delivery	Phase 2B - 2008 to 2010
	Phase 3A - Study
	Phase 4A - Study

Estimated Phase Expenditure

Phase 2B - $100m to $150m
Phase 3A - Less than $10m
Phase 4A - Less than $10m

Points of Contact

Capability Staff:

Squadron Leader Paul Gibbs
(02) 6265 2073

Defence Materiel Organisation:

Wing Commander Eric Gidley
(02) 6266 4601

This Phase

This phase will design and construct a permanent facility for a collocated Headquarters Australian Theatre (HQAST) capable of conducting joint, combined and single-service military operations and campaigns.

Proposal Background

In addition to developing HQAST facilities, JP 8001 has several phases concerned with deployable C4I capabilities. This development work commenced in 1998 through project JP 2056. JP 2056 upgraded the C4I infrastructure at the Deployable Joint Force Headquarters (DJFHQ) at Enoggera, and created a prototype deployable Joint Task Force (JTFHQ) capability. Other project Phases concerned with development of Theatre Command capabilities are:

- JP 8001 Phase 3A (previously approved) provides a deployable Joint Task Force Headquarters comprising a headquarters on HMAS MANOORA, enhancements to facilities at Deployable Joint Force Headquarters, and further deployable capabilities to support a Deployable Joint Task Force Headquarters (Land);
- JP 8001 Phase 3B (previously approved) provides a second deployable Joint Task Force Headquarters on HMAS KANIMBLA, and deployable capabilities to support a Deployable Joint Task Force Headquarters (land) based on a Brigade, Flotilla or Air Wing;
- JP 8001 Phase 3C.1 (previously approved) is a Project Definition Study (PDS) to define the requirements for a Deployable Accredited Secure Intelligence Facility to support deployed intelligence capabilities. The phase includes the development of a prototype deployable Accredited Secure Intelligence Facility capability; and
- JP 8001 Phase 3C.2 follows on from Phase 3C.1 and will deliver the mature deployable Accredited Secure Intelligence Facility capability.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Command support systems;
- Communications and information systems; and
- Facilities and infrastructure.

Australian Industry Involvement

Acquisition

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

- Systems and software design and development;
- Systems integration;
- Technical support services;
- Data networking and fusion;
- Building construction and fit- out; and
- Private financing is being considered for the construction and through life support of the new facilities and infrastructure.

Through-life Support

The 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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2003/04

In-service Delivery 2006 to 2008

Estimated Phase Expenditure

$250m to $350m (incorporating both facilities and systems fit-out budget)

Other Unapproved Phases

See also JP 8001 2B Phase 3C.3.

Points of Contact

Capability Staff:

Commander Daniel Gibbons
(02) 6265 5463

Corporate Support & Infrastructure Group:

Air Commodore Jack Plenty
Yet to be determined.

This Phase

This phase will deliver a replacement Accredited Secure Intelligence Facility (ASIF) to enable available information systems to provide appropriate levels of intelligence support to a deployed Joint Task Force (JTF)Commander.

Proposal Background

JP 8001 Ph3C seeks to develop deployable and accredited secure intelligence facilities. These facilities provide an integrated environment for the use of deployed intelligence capabilities.

JP 8001 Ph3C aims to provide accredited facilities for available information systems to allow appropriate levels of intelligence support to be provided to a deployed JTF Commander. Facilities include the supporting infrastructure such as power, climate control, work areas, office machines, security, specific hardware, software and communications systems. ASIFs are scalable and operate at classified security and foreign releasability levels.

It is expected that initial aspects of this capability will be introduced into service in 2003 and a further development and sustainment phase will be included in later years of the Defence Capability Plan.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Command support systems;
- Communications and information systems; and
- Shelter systems.

Australian Industry Involvement

Acquisition

Although the industry requirements will be guided by the information gained through the Project Definition Study, the areas on which requirements are anticipated to focus include:

- Systems and software design and development;
- Systems integration;
- Installation of systems into the LPA and shelters; and
- Provision of shelters, generators and support equipment.

Through-life Support

Full through-life support is needed and more specific requirements have yet to be determined.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2009/10 to 2011/12
In-service Delivery	2011 to 2013

Estimated Phase Expenditure

$10m to $20m

Other Unapproved Phases

See also JP 8001 Phase 2B.

Points of Contact

Capability Staff:

Squadron Leader Pete Wooding
(02) 6265 1170

Defence Materiel Organisation:

Lieutenant Colonel Campbell Smith
(02) 6265 4079

This Phase

LAND 17 will enhance the Australian Army indirect fire support system through the replacement or enhancement of the 105mm Hamel Howitzer and 155mm M198 Howitzer fleet when they reach the end of their service life in 2010.

Proposal 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 and introduced into Australian service in the 1980s. The changing nature of operations in the land and littoral environment means the Army's offensive support system needs the ability to apply precise lethal and non-lethal effects from mortars, howitzers, ships and aircraft discriminately over large areas on the battlefield. The modernised system will be characterised by responsiveness, high tactical mobility, greater autonomy and survivability. This modernised system will complement current and future ADF surveillance, target acquisition, digitisation and land logistic capabilities. This project combines the previous LAND 17 and LAND 18 Projects.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Enhanced munitions;
- A new integral Command and Control System; and
- Improved delivery platforms.

Australian Industry Involvement

Acquisition

Industry requirements are yet to be developed.

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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2005/06
In-service Delivery	2008 to 2010

Estimated Phase Expenditure

$600m to $750m

Points of Contact

Capability Staff:

Major Sean Ryan
(02) 6265 4820

Defence Materiel Organisation:

Mr Michael Doust
(03) 9282 4481

This Phase

This phase will provide the Australian Army with the range of direct fire support weapon systems that will be integral to an Infantry Battalion.

Proposal Background

LAND 40 was raised in consideration of the Defence White Paper. LAND 40 comprises two phases:

- Phase 1 (previously approved) seeks to provide a medium range, direct fire guided weapon for attacking bunkers, buildings and armoured vehicles.
- Phase 2 seeks to provide a range of direct fire support weapons for use by an Infantry Battalion.

Defence Needs of Australian Industry

Industry needs that may relate to this phase include:

- Ballistic weapons and munitions.

Australian Industry Involvement

Acquisition

The industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal.

Through-life Support

Full through-life support is needed and more specific requirements will be determined by the preliminary stages/definition studies of the proposal.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2006/07
In-service Delivery	2008 to 2010

Estimated Phase Expenditure

$150m to $200m

Points of Contact

Capability Staff:

Major Bob Parker
(02) 6265 1863

Defence Materiel Organisation:

Mr Pat Meehan
(03) 9282 7150

This Phase

This phase will replace the ADF Night Fighting Equipment, such as image intensifiers and night vision goggles, when they reach the end of their service life.

Proposal Background

LAND 53 (NINOX) is a multi-phased project 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' detection and recognition capabilities under various battlefield conditions. Phase 2 sub-phases consider the introduction of Unattended Ground Sensors, whilst the various sub-phases of Phase 1 consider the other range of surveillance systems.

Defence Needs of Australian Industry

Industry needs that may relate to this phase include:

- Electro-optics integration; and
- Packaging and storage.

Australian Industry Involvement

Acquisition

The industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal.

Through-life Support

Full through-life support is needed and more specific requirements will be determined by the preliminary stages/definition studies of the proposal.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2008/09 to 2010/11

In-service Delivery 2010 to 2012

Estimated Phase Expenditure

$150m to $250m

Points of Contact

Capability Staff:

Captain Adam Rankin
(02) 6265 2810

Defence Materiel Organisation:

Lieutenant Colonel Simon Welsh
(03) 9282 6199

This Phase

This phase will extend the life-of-type of the ADF AN/TPQ-36 Weapon Locating Radar until approximately 2015.

Proposal Background

The AN/TPQ-36 Weapon Locating Radar was introduced into service in 1987 as an earlier phase of LAND 58. A total of seven radars, a simulator, plus support and test equipment were purchased. The upgraded radars will be capable of locating (detecting and providing targeting data) mortars, guns and rockets in the tactical land environment.

Defence Needs of Australian Industry

Industry needs that may relate to this phase include:

- Sensors.

Australian Industry Involvement

The industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2005/06

In-service Delivery 2007 to 2009

Estimated Phase Expenditure

$20m to $30m

Points of Contact

Capability Staff:

Major Doug Mallett
(02) 6265 1734

Defence Materiel Organisation:

Lieutenant Colonel Duncan Roach
(03) 9282 5380

These Phases

Phase 3.4 will provide further rollout of Battlefield Command Support System (BCSS) to Land Force units.

Phase 4 will complete the rollout of, and provide enhancement to, the Australian Army's Battlefield Command Support System (BCSS). This phase will continue the BCSS rollout after Phase 3.4 is acquired. The exact scope and mix of capabilities to be provided in Phase 4 is yet to be determined.

Proposal Background

LAND 75 is a multi-phased proposal to provide the Australian Army with a BCSS. The proposal comprises eight phases. LAND 75 Phases 1 and 2 were studies conducted throughout the 1980's under the auspices of the then Australian Army Tactical Command and Control System (AUSTCCS) project.

In 1992, Army proceeded to contract with CelciusTech Australia, and commenced development under Phase 3.1 of a first iteration of the system. By 1998, it became clear that Army's ambitions, and the extant limitations in technology, required a radical departure from the existing development methodology - particularly a move from Unix to NT technology. A revised prime contract was negotiated with CelciusTech, and in early 1998, Phase 3.2 was commenced to develop an NT-based BCSS for delivery to Australia's 1st Brigade. Final delivery of this phase is anticipated to occur by mid-2003.

In early 2000, Phase 3.3 was split into two sub-phases: Phase 3.3 and Phase 3.3b. Phase 3.3 was commenced with the prime contractor, Saab Systems Australia (the former CelciusTech). Phase 3.3 seeks to simplify the user interface of BCSS, and is anticipated to deliver its final components by mid-2005. 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.

Phase 3.3B was approved in November 2001 and continues to enhance the functionality, stability and interoperability of BCSS and rollout the system within ARA units of the Land Army.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Command support systems;
- Information systems; and
- Communications systems.

Australian Industry Involvement

Acquisition

Future industry requirements will focus on:

- Identification and incorporation into the existing BCSS of commercially developed software products that can be modified to support the staff functions undertaken in a tactical environment (including operations, logistics, intelligence and mapping);
- Identification of secure, deployable wireless local area network technology that will assist in more rapid set- up and dismantling of the BCSS; and
- Identification and trialing of technology that allows deployment of BCSS functions within armoured combat vehicles, and in miniature form for use by small (7- 30 persons) dismounted infantry groups.

Through-life Support

While the current PSI is being utilised to meet through-life support requirements, specific details of the mature through-life support arrangements of LAND 75 are yet to be determined. The 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.

Potential Prime Contractors

Potential Prime Contractors are likely to include existing Australian based suppliers of C2 capability, including - ADI, Kaz, Saab, SfS.

Phase Schedule Highlights

Year-of-Decision	Phase 3.4 - FY 2005/06
	Phase 4 - FY 2009/10 to 2011/12
In-service Delivery	Phase 3.4 - 2007 to 2009
	Phase 4 - 2010 to 2012

Estimated Phase Expenditure

Phase 3.4 - $75m to $100m

Phase 4 - $75m to $100m

Points of Contact

Capability Staff:

Major Vance Feeney (NZ)
(02) 6265 4817

Defence Materiel Organisation:

Lieutenant Colonel Steve Ellicott
(02) 6266 7432

This Phase

This phase will extend the life of ADF small arms, such as the F88 Steyr and F89 Minimi Machine Gun.

Proposal Background

Previous phases of LAND 91 introduced the F88 Steyr into service in 1988 and the F89 Minimi in 1989.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Ballistic weapons and munitions.

Australian Industry Involvement

Acquisition

The industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal.

Through-life Support

Full through-life support is needed and more specific requirements will be determined by the preliminary stages/definition studies of the proposal.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2008/09 to 2010/11

In-service Delivery 2010 to 2012

Estimated Phase Expenditure

$30m to $50m

Points of Contact

Capability Staff:

Major Bob Parker
(02) 6265 1863

Defence Materiel Organisation:

Lieutenant Colonel Stephen Saddington
(03) 9282 6441

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This Phase

This phase will upgrade the fleet of Australian Light Armoured Vehicles (ASLAV).

Proposal Background

LAND 112 is a multi-phased proposal to provide a Light Armoured Vehicle for the Australian Army. Other phases include:

- Phase 1 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 acquired 111 wheeled, light armoured vehicles. The vehicle was manufactured by General Motors Defense of Canada, with final fit-out in Australia completed by BAE Systems Australia; and
- Phase 3, in progress, is acquiring 144 additional ASLAV to equip 2nd/14th Light Horse Regiment, to round out 2nd Cavalry Regiment, and to retrofit earlier Phase 2 ASLAV to the improved Phase 3 standard.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Integration of electronic and mechanical systems to armoured vehicles including:
  - Mine protection;
  - Battlefield management;
  - Signature management;
  - Spall liners;
  - Engine retrofit; and
  - Ballistic protection; and
- Comprehensive maintenance of these systems in Australia (rather than through overseas agency).

Australian Industry Involvement

There are opportunities for several contractors with niche expertise in the manufacture and/or supply of survivability technologies to participate in Phase 4 of the ASLAV Program. The overall integration work will not automatically pass to General Dynamics Land Systems - Australia.

Acquisition

For the acquisition stage of this proposal, the industry requirements will be satisfied through:

- Possible supply and installation of the appliqué protection kits and spall liners (for ASLAV interior);
- System 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.

Through-life Support

One or a number of Australian contractors will undertake through-life support activities.

Potential Prime Contractors

The prime contractor is anticipated to be drawn from existing Australian-New Zealand based defence industry. A decision is yet to be made whether to use an amendment to the existing Phase 2 and Phase 3 contract or to create a new contract.

Phase Schedule Highlights

Year-of-Decision FY 2006/07

In-service Delivery 2009 to 2011

Estimated Phase Expenditure

$200m to $250m

Points of Contact

Capability Staff:

Lieutenant Colonel Greg Akhurst
(02) 6265 4918

Defence Materiel Organisation:

Lieutenant Colonel Rod Rayward
(03) 9282 6322

These Phases

Phase 3A will commence the replacement of Army's field vehicles and trailers. Higher readiness units will be equipped first.

Phase 3B will provide replacement field vehicles and trailers for the remainder of the ADF.

Proposal Background

LAND 121 (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, 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.

Other phases of LAND 121 include:

- Phase 1, a project definition study sought to develop a comprehensive plan for later phases of LAND 121;
- Phase 2A, in progress, enhances current capability for heavy recovery and bulk liquid transport. It also addresses excessive cabin noise and personnel/cargo restraint and segregation systems;
- Phase 2B, addressed capability deficiencies identified for East Timor operations. This phase is currently being closed;
- Phase 3A seeks to commence the replacement of the current fleet of ADF field vehicles and trailers with future field vehicles and trailers; and
- Phase 3B extends the replacement of ADF field vehicles and trailers across the remainder of the fleet.

Defence Needs of Australian Industry

Defence intends to use a prime contractor to manage both the production and through-life support of the capabilities chosen and seeks a solution with the following preferences:

- All vehicles and trailers to come from one manufacturer, or
- The prime contractor will supply a portion of the fleet and will sub-contract to acquire the remainder from another supplier, or
- A consortium will be established from a variety of manufacturers.

The prime contractor is to be an established vehicle manufacturer that is supplying a significant portion of the vehicle fleet.

Australian Industry Involvement

Acquisition

LAND 121 (Overlander) will offer the following opportunities for Australian industry:

- Specific production/design opportunity in the total work package that may contribute to the global market;
- Production of components that may contribute to the global supply market;
- Modifications required to meet Australian Design Rules;
- Production of trailers, if commercially competitive;
- Production and integration of specialist shelters/modules to be fitted to the cab/chassis being sourced from overseas, if commercially competitive;
- Project management;
- Facilities construction;
- Training; and
- Production of technical documentation.

Through-life Support

The 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 to the maximum extent possible.

Potential Prime Contractors

The Invitation to Register Interest for Phase 3A has closed and the responses are currently under review. Upon completion of this review, a select group of companies will be invited to tender for the role of Prime Contractor.

Phase 3B will follow on from Phase 3A and it is anticipated that the Prime Contractor will be the same as Phase 3A.

Phase Schedule Highlights

Year-of-Decision	Phase 3A - FY 2003/04
	Phase 3B - FY 2007/08
In-service Delivery	Phase 3A - 2008 to 2010
	Phase 3B - 2011 to 2013

Estimated Phase Expenditure

Phase 3A - $450m to $600m

Phase 3B - $2000m to $2500m

Points of Contact

Capability Staff:

Major Mick Conlon
(02) 6265 5625

Defence Materiel Organisation:

Phase 3A - Mr Robert Lumley
(03) 9282 6888

Phase 3B - Mr Kevin O'Callaghan
(03) 9282 4828

These Phases

This proposal will develop and acquire enhanced capabilities for the combat solider.

Proposal Background

LAND 125 (Wundurra) is a multi-phased, developmental proposal to optimise the Australian Defence Force (ADF) capabilities for dismounted close combat at the individual and section level, including the linkages to the combat unit. This will be achieved by integrating the functions and equipment of the individual combat soldier into an effective system. An integrated system will improve the ability of the combat soldier and team to see, hear, move, react and engage on the future battlefield. This capability will also enhance the combat soldier's ability to train effectively for this future battlefield. LAND 125 represents the first time that the ADF has treated the individual soldier and associated equipment as a comprehensive system.

To date, LAND 125 has trialed limited technological enhancements. The enhancements were refined and evaluated in three trials to determine the validity of the proposal and to determine a means of measuring capability improvements.

Phases of LAND 125 include:

- Phase 1 is complete and was a Capability Definition Study conducted in the period 1996-1998. This incorporated three Soldier Combat System Enhancement Studies that were conducted to refine the proposal methodology;
- Phase 2A is the preparatory sub-phase and focuses on the development of the Functional Performance Specification;
- Phases 2B/2C. These phases are to be combined and will focus on preliminary and detailed designs, costed capability options and the request for tender for Phase 3 acquisition;
- Phase 3 will acquire the initial Soldier Combat System; and
- Phase 4 will extend the basis of provisioning of the Soldier Combat System to other Force Element Groups of the ADF and incorporate a technology refresh for previously fielded systems.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Soldier combat systems;
- Communication systems;
- Command, control, communications, computer and intelligence (C4I) systems;
- Mobile computing;
- Sensors;
- Battery technology;
- Associated software; and
- Combat clothing and combat soldier ensemble.

Australian Industry Involvement

Phases 2B and 2C - DSTO will progress a Soldier Combat System Testbed to encourage the inclusion of Australian niche technologies.

Phase 3 - The Phase 3 system is to be open architecture, plug and play to maximise Australian Industry Involvement.

Acquisition

Phases 2B, 2C and 3 - The industry requirements will be guided by the information gained through the Project Definition Study and preliminary design.

Phase 4 - The industry requirements will be guided by the information gained through Phase 3.

Through-life Support

The 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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage for Phase 3 or Phase 4.

Phase Schedule Highlights

Year-of-Decision	Phase 2B - FY 2003/04
	Phase 2C - FY 2003/04
	Phase 3 - FY 2006/07
	Phase 4 - FY 2009/10 to 2011/12
In-service Delivery	Phase 2B - 2004 to 2006
	Phase 2C - 2005 to 2007
	Phase 3 - 2007 to 2009
	Phase 4 - 2010 to 2012

Estimated Phase Expenditure

Phase 2B - $10m to $20m

Phase 2C - $30m to $50m

Phase 3 - $450m to $600m

Phase 4 - $250m to $350m

Points of Contact

Capability Staff:

Lieutenant Colonel John Butler
(02) 6265 4349

Defence Materiel Organisation:

Colonel Doug Fraser
(03) 9282 6431

This Phase

This phase includes acquisition of a range of mine clearing systems for fitting to armoured vehicles.

Proposal Background

LAND 144 seeks to provide the Army with a modern countermine capability by combining enhancements to existing capabilities with a range of modern, commercially available, countermine equipment.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Integration.

Australian Industry Involvement

The industry requirements will be guided by the information gained through the Project Definition Study and preliminary design.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2005/06

In-service Delivery 2006 to 2008

Estimated Phase Expenditure

$10m to $20m

Points of Contact

Capability Staff:

Major Ian Pickett
(02) 6265 3983

Defence Materiel Organisation:

Lieutenant Colonel Roy Bird
(03) 9282 5035

This Phase

This phase will introduce an assured, positive identification system for Land forces, using electronic systems to prevent fratricide.

Proposal Background

Combat Identification (CID) is the process of determining an accurate understanding of objects and persons detected in the battle-space in order to allow the timely application of tactical options and weapons effects. In simple terms it is an Identification Friend or Foe (IFF) system for land forces. The key role of the system is to minimise fratricide. However, in the network centric warfare paradigm the ability to positively identify the location and status of own and friendly forces, along with the positive failsafe of a CID system, will allow the precise and discriminative application of firepower in the battlespace. This process must be integrated with coalition CID systems.

The CID need is met in substantial part for ADF air and sea warfighting platforms by IFF. However there is no such system fitted to Land combat or combat support systems. Therefore, in order to minimise the fratricide of Australian land forces and to maximise the effect of limited weapons and ordnance, there is a need for a system or systems that provide an accurate characterisation of potential targets in the battle-space. The situational awareness provided by this capability will form a significant building block of the Network Centric Warfare concept.

Defence Needs of Australian Industry

Yet to be determined.

Australian Industry Involvement

Yet to be determined.

Acquisition

Yet to be determined.

Through-life Support

Yet to be determined.

Potential Prime Contractors

Yet to be determined.

Phase Schedule Highlights

Year-of-Decision	FY 2004/05 (Study)
In-service Delivery	2008 to 2010

Estimated Phase Expenditure

$200m to $250m

Points of Contact

Capability Staff:

Lieutenant Colonel Pete Docwra
(02) 6265 3984

Defence Materiel Organisation:

Mr David Cochrane
(02) 6265 5774

This Phase

This project will enhance survivability of land forces in combat operations through the provision of new warfighting systems. These new systems will incrementally replace the Army's current combat, combat support and some combat service support systems.

Proposal Background

This project seeks to enhance survivability of land forces in combat operations through the provision of transformational warfighting systems. These new systems, based on manned and unmanned air and land platforms, will incrementally replace legacy combat, combat support and some combat service support systems currently fielded in the Army Combined Arms Teams. These systems will have very high commonality within their fleets and be interoperable with coalition nations. The systems will be network capable and will have scalable lethality and survivability packages which can be optimised for a range of conditions.

Life of type of current land fighting vehicle systems (M113AS3 and ASLAV) is about 2020. This project will enable the ADF to engage in development programs and to commence replacement of some elements of the system from about 2015.

Defence Needs of Australian Industry

LAND 400 is in the very first stages of the Capability Life Cycle. As a result, an understanding of how Australian Industry might contribute to this project has not been developed. We anticipate that specific industry requirements will emerge in around 2006, as the Defence Science and Technology Organisation completes its first studies into the proposal.

Australian Industry Involvement

The industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision FY 2011/12 to 2013/14

In-service Delivery 2015 to 2017

Estimated Phase Expenditure

$1000m to $1500m

Points of Contact

Capability Staff:

Lieutenant Colonel Greg Akhurst
(02) 6265 4918

Defence Materiel Organisation:

Brigadier Grant Cavenagh
(03) 9282 6712

This Phase

This project will replace the ADF Main Battle Tank fleet with a more modern tank capability that will be supportable until at least 2020.

Proposal Background

This project seeks to replace the ADF tank fleet with a more modern, survivable and interoperable tank capability that will be supportable until at least 2020. This capability requirement has been developed in order to support the Combined Arms Team in close combat. The replacement vehicles must be capable of satisfying the ADF operational requirement until replaced by a Future Combat Vehicle System capability.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Maintenance and repair of tanks and sub-systems:
  - Automotive repair and maintenance;
  - Hydraulic system repair and maintenance; and
  - Electro-optics repair and maintenance.

Australian Industry Involvement

Australian industry is expected to be confined mainly to support of the replacement tanks.

Acquisition

Australian industry involvement during acquisition is expected to be minimal, if any, and might include minor modifications for compliance with Australian Design Rules and adaptation for the local environment.

Through-life Support

An Australian contractor is expected to undertake through-life support activities.

Potential Prime Contractors

The prime support contractor is expected to be drawn from existing Australian-New Zealand based defence industry.

Phase Schedule Highlights

Year-of-Decision	FY 2003/04
In-service Delivery	2007 to 2009

Estimated Phase Expenditure

$450m to $600m

Points of Contact

Capability Staff:

Lieutenant Colonel Greg Akhurst
(02) 6265 4918

Defence Materiel Organisation:

Lieutenant Colonel Andrew Libby
(03) 9282 6778

This Phase/Proposal Background

SEA 1390 Phase 4B will replace the ageing SM-1 'Standard' missile system fitted in FFGs with a modern variant of the 'Standard' missile for use in the surface-to-air environment. The phase will upgrade 4 FFGs and provide stocks to outfit the ships.

Defence Needs of Australian Industry

Identified needs that may relate to this proposal include:

- Project management;
- Software development and system integration of US based missile technology; and
- Systems engineering.

Australian Industry Involvement

Acquisition

The Acquisition Strategy will define the Australian industry requirements, noting there is a mix of commercial and Foreign Military arrangements necessary to implement this capability.

Through-life Support

The industry requirements will be based around developing optimum arrangements for through-life support and technology release provisions.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2003/04
In-service Delivery	2008 to 2010

Estimated Phase Expenditure

$450m to $600m

Other Unapproved Phases

See also SEA 1390 Phase 5.

Points of Contact

Capability Staff:

Lieutenant Commander Simon Carroll
(02) 6265 6630

Defence Materiel Organisation:

Mr Mal Adams
(02) 6265 3425

This Phase

This is a new phase which provides land-based support equipment for the FFG MK-92 Radar system.

Proposal Background

This phase provides a Mk92 Radar training and test suite and installation in a shore training base to support the FFG upgrade in phase 2.

Defence Needs of Australian Industry

Identified needs that may relate to this proposal include:

- The development and conduct of Mk 92 Fire Control training;
- Repair and maintenance; and
- Test integration.

Australian Industry Involvement

Acquisition

Limited - equipment will be direct procurement of equipment that is excess to USN requirement.

Through-life Support

The industry requirements will be based around developing optimum arrangements for indigenous through-life support.

Potential Prime Contractors

ADI Ltd or Lockheed Martin - Australia for equipment installation and set to work.

Phase Schedule Highlights

Year-of-Decision FY 2003/04

In-service Delivery 2004 to 2006

Estimated Phase Expenditure

$10m to $20m

Other Unapproved Phases

See also SEA 1390 Phase 4B.

Points of Contact

Capability Staff:

Commander Tom Mueller
(02) 6265 5086

Defence Materiel Organisation:

Mr Mal Adams
(02) 6265 3425

This Phase

This phase is a follow-on acquisition of Evolved Sea Sparrow Missiles (ESSM) to equip the Royal Australian Navy with further missile stockholdings for the surface combatant force.

Proposal Background

ESSM is an initiative by 10 of the 12-nation NATO Sea Sparrow Consortium (of which Australia is a member) to develop an improvement to the existing RIM-7P NATO Sea Sparrow Missile (NSSM). The ESSM program has developed a ship air-defence missile with significantly increased speed and lethality. The related development of a Quad-Pack Canister capability for the Mk41 Vertical Launch System will also allow ANZAC and FFG missile capacity to be quadrupled (32 ESSM vice 8 NSSM). SEA 1428 comprises four phases:

- Phase 1 (complete) Engineering and Manufacturing Development of missile modifications and development of the quad-pack canister;
- Phase 2A development tasks complete, integration of ESSM into ANZAC combat system; integration work on ANZAC ships 05, 06 and 07, and initial acquisition of missiles for three ANZAC and six FFGs. This phase will be complete on delivery of ANZAC ship 07 and missiles from the production program;
- Phase 2B/3 (previously approved) integrates ESSM into the remaining ANZACs (01, 03, 08, 09 and 10) and acquires additional missiles and canisters for them; and
- Phase 4 will acquire additional missiles in accordance with the ADF armament stockholding policy.

Defence Needs of Australian Industry

Identified needs that may relate to this phase include:

- Guided weapons.

Australian Industry Involvement

Acquisition

Industry requirements will focus on development of capabilities related to:

- Supply and installation of missile components; and
- Technical and training support and services.

Through-life Support

The 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. This requirement is spread across a number of sub-contractors dealing with different prime contractors for the missile, launching system, ship combat system and training/simulation systems.

Potential Prime Contractors

Prime Contractors for the launching system and missile are based in the United States and are managed in accordance with the NATO Sea Sparrow Consortium Memoranda of Understanding (MOUs), with several sub-contracts let with Australian industries as required by the work-share requirements of those MOUs. Companies that expressed an interest in being sub-contractors to the US prime contractor for this proposal, included:

- BAE Systems Australia, ADI Ltd, Mackay Ltd.

Phase Schedule Highlights

Year-of-Decision	FY 2005/06
In-service Delivery	2007 to 2009

Estimated Phase Expenditure

$75m to $100m

Points of Contact

Capability Staff:

Lieutenant Commander Simon Carroll
(02) 6265 6630

Defence Materiel Organisation:

Commander Vaughn Rixon
(02) 6266 0158

These Phases

Phase 5B provides for a continuous technology update program to sustain the capability of the Collins Submarines.

Phase 6 will replace the sonar system, including signal processors. It will maintain the capability of the Collins class sensors into the future.

Proposal Background

Earlier phases of SEA 1439 (Phase 1 & 2) involved the conduct of studies into modifications and improvements required to bring the COLLINS Class to full capability against current operational requirements. The recommendations from those studies to achieve the required capability were implemented in Phase 3 (Sustainability & Reliability Enhancements) and Phase 4 (Collins Full Operational Capability (including Replacement Combat System)).

SEA 1439 Phase 5 (Collins Continuous Improvement Program (CIP)) is designed to leverage off those earlier phases to sustain contemporary capability requirements through a CIP which will be maintained throughout the life of the submarines.

SEA 1439 Phase 6 proposes to replace the sonar system in the Collins submarines.

Defence Needs of Australian Industry

The identified needs that relate to Phase 5B are the requirement to enhance and maintain a sustainable submarine support industry.

The identified needs that relate to Phase 6 are the requirement to enhance and maintain a sustainable submarine support industry, particularly focussed on sonar capability.

Australian Industry Involvement

Acquisition

Phase 5B - Industry requirements will focus on development of capabilities established under the auspices of the Director General Submarines (DGSM) and Director General Maritime Development (DGMD).

Phase 6 - Although much of the sonar system technology will be sourced from overseas, the intention is to establish significant levels of in-country capability, particularly in terms of software development, assembly, integration and support.

Through-life Support

The industry requirements will be based around developing optimum arrangements for through-life support, including ongoing access to key technologies from the range of world suppliers. They are also based around the requirement for a sustainable industry to support the submarine capability as part of the Australian naval shipbuilding, refit and repair industry.

Potential Prime Contractors

Phase 5B - ASC will be the principal provider of all submarine platform related work in accordance with the Strategic Agreement for the Through-life Support of the Collins Class Submarines.

Phase 6 - Potential Prime Contractors for sonar are Thales Underwater Systems, STN Atlas, Lockheed Martin and British Aerospace.

Phase Schedule Highlights

Year-of-Decision	Phase 5B - FY 2005/06
	Phase 6 - FY 2009/10 to 2011/12
In-service Delivery	Phase 5B - 2008 to 2010
	Phase 6 - 2012 to 2014

Estimated Phase Expenditure

Phase 5B - $250m to $350m

Phase 6 - $350m to $450m

Points of Contact

Capability Staff:

Commander Stephen O'Hearn
(02) 6265 2134

Lieutenant Commander Frank Powell
(02) 6265 6201

Defence Materiel Organisation:

Phase 5B - Commander Richard Fitzgerald
(02) 6265 2415

Phase 6 - Mr Bob Clark
(02) 6266 7051

These Phases

Phase 3 will commence enhancement of the ADF maritime communications capability, with the introduction of the Maritime Tactical Wide Area Network (MTWAN) in FFGs, FFHs, LPAs and HMAS SUCCESS. This provides the introduction of tactical IP networking and provides the foundation for the Network Centric Warfare (NCW) roadmap in the Maritime environment.

Phase 4 will consider the expansion of the MTWAN into remaining Fleet units, integrate capabilities being delivered to maritime platforms by other approved communications projects, and consider the replacement of radios, antennas and other systems that will enhance maritime communications.

Proposal Background

The proposal has evolved from a simple radio project, which became a LAN/WAN-at-sea concept, and was then rescoped to include the entire Maritime Tactical Communications System. The intention is to take a more holistic approach to the information and communications architecture.

Defence Science and Technology Organisation (DSTO) carried out a scoping study to determine capabilities that would significantly improve communications and operational information management processes. That information was used to inform the Phase 2B PDS which has refined the scope of work for Phase 3, and continues to define the options for Phase 4.

Defence Needs of Australian Industry

Identified needs will vary from phase to phase but include:

- Project Management;
- Communications & information systems expertise;
- Systems definition &integration; and
- Through Life Support.

Australian Industry Involvement

Particular emphasis on sustainment support

Acquisition

Although the industry requirements will be guided by the information gained through the preliminary stages/definition studies of the proposal, the areas on which requirements are anticipated to focus include:

- Systems integration, including integration of Commercial-Off-the-Shelf (COTS) items and software.
- Supply and installation of new communications, voice and data distribution subsystems.

Through-life Support

The 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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

The prime contractor is anticipated to be drawn from the existing Australian and New Zealand-based communications and information systems industry.

Phase Schedule Highlights

Year-of-Decision	Phase 3 - FY 2003/04
	Phase 4 - FY 2005/06
In-service Delivery	Phase 3 - 2008 to 2010
	Phase 4 - 2008 to 2010

Estimated Phase Expenditure

Phase 3 - $30m to $50m

Phase 4 - $250m to $350m

Points of Contact

Capability Staff:

Lieutenant Commander Gemma Pumphrey
(02) 6265 1908

Defence Materiel Organisation:

Commander Mark Purcell
(02) 6265 7862

These Phases

Phase 2B will acquire fire control radars to complete the ANZAC Ship Anti-Ship Missile Defence (ASMD) upgrade. Consideration may be given to evolving radar technologies which have significant performance advantages over conventional radars.

Proposal Background

During Phase 2A (previously approved), a study and related trials will consider the feasibility of including an active phased array radar as part of an ASMD solution in the ANZAC class. While this analysis proceeds, work relating to aspects of the project that are common to both a conventional and a phased array radar solution will progress. This includes the upgrade of the Fire Control Radar, Command and Control system (including multi sensor data fusion), the inclusion of an Infra Red Search and Tracking capability and a Very Short Range Air Defence system.

Once studies into the feasibility of including an active phased array radar solution are completed decisions relating to incorporation of a second channel of fire into the ANZAC Class will be made in Phase 2B.

Defence Needs of Australian Industry

Identified needs that may relate to Phase 2 include:

- Provision of phased array or conventional fire control director systems; and
- Integration of phased array radar or director systems into ships.

Australian Industry Involvement

Acquisition

The areas on which requirements are anticipated to focus include:

- System design;
- Equipment procurement;
- System integration and installation; and
- Test and Evaluation.

Through-life Support

The 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.

Potential Prime Contractors

The ANZAC Anti-ship Missile Defence Upgrade will be contracted through the ANZAC Alliance. The ANZAC Alliance is the Commonwealth, Saab and Tenix. Sub-contractors will be engaged for procurement of the major equipment.

Phase Schedule Highlights

Year-of-Decision FY 2004/05

In-service Delivery 2008 to 2010

Estimated Phase Expenditure

$75m to $100m

Points of Contact

Capability Staff:

Commander Tom Mueller
(02) 6265 5086

Defence Materiel Organisation:

Mr Chris Eggleton
(08) 9553 1850

These Phases

Phase 2A will replace HMAS WESTRALIA with a commercial second hand Auxiliary Oiler (AO), which will be modified in Australia.

Phase 2B will provide a new oiler as the HMAS WESTRALIA replacement reaches the end of its life. The replacement ship will comply with impending international conventions and regulations governing maritime hull design.

Proposal Background

The fleet oiler HMAS WESTRALIA will be replaced through the acquisition of another operating but environmentally sustainable ship of commercial origin. The ship will be modified in Australia to provide the fleet with underway replenishment of fuel (diesel and aviation) and water . The substitute oiler is expected to be in service in 2006 and is a less ambitious replacement than that originally envisaged by the 2000 Defence White Paper.

Defence Needs of Australian Industry

Identified needs that may relate to Phase 2A include:

- Support ships and support ship systems;
- Ship structures;
- Ship propulsion systems;
- Ship electrical and electronic systems;
- Ship environmental systems;
- Bulk liquid handling and distribution;
- Configuration management; and
- In-service support.

Identified needs that may relate to Phase 2B include:

- Project management;
- Design capability including adaptation, production and detailed design;
- Ship structures and propulsion;
- Ship electrical and electronic systems;
- Procurement of ship's systems;
- Bulk liquid handling and distribution;
- Cargo handling systems;
- Conduct of test and trials;
- Configuration management; and
- In-service support.

Australian Industry Involvement

The Government's strong preference is to modify the Phase 2A ship and build the Phase 2B ship in Australia.

Acquisition

Although the industry requirements will be guided by the information gained through the definition studies of the proposal, the areas on which requirements for Phase 2A are anticipated to focus include:

- Modification of large non-combatant ships.

Phase 2B industry requirements will also be guided by the information gained through the definition studies of the proposal. The areas on which requirements for this phase are anticipated to focus include:

- Construction of large non-combatant ships; and
- Adaptation of proven designs to achieve effective commonality of ship systems with other ADF ships, including the those acquired through JP 2048, SEA 4000 and SEA 1654 Phase 3.

Through-life Support

Through-life support activities will be undertaken by the Australian and New Zealand-based ship repair industry. The industry requirements will be based around maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities for the ship platforms and replenishment systems/equipment.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 2A - FY 2003/04
	Phase 2B - FY 2014/15 to 2016/17
In-service Delivery	Phase 2A - 2005 to 2007
	Phase 2B - 2018 to 2020

Estimated Phase Expenditure

Phase 2A - $100m to $150m

Phase 2B - $150m to $200m

Other Unapproved Phases

See also SEA 1654 Phase 3.

Points of Contact

Capability Staff:

Commander Tim Crawford
(02) 6265 5114

Defence Materiel Organisation:

Mr Gary McFarlane
(02) 6265 3367

This Phase

This phase will replace the capability currently provided by HMAS Success.

Proposal Background

This project seeks to replace the existing RAN afloat support capability for maritime operations. As articulated in the Defence 2000 White Paper, there exists a requirement to sustain ships at sea longer and at greater ranges from port. The plan is to replace HMAS SUCCESS with a purpose built support ship when it reaches end of service life in around 2015.

Defence Needs of Australian Industry

Identified needs that may relate to this proposal include:

- Project management;
- Design capability including adaptation, production and detailed design;
- Ship structures and propulsion;
- Ship electrical and electronic systems;
- Procurement of ship's systems;
- Bulk liquid handling and distribution;
- Cargo handling systems;
- Conduct of test and trials;
- Configuration management; and
- In-service support.

Australian Industry Involvement

The Government's strong preference is to build this ship in Australia.

Acquisition

Although the industry requirements will be guided by the information gained through the definition studies of the proposal, the areas on which requirements are anticipated to focus include:

- Construction of large non-combatant ships.
- Adaptation of proven designs to achieve effective commonality of ship systems with other ADF ships, including the those acquired through JP 2048, SEA 4000 and SEA 1654 Phase 2B.

Through-life Support

Through-life support activities will be undertaken by the Australian and New Zealand-based ship repair industry. The industry requirements will be based around maintaining sufficient capability within Australian industry to undertake a full range of through-life maintenance and support activities.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	FY 2011/12 to 2013/14
In-service Delivery	2015 to 2017

Estimated Phase Expenditure

$350m to $450m

Other Unapproved Phases

See also SEA 1654 Phases 2A and 2B.

Points of Contact

Capability Staff:

Commander Tim Crawford
(02) 6265 5114

Defence Materiel Organisation:

Mr Gary McFarlane
(02) 6265 3367

These Phases

Phase 1C is a study phase that will explore ship platform options to provide the ADF with an affordable Maritime Air Warfare capability, engage industry and mitigate risk prior to the SEA 4000 acquisition phase. Options developed will help to inform the design phase (Phase 2) of SEA 4000.

Within Phase 2, concepts identified in the initial design will be developed into a detailed and fully costed design necessary to enter into contractual arrangements for the build phase.

Phase 3 will acquire the new air warfare capable destroyers.

Proposal Background

As part of the 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 involved a Maritime Capability Options Study and use of a joint Defence and Industry Integrated Project Team to collate and analyse information on Air Warfare platforms currently in build. This resulted in SEA 4000, which aims to acquire a Maritime Air Warfare capability, being initiated.

SEA 4000 is a multi-stage proposal to acquire this capability. Stages of SEA 4000 include:

- Phase 0 included a series of funded studies undertaken between 2001 and 2002, to identify capabilities for these platforms. Aspects of these studies are being conducted in consultation with industry and with support from a number of areas within Defence;
- Phase 1 Project Definition. This phase will include project definition studies and concepts design development;
- Phase 2. Design. Phase 1 concepts will be developed into a detailed and fully costed design in order to enter into contractual arrangements for the build phase;
- Phase 3. Build. While the exact timing of each build will be determined from the outcomes of previous phases, an in-service date for the first ship is 2013; and
- Phase 4. Test and Acceptance.

Defence Needs of Australian Industry

Identified needs that may relate to SEA 4000 include:

- Project management;
- Design capability including adaptation, production and design;
- Warship systems design integration;
- Systems engineering;
- Ship structures and propulsion;
- Integrated combat and platform systems; and
- Ship electrical and electronic systems.

Specific needs that may relate to Phase 2 include:

- Development of major surface ship designs, design integration authorities, modelling and simulation, independent verification and validation.

Specific needs that may relate to Phase 3 include:

- Construction of three major surface ships.

Australian Industry Involvement

These ships are expected to be built in Australia with hull and weapon systems integrated at a significantly enhanced shipyard.

Acquisition

Although the industry requirements will be guided by the information gained through the early stages and studies of the proposal, the areas on which requirements are anticipated to focus include:

- Project Management and Support; and
- Design and development of warship systems, structures, propulsion, electrical and combat systems.

Through-life Support

The 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.

Potential Prime Contractors

No potential prime contractors have been identified at this stage.

Phase Schedule Highlights

Year-of-Decision	Phase 1C - FY 2003/04
	Phase 2 - FY 2004/05
	Phase 3 - FY 2006/07
In-service Delivery	Phase 1C - N/A
	Phase 2 - N/A
	Phase 3 - 2013 to 2015

Estimated Phase Expenditure

Phase 1C - $10m to $20m

Phase 2 - $50m to $75m

Phase 3 - $4500m to $6000m

Points of Contact

Capability Staff:`

Commander George McGuire
(02) 6265 6371

Defence Materiel Organisation:

Mr Jim Gledhill
(02) 6266 0195

Proposal phases are listed first by estimated expenditure band, then in alphanumeric order.

Proposal Number	Phase	Name	Estimated Expenditure Band	Page
AIR 6000	Phase 2A	New Aerospace Combat Capability	$4500m to $6000m	44
AIR 6000	Phase 2B	New Aerospace Combat Capability	$4500m to $6000m	44
SEA 4000	Phase 3	Air Warfare Destroyer	$4500m to $6000m	159
AIR 7000	Phase 2	Maritime Patrol Aircraft Capability	$3500m to $4500m	49
AIR 6000	Phase 2C	New Aerospace Combat Capability	$2500m to $3500m	44
LAND 121	Phase 3B	Overlander - Field Vehicles & Trailers	$2000m to $2500m	132
JP 2048	Phases 4A&4B	Amphibious Deployment and Sustainment (ADAS)	$1500m to $2000m	86
AIR 9000	Phase 4	Black Hawk Mid-Life Upgrade	$1000m to $1500m	59
LAND 400	Phase 1	Survivability of Ground Forces	$1000m to $1500m	140
AIR 7000	Phase 1	Multi-mission Unmanned Aerial Vehicle (MUAV)	$750m to $1000m	47
AIR 8000	Phase 2	Battlefield Airlifter	$750m to $1000m	51
AIR 9000	Phase 2	Additional Trooplift Helicopters	$750m to $1000m	55
AIR 9000	Phase 3C	Seahawk Mid-Life Upgrade	$750m to $1000m	57
JP 2096	Phase 1	Surveillance Enhancement	$750m to $1000m	113
AIR 5428	Phase 1	Pilot Training System	$600m to $750m	39
LAND 17		Artillery Replacement - 105mm & 155mm	$600m to $750m	122
AIR 8000	Phase 1	C-130H Refurbishment	$450m to $600m	51
JP 2008	Phase 4	Military Satellite Communications	$450m to $600m	75
LAND 121	Phase 3A	Overlander - Field Vehicles & Trailers	$450m to $600m	132
LAND 125	Phase 3	Soldier Combat System - Acquisition	$450m to $600m	135
LAND 907	Phase 1	Main Battle Tank Replacement	$450m to $600m	142
SEA 1390	Phase 4B	FFG SM-1 Missile Replacement	$450m to $600m	144
AIR 5376	Phase 2.3	F/A-18 EWSP	$350m to $450m	24
AIR 5418	Phase 1	Follow-on Stand-Off Weapon Capability	$350m to $450m	35
AIR 9000	Phase 5B	Chinook Upgrade	$350m to $450m	61
JP 2072	Phase 2	Battlespace Communications System (Land)	$350m to $450m	99

Proposal Number	Phase	Name	Estimated Expenditure Band	Page
JP 2097	Phase 1	REDFIN - Enhancements to Special Operations Capability	$350m to $450m	114
SEA 1439	Phase 6	Collins Sonar Replacement	$350m to $450m	149
SEA 1654	Phase 3	Maritime Operational Support Capability - SUCCESS Replacement	$350m to $450m	157
JP 2060	Phase 3	ADF DeployableMedical Capability	$250m to $350m	89
JP 2064	Phase 3	Geospatial Information Infrastructure and Services	$250m to $350m	91
JP 2085	Phase 2	Explosive Ordnance Warstock	$250m to $350m	105
JP 2085	Phase 3	Explosive Ordnance Warstock	$250m to $350m	105
LAND 125	Phase 4	Soldier Combat System - Further Acquisition	$250m to $350m	135
SEA 1439	Phase 5B	Collins Continuous Improvement Program	$250m to $350m	149
SEA 1442	Phase 4	Maritime Communication & Information Management Architecture Modernisation - Major Capability	$250m to $350m	151
JP 2047	Phase 3	Wide Area Communications Network Replacement	$250m to $350m	83
JP 8001	Phase 2B	HQAST - Collocation	$250m to $350m	118
JP 2072	Phase 3	Battlespace Communications System (Land)	$200m to $250m	99
LAND 112	Phase 4	ASLAV Enhancement	$200m to $250m	130
LAND 146	Phase 1	Combat Identification for Land Forces	$200m to $250m	138
AIR 5276	Phase 9	AP-3C Orion Component Enhancements	$150m to $200m	21
AIR 5376	Phase 3.2C	Hornet Structural Refurbishment Stage 2 - additional	$150m to $200m	24
DEF 224	Phase 2B	BUNYIP - Acquisition	$150m to $200m	64
DEF 224	Phase 3	Force Level Electronic Warfare	$150m to $200m	64
JP 90	Phase 1	ADF Identification Friend or Foe	$150m to $200m	70
JP 126	Phase 2	Joint Theatre Distribution System	$150m to $200m	71
JP 2048	Phase 3	Amphibious Watercraft Replacement	$150m to $200m	86
JP 2048	Phase 4C	Strategic Lift Capability	$150m to $200m	86
JP 2085	Phase 1B	Explosive Ordnance Warstock	$150m to $200m	105

Proposal Number	Phase	Name	Estimated Expenditure Band	Page
LAND 40	Phase 2	Direct Fire Support Weapon	$150m to $200m	124
LAND 53	Phase 1BR	NINOX - Night Fighting Equipment Replacement	$150m to $200m	125
SEA 1654	Phase 2B	Maritime Operational Support Capability - Auxiliary Oiler Replacement	$150m to $200m	155
AIR 5276	Phase 6	Data Links for AP-3C Orion	$100m to $150m	21
AIR 5376	Phase 2.4	F/A-18 Forward Looking Infra-red Capability	$100m to $150m	24
AIR 5416	Phase 4	C-130J EWSP	$100m to $150m	33
JP 129	Phase 2	Airborne Surveillance for Land Operations	$100m to $150m	73
JP 2030	Phase 8	ADF Joint Command Support Environment	$100m to $150m	79
JP 2030	Phase 9	ADF Joint Command Support Environment	$100m to $150m	79
JP 2077	Phase 2B	Improved Logistics Information Systems	$100m to $150m	101
JP 5408	Phase 2B	ADF GPS Enhancement	$100m to $150m	116
SEA 1654	Phase 2A	Maritime Operational Support Capability - WESTRALIA Replacement	$100m to $150m	155
AIR 5276	Phase 8B	AP-3C Electronic Support Measure - Acquisition	$75m to $100m	21
JP 2089	Phase 2	Tactical Information Exchange Domain (Data Links)	$75m to $100m	107
LAND 75	Phase 3.4	Battlefield Command Support System	$75m to $100m	127
LAND 75	Phase 4	Battlefield Command Support System	$75m to $100m	127
SEA 1428	Phase 4	Evolved Seasparrow Missiles	$75m to $100m	147
SEA 1448	Phase 2B	ANZAC ASMD Upgrade - Fire Control Radar	$75m to $100m	153
AIR 5405	Phase 1	Replacement Mobile Region Operations Centre	$50m to $75m	27
AIR 5409	Phase 1	Bomb Improvement Program	$50m to $75m	29
JP 2025	Phase 5	JORN Upgrade	$50m to $75m	77
JP 2044	Phase 3A	Space Based Surveillance Capability	$50m to $75m	81
JP 2044	Phase 3B	Space Based Surveillance Capability	$50m to $75m	81

Proposal Number	Phase	Name	Estimated Expenditure Band	Page
JP 2060	Phase 2B	Enhanced Deployable Medical Capability	$50m to $75m	89
JP 2080	Phase 2B	Defence Management Systems Improvement	$50m to $75m	103
JP 2089	Phase 3	Tactical Information Exchange Domain (Data Links)	$50m to $75m	107
SEA 4000	Phase 2	Air Warfare Destroyer - Design Activity	$50m to $75m	159
AIR 5276	Phase 5	P-3C Orion EO Enhancement	$30m to $50m	21
AIR 5416	Phase 3	Enhanced EWSP for F-111 (RWR)	$30m to $50m	31
AIR 5431	Phase 1	Replacement of Alenia Radar System	$30m to $50m	40
AIR 5432	Phase 1	Communications, Navigation, Surveillance/Air Traffic Management	$30m to $50m	42
AIR 9000	Phase 5A	Chinook Upgrade - Early Engine Replacement	$30m to $50m	61
AIR 9001	Phase 1	Training Helicopter Lease	$30m to $50m	63
DEF 7013	Phase 4	Joint Intelligence Support System	$30m to $50m	66
JP 1	Phase R	Harpoon Missiles Upgrade	$30m to $50m	68
JP 2008	Phase 3F	Military Satellite Communications	$30m to $50m	75
JP 2065	Phase 2	Integrated Broadcast System	$30m to $50m	93
JP 2068	Phase 2B	Computer Network Defence	$30m to $50m	95
JP 2080	Phase 3	Defence Management Systems Improvement	$30m to $50m	103
JP 2080	Phase 4	Defence Management Systems Improvement	$30m to $50m	103
JP 2090	Phase 1B	Combined Information Environment	$30m to $50m	109
LAND 91	Phase 6	Small Arms Life of Type Extension	$30m to $50m	129
LAND 125	Phase 2C	Soldier Combat System - Final Design	$30m to $50m	135
SEA 1442	Phase 3	Maritime Communication & Information Management Architecture Modernisation - Initial Capability	$30m to $50m	151
AIR 5427	Phase 1	Transportable Air Operations Towers	$20m to $30m	37
JP 66	Phase 1	Replacement for Air Defence Targets	$20m to $30m	69

Proposal Number	Phase	Name	Estimated Expenditure Band	Page
JP 2068	Phase 2A	DNOC - Defence Network Management System (DNMS)	$20m to $30m	95
JP 2069	Phase 2	High Grade Cryptographic Equipment	$20m to $30m	97
LAND 58	Phase 3	Weapon Locating Radar Life of Type Extension	$20m to $30m	126
AIR 5276	Phase 8C	AP-3C Technology Insertion/ Component Purchase	$10m to $20m	21
AIR 9000	Phase 3B	Seahawk Mid-Life Upgrade - Initial Design Activity	$10m to $20m	57
JP 2047	Phase 2A	Defence Wide Area Communications Network	$10m to $20m	83
JP 2047	Phase 2B	Wide Area Communications Network	$10m to $20m	83
JP 2065	Phase 3	Integrated Broadcast System	$10m to $20m	93
JP 2069	Phase 1B	High Grade Cryptographic Equipment	$10m to $20m	97
JP 2095	Phase 1	Aviation Fire Trucks	$10m to $20m	111
JP 8001	Phase 3C.3	Accredited Secure Intelligence Facility	$10m to $20m	120
LAND 125	Phase 2B	Soldier Combat System - Preliminary Design	$10m to $20m	135
LAND 144	Phase 1	Counter Mine Capability	$10m to $20m	137
SEA 1390	Phase 5	MK-92 Radar Support Equipment	$10m to $20m	145
SEA 4000	Phase 1C	Air Warfare Destroyer Study	$10m to $20m	159
JP 2047	Phase 2C	Wide Area Communications Network	Less than $10m	83
JP 2048	Phase 2	Amphibious and Afloat Support Study	Less than $10m	86
JP 2080	Phase 2A	Defence Management Systems Improvement	Less than $10m	103
JP 5408	Phase 3A	ADF GPS Enhancement - Risk Study	Less than $10m	116
JP 5408	Phase 4A	ADF GPS Enhancement - Risk Study	Less than $10m	116

Proposal phases are listed first by estimated Year-of-Decision, then in alphanumeric order.

Proposal Number	Phase	Name	Page
JP 2077	Phase 2B	Improved Logistics Information Systems	101
JP 2089	Phase 2	Tactical Information Exchange Domain (Data Links)	107
JP 2090	Phase 1B	Combined Information Environment	109
JP 2095	Phase 1	Aviation Fire Trucks	111
LAND 146	Phase 1	Combat Identification for Land Forces	138
SEA 1448	Phase 2B	ANZAC ASMD Upgrade - Fire Control Radar	153
SEA 4000	Phase 2	Air Warfare Destroyer - Design Activity	159
FY 2005/06			
AIR 5276	Phase 8C	AP-3C Technology Insertion/Component Purchase	21
AIR 5376	Phase 3.2C	Hornet Structural Refurbishment Stage 2 - additional	24
AIR 5416	Phase 4	C-130J EWSP	33
AIR 5427	Phase 1	Transportable Air Operations Towers	37
AIR 9000	Phase 4	Black Hawk Mid-Life Upgrade	59
AIR 9001	Phase 1	Training Helicopter Lease	63
JP 2008	Phase 3F	Military Satellite Communications	75
JP 2048	Phase 3	Amphibious Watercraft Replacement	86
JP 2069	Phase 1B	High Grade Cryptographic Equipment	97
JP 2072	Phase 2	Battlespace Communications System (Land)	99
JP 2097	Phase 1	REDFIN - Enhancements to Special Operations Capability	114
LAND 17		Artillery Replacement - 105mm & 155mm	122
LAND 58	Phase 3	Weapon Locating Radar Life of Type Extension	126
LAND 75	Phase 3.4	Battlefield Command Support System	127
LAND 144	Phase 1	Counter Mine Capability	137
SEA 1428	Phase 4	Evolved Seasparrow Missiles	147
SEA 1439	Phase 5B	Collins Continuous Improvement Program	149
SEA 1442	Phase 4	Maritime Communication & Information Management Architecture Modernisation - Major Capability	151
FY 2006/07			
AIR 5276	Phase 6	Data Links for AP-3C Orion	21
AIR 5276	Phase 9	AP-3C Orion Component Enhancements	21
AIR 5405	Phase 1	Replacement Mobile Region Operations Centre	27
AIR 5431	Phase 1	Replacement of Alenia Radar System	40
AIR 6000	Phase 2A	New Aerospace Combat Capability	44
AIR 7000	Phase 2	Maritime Patrol Aircraft Capability	49
AIR 8000	Phase 2	Battlefield Airlifter	51
AIR 9000	Phase 3B	Seahawk Mid-Life Upgrade - Initial Design Activity	57
JP 90	Phase 1	ADF Identification Friend or Foe	70
JP 126	Phase 2	Joint Theatre Distribution System	71
JP 2030	Phase 8	ADF Joint Command Support Environment	79

Proposal Number	Phase	Name	Page
JP 2047	Phase 2B	Wide Area Communications Network	83
JP 2065	Phase 2	Integrated Broadcast System	93
JP 5408	Phase 2B	ADF GPS Enhancement	116
JP 5408	Phase 3A	ADF GPS Enhancement - Risk Study	116
LAND 40	Phase 2	Direct Fire Support Weapon	124
LAND 112	Phase 4	ASLAV Enhancement	130
LAND 125	Phase 3	Soldier Combat System - Acquisition	135
SEA 4000	Phase 3	Air Warfare Destroyer	159
FY 2007/08			
AIR 5428	Phase 1	Pilot Training System	39
AIR 5432	Phase 1	Communications, Navigation, Surveillance/Air Traffic Management	42
AIR 9000	Phase 3C	Seahawk Mid-Life Upgrade	57
JP 66	Phase 1	Replacement for Air Defence Targets	69
JP 2069	Phase 2	High Grade Cryptographic Equipment	97
JP 2072	Phase 3	Battlespace Communications System (Land)	99
JP 2080	Phase 3	Defence Management Systems Improvement	103
JP 2089	Phase 3	Tactical Information Exchange Domain (Data Links)	107
LAND 121	Phase 3B	Overlander - Field Vehicles & Trailers	132
FY 2008/09 to FY 2010/11			
DEF 7013	Phase 4	Joint Intelligence Support System	66
JP 2044	Phase 3A	Space Based Surveillance Capability	81
JP 2085	Phase 2	Explosive Ordnance Warstock	105
JP 5408	Phase 4A	ADF GPS Enhancement - Risk Study	116
LAND 53	Phase 1BR	NINOX - Night Fighting Equipment Replacement	125
LAND 91	Phase 6	Small Arms Life of Type Extension	129
FY 2009/10 to FY 2011/12			
AIR 8000	Phase 1	C-130H Refurbishment	51
AIR 9000	Phase 5B	Chinook Upgrade	61
DEF 224	Phase 3	Force Level Electronic Warfare	64
JP 2047	Phase 2C	Wide Area Communications Network	83
JP 2064	Phase 3	Geospatial Information Infrastructure and Services	91
JP 2085	Phase 3	Explosive Ordnance Warstock	105
JP 8001	Phase 3C.3	Accredited Secure Intelligence Facility	120
LAND 75	Phase 4	Battlefield Command Support System	127
LAND 125	Phase 4	Soldier Combat System - Further Acquisition	135
SEA 1439	Phase 6	Collins Sonar Replacement	149

AIR 5276 AIR 5276 AIR 5276 AIR 5276 AIR 5276	Phase 5 Phase 6 Phase 8B Phase 8C Phase 9	P-3C Orion EO Enhancement Data Links for AP-3C Orion AP-3C Electronic Support Measure - Acquisition AP-3C Technology Insertion/Component Purchase AP-3C Orion Component Enhancements	*Capability Staff:* Phases 5, 6 and 9 - Squadron Leader Rob Brownie (02) 6265 5447 Phases 8B and 8C - Squadron Leader Gary Lewis (02) 6265 2115	*Defence Materiel Organisation:* Ms Katrina Burzynski (08) 8393 3582
AIR 5376 AIR 5376 AIR 5376	Phase 2.3 Phase 2.4 Phase 3.2C	F/A-18 EWSP F/A-18 Forward Looking Infra-red Capability Hornet Structural Refurbishment Stage 2 - additional	*Capability Staff:* Wing Commander Joe Iervasi (02) 6265 4897	*Defence Materiel Organisation:* Wing Commander William Malkin (02) 4928 6901
AIR 5405	Phase 1	Replacement Mobile Region Operations Centre	*Capability Staff:* Squadron Leader Antony Martin (02) 6265 5561	*Defence Materiel Organisation:* Mr David Ockerby (02) 6265 4958
AIR 5409	Phase 1	Bomb Improvement Program	*Capability Staff:* Squadron Leader Dave Hockley (02) 6265 5540	*Defence Materiel Organisation:* Commander John Crathern (02) 6265 7752
AIR 5416	Phase 3	Enhanced EWSP for F-111 (RWR)	*Capability Staff:* Squadron Leader Gary Lewis (02) 6265 2115	*Defence Materiel Organisation:* Mr Laurie Bode (02) 6265 1615
AIR 5416	Phase 4	C-130J EWSP	*Capability Staff:* Flight Lieutenant Cam Leslie (02) 6265 4444	*Defence Materiel Organisation:* Mr Laurie Bode (02) 6265 1615
AIR 5418	Phase 1	Follow-on Stand-Off Weapon Capability	*Capability Staff:* Squadron Leader Dave Hockley (02) 6265 5540	*Defence Materiel Organisation:* Commander John Crathern (02) 6265 7752

AIR 5427	Phase 1	Transportable Air Operations Towers	*Capability Staff:* Flight Lieutenant Trish Atkinson (02) 6265 7530	*Defence Materiel Organisation:* Mr David Ockerby (02) 6265 4958
AIR 5428	Phase 1	Pilot Training System	*Capability Staff:* Flight Lieutenant Christensen (02) 6265 4809	
AIR 5431	Phase 1	Replacement of Alenia Radar System	*Capability Staff:* Squadron Leader Antony Martin (02) 6265 5561	*Defence Materiel Organisation:* Mr David Ockerby (02) 6265 4958
AIR 5432	Phase 1	Communications, Navigation, Surveillance/Air Traffic Management	*Capability Staff:* Squadron Leader Richard Pizzuto (02) 6265 2216	*Defence Materiel Organisation:* Mr David Ockerby (02) 6265 4958
AIR 6000 AIR 6000 AIR 6000	Phase 2A Phase 2B Phase 2C	New Aerospace Combat Capability New Aerospace Combat Capability New Aerospace Combat Capability	*Capability Staff:* Group Captain Mark Skidmore (02) 6265 5537	*Defence Materiel Organisation:* Project Office: Mr Bill Greenwood (02) 6265 7478 Industry Team: Mr Mike Lyons (02) 6265 5172
AIR 7000		Overview	*Capability Staff:* Wing Commander Warren Nelson (02) 6265 5559	
AIR 7000	Phase 1	Multi-mission Unmanned Aerial Vehicle (MUAV)	*Capability Staff:* Wing Commander Warren Nelson (02) 6265 5559	*Defence Materiel Organisation:* Wing Commander Darren May (02) 6265 2118

AIR 7000	Phase 2	Maritime Patrol Aircraft Capability	*Capability Staff:* Wing Commander Warren Nelson (02) 6265 5559	*Defence Materiel Organisation:* Wing Commander Bruce Skipworth (02) 6265 1613
AIR 8000 AIR 8000	Phase 1 Phase 2	C-130H Refurbishment Battlefield Airlifter	*Capability Staff:* Wing Commander Ian Honey (02) 6265 5524	*Defence Materiel Organisation:* Wing Commander Bruce Skipworth (02) 6265 1613
AIR 9000		Overview		*Defence Materiel Organisation:* Mr Andrew Wood (02) 6265 7611
AIR 9000	Phase 2	Additional Trooplift Helicopters	*Capability Staff* Lieutenant Colonel Shayne Elder (02) 6265 5519	*Defence Materiel Organisation:* Captain Mark Remmers, RAN (02) 6265 7449 Colonel Gary Michajlow (07) 4691 7800
AIR 9000 AIR 9000	Phase 3B Phase 3C	Seahawk Mid-Life Upgrade - Initial Design Activity Seahawk Mid-Life Upgrade	*Capability Staff:* Lieutenant Commander Peter Saunders (02) 6265 3179	*Defence Materiel Organisation:* Mr Denis Hughes (02) 6265 7556 Captain Stephen Pearson, RAN (02) 4424 3333
AIR 9000	Phase 4	Black Hawk Mid-Life Upgrade	*Capability Staff:* Lieutenant Colonel Shayne Elder (02) 6265 5519	*Defence Materiel Organisation:* Captain Mark Remmers, RAN (02) 6265 7449 Colonel Gary Michajlow (07) 4691 7800

AIR 9000 AIR 9000	Phase 5A Phase 5B	Chinook Upgrade - Early Engine Replacement Chinook Upgrade	*Capability Staff:* Lieutenant Colonel Shayne Elder (02) 6265 5519	*Defence Materiel Organisation:* Captain Mark Remmers, RAN (02) 6265 7449 Colonel Gary Michajlow (07) 4691 7800
AIR 9001	Phase 1	Training Helicopter Lease	*Capability Staff:* Lieutenant Commander Ian Chapman (02) 6265 6202	*Defence Materiel Organisation:* Captain Stephen Pearson, RAN (02) 4424 3333
DEF 224 DEF 224	Phase 2B Phase 3	Force Level Electronic Warfare Force Level Electronic Warfare	*Capability Staff:* Mr Keith Hunter (02) 6265 4301	*Defence Materiel Organisation:* Mr Geoff Cropper (02) 6265 4215
DEF 7013	Phase 4	Joint Intelligence Support System	*Capability Staff:* Squadron Leader Pete Wooding (02) 6265 1170	*Defence Materiel Organisation:* Mr Cliff Meyer (02) 6265 4403
JP 1	Phase R	Harpoon Missiles Upgrade	*Capability Staff:* Lieutenant Commander Simon Carroll (02) 6265 6630	*Defence Materiel Organisation:* Commander John Crathern (02) 6265 7752
JP 66	Phase 1	Replacement for Air Defence Targets	*Capability Staff:* Wing Commander Stephen Meredith (02) 6265 5442	
JP 90	Phase 1	ADF Identification Friend or Foe	*Capability Staff:* Squadron Leader Antony Martin (02) 6265 5561	*Defence Materiel Organisation:* Mr David Cochrane (02) 6265 5774

JP 126	Phase 2	Joint Theatre Distribution System	*Capability Staff:* Major Glyn Llanwarne (02) 6265 6033	*Defence Materiel Organisation:* Mr David Bloomer (03) 9282 7173
JP 129	Phase 2	Airborne Surveillance for Land Operations	*Capability Staff:* Major Martin Power (02) 6265 5119	*Defence Materiel Organisation:* Wing Commander Darren May (02) 6265 2118
JP 2008 JP 2008	Phase 3F Phase 4	Military Satellite Communications Military Satellite Communications	*Capability Staff:* Squadron Leader Nicholas Clarke (02) 6265 7535	*Defence Materiel Organisation:* Mr Greg McKinnon (02) 6265 4155
JP 2025	Phase 5	JORN Upgrade	*Capability Staff:* Lieutenant Colonel Mike Bradford (02) 6265 3897	*Defence Materiel Organisation:* Mr Robin Thurston (02) 6266 4456
JP 2030 JP 2030	Phase 8 Phase 9	ADF Joint Command Support Environment ADF Joint Command Support Environment	*Capability Staff:* Lieutenant Colonel Chris Shine (02) 6265 4086	*Defence Materiel Organisation:* Mr Terry Oldfield (02) 6265 7726
JP 2044 JP 2044	Phase 3A Phase 3B	Space Based Surveillance Capability Space Based Surveillance Capability	*Capability Staff:* Lieutenant Colonel Mike Bradford (02) 6265 3897	*Defence Materiel Organisation:* Mr Keith Fanner (02) 6265 5667
JP 2047 JP 2047 JP 2047 JP 2047	Phase 2A Phase 2B Phase 2C Phase 3	Defence Wide Area Communications Network Wide Area Communications Network Wide Area Communications Network Wide Area Communications Network Replacement	*Capability Staff:* Mr Claude D'Abrera (02) 6265 5228	*Defence Materiel Organisation:* Mr Daryl Mouser (02) 6266 1932

JP 2048 JP 2048 JP 2048 JP 2048	Phase 2 Phase 3 Phases 4A&4B Phase 4C	Amphibious and Afloat Support Study Amphibious Watercraft Replacement Amphibious Deployment and Sustainment (ADAS) Strategic Lift Capability	*Capability Staff:* Commander Tim Crawford (02) 6265 5114	*Defence Materiel Organisation:* Mr Gary McFarlane (02) 6265 3367
JP 2060 JP 2060	Phase 2B Phase 3	Enhanced Deployable Medical Capability ADF Deployable Medical Capability	*Capability Staff:* Major Brett Laboo (02) 6265 2815	*Defence Materiel Organisation:* Mr Russell Scott (03) 9282 4385
JP 2064	Phase 3	Geospatial Information Infrastructure and Services	*Capability Staff:* Major Simon Buckpitt (02) 6265 6426	*Defence Materiel Organisation:* Mr Keith Fanner (02) 6265 5667
JP 2065 JP 2065	Phase 2 Phase 3	Integrated Broadcast System Integrated Broadcast System	*Capability Staff:* Commander Katja Flaherty (02) 6265 3489	*Defence Materiel Organisation:* Mr David Cochrane (02) 6265 5774
JP 2068 JP 2068	Phase 2A Phase 2B	DNOC - Defence Network Management System (DNMS) Computer Network Defence	*Capability Staff:* Mr Claude D'Abrera (02) 6269 5228	*Defence Materiel Organisation:* Mr Daryl Mouser (02) 6266 1932
JP 2069 JP 2069	Phase 1B Phase 2	High Grade Cryptographic Equipment High Grade Cryptographic Equipment	*Capability Staff:* Mr Craig Marshall (02) 6265 4009	*Defence Materiel Organisation:* Mr Steve McGrath (02) 6266 1873
JP 2072 JP 2072	Phase 2 Phase 3	Battlespace Communications System (Land) Battlespace Communications System (Land)	*Capability Staff* Phase 2 - Major Alice Dillon (02) 6265 6501 Phase 3 - Major Alan Fraser (02) 6265 1452	*Defence Materiel Organisation:* Lieutenant Colonel Andrew Shegog (02) 6265 1992

JP 2077	Phase 2B	Improved Logistics Information Systems	*Capability Staff:* Lieutentant Colonel Marty McKone (02) 6265 7215	*Defence Materiel Organisation:* Mr Rao Ayyalasomayajula (03) 9310 8703
JP 2080	Phase 2A	Defence Management Systems Improvement	*Capability Staff:* Mr Andrew Pellow (02) 6265 7594	
JP 2080	Phase 2B	Defence Management Systems Improvement		
JP 2080	Phase 3	Defence Management Systems Improvement		
JP 2080	Phase 4	Defence Management Systems Improvement		
JP 2085	Phase 1B	Explosive Ordnance Warstock	*Capability Staff:* Brigadier John Cantwell (02) 6265 2888	*Defence Materiel Organisation:* Commodore Peter Law (02) 6266 0122
JP 2085	Phase 2	Explosive Ordnance Warstock		
JP 2085	Phase 3	Explosive Ordnance Warstock		
JP 2089	Phase 2	Tactical Information Exchange Domain	*Capability Staff:* Squadron Leader Matt Colbert (02) 6265 7215	*Defence Materiel Organisation:* Mr Joseph Vega (02) 6265 7407
JP 2089	Phase 3	Tactical Information Exchange Domain (Data Links)		
JP 2090	Phase 1B	Combined Information Environment (Data Links)	*Capability Staff:* Mr Andrew Tape (02) 6265 7035	*Information Systems Division:* Mr Steve Hansson (02) 6266 4604 *Defence Materiel Organisation:* Mr Terry Oldfield (02) 6265 7726
JP 2095	Phase 1	Aviation Fire Trucks	*Capability Staff:* Major Ian Pickett (02) 6265 3983	*Defence Materiel Organisation:* Lieutenant Colonel Peter Cleasby-Jones (03) 9282 6745

JP 2096	Phase 1	Surveillance Enhancement	*Capability Staff:* Group Captain Tony Burke (02) 6265 5802	
JP 2097	Phase 1	REDFIN - Enhancements to Special Operations Capability	*Capability Staff:* Major Grant Mason (02) 6265 4643	*Defence Materiel Organisation:* Mr David Cochrane (02) 6265 5774
JP 5408 JP 5408 JP 5408	Phase 2B Phase 3A Phase 4A	ADF GPS Enhancement ADF GPS Enhancement - Risk Study ADF GPS Enhancement - Risk Study	*Capability Staff:* Squadron Leader Paul Gibbs (02) 6265 2073	*Defence Materiel Organisation:* Wing Commander Eric Gidley (02) 6266 4601
JP 8001	Phase 2B	HQAST - Collocation	*Capability Staff:* Commander Daniel Gibbons (02) 6265 5463	*Corporate Support & Infrastructure Group:* Air Commodore Jack Plenty Ph -Yet to be determined.
JP 8001	Phase 3C.3	Accredited Secure Intelligence Facility	*Capability Staff:* Squadron Leader Pete Wooding (02) 6265 1170	*Defence Materiel Organisation:* Lieutenant Colonel Campbell Smith (02) 6265 4079
LAND 17		Artillery Replacement - 105mm & 155mm	*Capability Staff:* Major Sean Ryan (02) 6265 4820	*Defence Materiel Organisation:* Mr Michael Doust (03) 9282 4481
LAND 40	Phase 2	Direct Fire Support Weapon	*Capability Staff:* Major Bob Parker (02) 6265 1863	*Defence Materiel Organisation:* Mr Pat Meehan (03) 9282 7150
LAND 53	Phase 1BR	NINOX - Night Fighting Equipment Replacement	*Capability Staff:* Captain Adam Rankin (02) 6265 2810	*Defence Materiel Organisation:* Lieutenant Colonel Simon Welsh (03) 9282 6199

LAND 58	Phase 3	Weapon Locating Radar Life of Type Extension	*Capability Staff:* Major Doug Mallett (02) 6265 1734	*Defence Materiel Organisation:* Lieutenant Colonel Duncan Roach (03) 9282 5380
LAND 75 LAND 75	Phase 3.4 Phase 4	Battlefield Command Support System Battlefield Command Support System	*Capability Staff:* Major Vance Feeney (NZ) (02) 6265 4817	*Defence Materiel Organisation:* Lieutenant Colonel Steve Ellicott (02) 6266 7432
LAND 91	Phase 6	Small Arms Life of Type Extension	*Capability Staff:* Major Bob Parker (02) 6265 1863	*Defence Materiel Organisation:* Lieutenant Colonel Stephen Saddington (03) 9282 6441
LAND 112	Phase 4	ASLAV Enhancement	*Capability Staff:* Lieutenant Colonel Greg Akhurst (02) 6265 4918	*Defence Materiel Organisation:* Lieutenant Colonel Rod Rayward (03) 9282 6322
LAND 121 LAND 121	Phase 3A Phase 3B	Overlander - Field Vehicles & Trailers Overlander - Field Vehicles & Trailers	*Capability Staff:* Major Mick Conlon (02) 6265 5625	*Defence Materiel Organisation:* Phase 3A - Mr Robert Lumley (03) 9282 6888 Phase 3B - Mr Kevin O'Callaghan (03) 9282 4828
LAND 125 LAND 125 LAND 125 LAND 125	Phase 2B Phase 2C Phase 3 Phase 4	Soldier Combat System - Preliminary Design Soldier Combat System - Final Design Soldier Combat System - Acquisition Soldier Combat System - Further Acquisition	*Capability Staff:* Lieutenant Colonel John Butler (02) 6265 4349	*Defence Materiel Organisation:* Colonel Doug Fraser (03) 9282 6431

LAND 144	Phase 1	Counter Mine Capability	*Capability Staff:* Major Ian Pickett (02) 6265 3983	*Defence Materiel Organisation:* Lieutenant Colonel Roy Bird (03) 9282 5035
LAND 146	Phase 1	Combat Identification for Land Forces	*Capability Staff:* Lieutenant Colonel Pete Docwra (02) 6265 3984	*Defence Materiel Organisation:* Mr David Cochrane (02) 6265 5774
LAND 400	Phase 1	Survivability of Ground Forces	*Capability Staff:* Lieutenant Colonel Greg Akhurst (02) 6265 4918	*Defence Materiel Organisation:* Brigadier Grant Cavenagh (03) 9282 6712
LAND 907	Phase 1	Main Battle Tank Replacement	*Capability Staff:* Lieutenant Colonel Greg Akhurst (02) 6265 4918	*Defence Materiel Organisation:* Lieutenant Colonel Andrew Libby (03) 9282 6778
SEA 1390	Phase 4B	FFG SM-1 Missile Replacement	*Capability Staff:* Lieutenant Commander Simon Carroll (02) 6265 6630	*Defence Materiel Organisation:* Mr Mal Adams (02) 6265 3425
SEA 1390	Phase 5	MK-92 Radar Support Equipment	*Capability Staff:* Commander Tom Mueller (02) 6265 5086	*Defence Materiel Organisation:* Mr Mal Adams (02) 6265 3425
SEA 1428	Phase 4	Evolved Seasparrow Missiles	*Capability Staff:* Lieutenant Commander Simon Carroll (02) 6265 6630	*Defence Materiel Organisation:* Commander Vaughn Rixon (02) 6266 0158

SEA 1439 SEA 1439	Phase 5B Phase 6	Collins Continuous Improvement Program Collins Sonar Replacement	*Capability Staff:* Commander Stephen O'Hearn (02) 6265 2134 Lieutenant Commander Frank Powell (02) 6265 6201	*Defence Materiel Organisation:* Phase 5B - Commander Richard Fitzgerald (02) 6265 2415 Phase 6 - Mr Bob Clark (02) 6266 7051
SEA 1442 SEA 1442	Phase 3 Phase 4	Maritime Communication & Information Management Architecture Modernisation - Initial Capability Maritime Communication & Information Management Architecture Modernisation - Major Capability	*Capability Staff:* Lieutenant Commander Gemma Pumphrey (02) 6265 1908	*Defence Materiel Organisation:* Commander Mark Purcell (02) 6265 7862
SEA 1448	Phase 2B	ANZAC ASMD Upgrade - Fire Control Radar	*Capability Staff:* Commander Tom Mueller (02) 6265 5086	*Defence Materiel Organisation:* Mr Chris Eggleton (08) 9553 1850
SEA 1654 SEA 1654	Phase 2A Phase 2B	Maritime Operational Support Capability - WESTRALIA Replacement Maritime Operational Support Capability - Auxiliary Oiler Replacement	*Capability Staff:* Commander Tim Crawford (02) 6265 5114	*Defence Materiel Organisation:* Mr Gary McFarlane (02) 6265 3367
SEA 1654	Phase 3	Maritime Operational Support Capability - SUCCESS Replacement	*Capability Staff:* Commander Tim Crawford (02) 6265 5114	*Defence Materiel Organisation:* Mr Gary McFarlane (02) 6265 3367
SEA 4000 SEA 4000 SEA 4000	Phase 1C Phase 2 Phase 3	Air Warfare Destroyer Study Air Warfare Destroyer - Design Activity Air Warfare Destroyer	*Capability Staff:* Commander George McGuire (02) 6265 6371	*Defence Materiel Organisation:* Mr Jim Gledhill (02) 6266 0195

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