



Rapid Prototyping Development  
and Evaluation Program

# *interface* with *rpde*

Edition 4





I am pleased to write this foreword to the latest Edition of Interface. As Head Capability Systems (HCS) I take a strong interest in the provision of innovation to ensure we can modernise our Military capabilities in the most effective and affordable way. Success is about analysing and managing risk early in the requirements phase of the capability life cycle to reduce the need for expensive changes later. Providing accountable and achievable decision information to Government about cost, capability and schedule for our Defence Capability Plan (DCP) is vital to make the most of our Defence dollar. RPDE currently has six Quicklooks and four Tasks underway, and since its inception has played, and continues to play, a key role in assisting to focus our effort and identify early opportunities for our capabilities.

In handing over the role of HCS Lieutenant General John Caligari has also handed over the role of Chairman of the RPDE Board. I sincerely thank him for his leadership as the previous Chairman and acknowledge the significant progress made in the conduct of the Board and the preparation for the review of the Relationship Agreement (RA). Work is now well under way on the new draft RA with strong input from RPDE members. Notably a key development will be separation of the Policy aspects of RPDE functions and the role of the Board from the RA. I expect this will provide a more coherent and flexible approach to achieve our innovation aspiration within the RA period.

My professional experience had been focussed in the Air Combat area, with command at all levels and previous experience in both Capability Development Group and Joint Operations. I therefore remain passionate about delivering a modernised and relevant Force for our warfighters. Innovation that results in enhanced, affordable, responsive and agile capabilities needs to remain our foremost objective. I believe this can be achieved if we continue to ensure strong engagement and dialogue between the key stakeholders of Defence, Industry, Science and Technology and Academia. Initiatives through RPDE can meet this aim if the Sponsors within Defence can frame the right questions and put them to Australia's key innovators. The challenges ahead with the Force Structure Review, Defence White Paper and First Principles Review present as opportunities to further advance and prove the value of RPDE.

To achieve this intent, all stakeholders need to be courageous, think outside the box, be risk aware but with a willingness to tolerate risk. A spectacular task failure may well be a success to progress our knowledge, and should firm our resolve to find innovative solutions.

Finally, I welcome Neil Miller as the Operations Manager and Andrew Fullgrabe as the Engagement Manager and look forward to their new energy and ideas in these two important roles.

I look forward to maintaining our strong RPDE membership, and through an adaptive and capable Board, am confident that we will make a difference through RPDE in the coming year.

A handwritten signature in black ink that reads "M. Hupfeld." The signature is written in a cursive, slightly slanted style.

**Air Vice-Marshal Mel Hupfeld, AO, DSC**  
RPDE Board Chair

Welcome to our first Edition of Interface for 2015. RPDE is well funded, busy and continues to provide high quality advice and prototypes to our Defence customer. The RPDE product remains highly valued, independent and well utilized at many levels of Defence. Our greatest challenge remains the integration of legacy projects and the distribution of information/data across those systems. I welcome the recent release of PLAN JERICHO by the Chief of Air Force and you will see Task 57 (Air Battle Management Systems Study) become a lead Activity at RPDE in the years ahead.

We value the creative thinking that comes from our members and we will continue to challenge our sponsors to ask the tough questions, and gather the evidence they need to proceed with confidence and understand the associated risk profile. Over the past year our Board has emphasised collaboration with industry, the value of innovation, thinking outside the box and an overall willingness to tolerate risk. I ask that you continue to vigorously support RPDE as a unique environment for our sponsors, industry and academia to share ideas in a collegiate environment and solve problems. We know this model works!

RPDE values your contributions and will focus more on Industry engagement, improved regional interaction and visits, and a greater emphasis on Workshops and the Biannual Meeting of Participants. Our RPDE stand at the Land Forces Conference in Brisbane and the Avalon Air Show has been very successful. We will continue to take our message to wider industry and offer our participants a place to meet with our RPDE team and our customer. I look forward to meeting as many of you as I can at PACIFIC 2015 in Sydney with a new Defence Capability Plan providing a solid foundation for the way ahead.

A draft of the new Relationship Agreement (RA) will be released by the end of March. The RA will carry our engagement model into the next ten years of the program and I strongly encourage you to review the document and provide your feedback before a final draft is prepared mid-year. We expect to have transitioned all members to the new RA by the end of this year. Over the past year we have thankfully noted over 40 new members wishing to join the program. These new members will bring enthusiasm, innovative technologies and capability that will enhance capability for the warfighter as part of the RPDE mission.

Our ethos of sharing the problems, managing the risk, protecting your IP and embracing complexity in a trusted environment remains pivotal. Most of all we are outcomes focused and get it done rapidly.

Thank you for your engagement, encouragement and valuable contributions to delivering innovative solutions. The RPDE team are ready to discuss your ideas, and challenge the status quo for capability options.



**Rick Shalders, CSC**  
RPDE General Manager



## Future Dates 2015

**16 April**  
Biannual Meeting of  
Participants (BMP) Canberra

**May**  
Quarter 2 Board Meeting

**August**  
Quarter 3 Board Meeting

**6-8 October**  
Pacific 2015 Sydney

**7 October**  
Biannual Meeting of  
Participants (BMP)

**November**  
Quarter 4 Board Meeting







OUR PROGRAM...  
IS A COLLABORATIVE  
NON-COMPETITIVE  
ENVIRONMENT WHERE  
COMMERCIAL INTERESTS  
ARE SECONDARY TO  
FINDING THE BEST  
SOLUTION FOR DEFENCE.

## Solutions we offer

- 1 A **Quicklook** delivers guidance, advice and input on a Defence issue by rapidly bringing together experts from industry and academia. Quicklooks have been expanded to address new Defence Capability Plan projects (as part of the Capability Development Improvement program), and industry-suggested Quicklooks are currently being pursued.
- 2 A **Task** delivers a prototyped solution to Defence. It normally takes **12–18 months** to complete and focuses on identifying, understanding and then facilitating change. It can involve the introduction of new organisations, concepts and technologies. The Task Report considers all Fundamental Inputs to Capability elements and may be focused beyond technology or equipment.

## Our team

The team consists of high calibre individuals who bring expertise from a diverse range of small, medium and large organisations. Personnel are engaged from Participant organisations on a two year secondment basis or sourced for a specific project. Most are based in Canberra and Adelaide with a handful of specialists contributing remotely under the RPDE Flexible Working Arrangements (FWA).

Our FWA is creating more effective and efficient outcomes for the Program, and it was designed to allow personnel to work from their hometown or workplace.

## Our values

- Work proactively together
- Communicate openly and honestly
- Encourage innovation and excellence
- Respect and support each other
- Give recognition, celebrate success and reward achievement
- Provide a challenging work environment

# Current Activities

## Quicklooks

### Quicklook 104 – SEA5000 Combat System Integration Considerations

What is the optimum level of Combat System integration for the Future Frigate?

### Quicklook 110 – Tactical Personal Area Networking

What are the tactical options and implications for changes to interfaces between Digital Terminal Control System (DTCS) components within the Joint Terminal Attack Controllers (JTAC), Joint Fire Observers (JFO) and Mobile Fire Controllers (MFC)?

### Quicklook 111 – JP3035-2 Core Simulation Capability

Is industry able to deliver the capability as described in extracts from the Operational Concept Document (OCD), Functional and Performance Specification (FPS) and Acquisition and Support Implementation Strategy, and within the constraints of the schedule and funding bands identified?

### Quicklook 112 – SEA500-3 ANZAC Class Tactical Communications Electronic Support Capability

Is there a realistic solution that is available for the ANZAC Class tactical communications electronic support capability effect required by Navy within platform constraints for delivery no later than 2016/17?

### Quicklook 113 – CIOG Disability Services

What are the options to provide ICT Customer Service and Help Desk to hearing impaired people within Defence? What are the associated security implications?

### Quicklook 114 – SEA 1350 Deep Water Tracking Range

What options exist to meet the RAN's fixed Deep Water Tracking Range needs?

## Tasks

### Task 047 JP2048 Ph4AB Command and Control System

What is the optimal system level architecture to allow the Combined Joint Task Force (CJTF), Commander Amphibious Task Force (CATF) and Commander Land Force (CLF) to perform command and control from the Joint Operations Room (JOR) in the amphibious environment by 2017?

### Task 051 Handheld Standoff IED Detection

Can standoff Improvised Explosive Device (IED) detection technology be miniaturised and a concept demonstrator developed to enhance personal force protection for soldiers from IEDs?

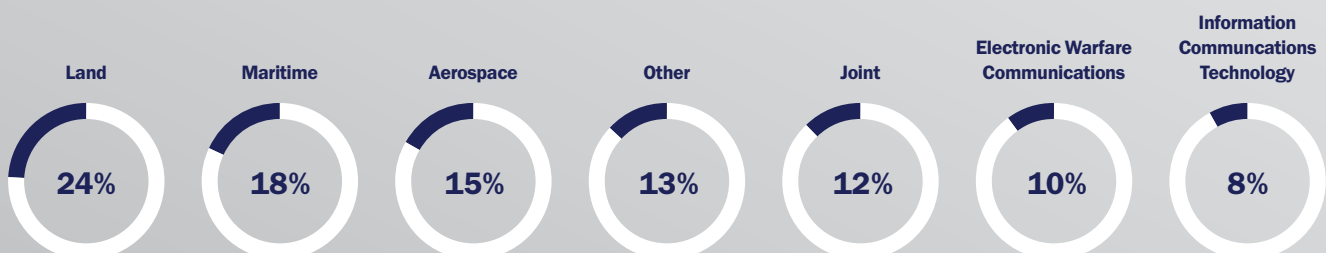
### Task 054 CIED Hand Held Detection

Can a single IED Hand Held Device Detector (HHDD) be developed with hybrid detection capability while retiring currently identified deficiencies and reducing the form factor to (or below) the lightest and most compact ground search devices available?

### Task 057 AIR5405 Air Battle Management (ABM) System Study

What are the necessary elements that comprise a 5th generation ABM System to achieve tasks specified within Defence White Paper 2013 that compliment and integrate with the relevant capabilities in Force 2020?

## Our Activities by Domain



## **Our Vision**

To be a high performing organisation whose expert advice is respected and accepted within Defence, Government and Industry.





# rpde Program Participants

Currently, there are 260 accredited Participants located in most States and Territories. An *Industry Member* brings significant Defence experience and capability plus a formal research and development (R&D) program. An *Associate Member* is often a highly specialised company or academic institution with a relevant R & D program.

'Participant' is the term used to describe companies and academic institutions that have successfully undertaken the strict assessment process. To gain program entry, an entity must demonstrate skills and expertise in one or more of the following niche capability areas:

- Military systems and materials/platform integration
- Communications/electronics/networking
- Human factors engineering/operations research/organisational analysis
- Data/information management/fusion
- Software development/integration

<b>ASC Pty Ltd</b>	Australian National University, Research School of Astronomy and Astrophysics, Advanced Instrumentation and Technology Centre	Chemring Australia Pty Ltd	EcoThought Pty Ltd
AAM Group	AVAXA Pty Ltd	Cirrus Real Time Processing Systems Pty Ltd	Edith Cowan University
Acacia Research Pty Ltd	Aviarc Australia	Cistech Solutions Pty Ltd	Eggler Consulting Engineers
Accenture Australia Holdings Pty Ltd	Babcock Pty Ltd	Clarinox Technologies Pty Ltd	Elbit Systems of Australia Pty Ltd
Acoustic Force	<b>BAE Systems Australia Limited</b>	Claviger Pty Ltd	EM Solutions Pty Ltd
Adelaide Research and Innovation (Acting for The University of Adelaide)	Beca Pty Ltd	Clearbox Systems Pty Ltd	Embedded Technologies Corporation Pty Ltd
Advitech Pty Ltd	Bellinger Instruments Pty Ltd	Cocoon Data Holdings Limited	EMC Australia
Aerospace Concepts Pty Ltd	Benelec Pty Ltd	Codarna Advanced Systems Pty Ltd	EMC Engineering Australia Pty Ltd
Agent Oriented Software Pty Ltd	Berkeley Information Technology Pty Ltd	Cogent Business Solutions Pty Ltd	Engineering and Scientific Systems Pty Ltd
Airservices Australia	Blue Glue Pty Ltd	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	Enginium Pty Ltd
Airspeed Pty Ltd	BMT Design and Technology Pty Ltd	Communications Design & Management Pty Limited (CDM)	Entech Electronics Pty Ltd
Alacrity Technologies	<b>Boeing Defence Australia</b>	Connexion Pty Limited	Envista Pty Limited
AMW Professional Services Pty Ltd	Bond University	Consilium Technology Pty Ltd	Epps Software Pty Ltd
Artis Group Pty Ltd	BROENS Industries Pty Ltd	Consumet Pty Ltd	Ernst & Young
ASG Group Limited	Bruck Textiles Pty Ltd	CSC Australia Pty Ltd	ESR-Australia Pty Ltd
Associated Electronic Services Pty Ltd	BSTech Consulting Pty Ltd	Cubic Defence Australia Pty Ltd	Etherstack Pty Ltd
ATACS Consulting Pty Ltd	C-E Solutions	Curtin University of Technology	Evalua Pty Ltd
Atamo Pty Ltd	CA (Pacific) Pty Ltd	Darmonmont Technologies Pty Ltd	Exelis C4i
ATEK Pty Ltd	CAE Australia Pty Ltd	Datacom Systems (ACT) Pty Ltd	Fastwave Communications Pty Ltd
ATSA Defence Services Pty Ltd	CAE Professional Services Pty Ltd	Deakin University	Fiomarine Industries
Audio Visual Imagenation Pty Ltd	Calytrix Technologies Pty Ltd	Defence Communications Industry Pty Ltd	Flight Data Systems Pty Ltd
Aurecon Australia Pty Ltd	Capgemini Australia	DEK Corporation Pty Ltd	Flinders Partners Pty Ltd
AUSPACE Pty Ltd	Capstoneblack Pty Ltd	Deloitte Touche Tohmatsu	Frazer Nash Consultancy Ltd
<b>Australian Aerospace Limited</b>	Catalyst Interactive Pty Ltd	Dialog Pty Ltd	Fujitsu Australia Ltd
Austal Ships Pty Ltd	<b>CEA Technologies Pty Ltd</b>	Dimension Data Australia Pty Ltd	Functional Directions Pty Ltd
Australian Defence Apparel Pty Ltd	CGI Technologies and Solutions Australia Pty Ltd	Dioli Pty Ltd	<b>General Dynamics Land Systems Australia Pty Ltd</b>
Australian Marine Technologies Pty Ltd	Charles Darwin University	Ebor Computing Pty Ltd	Geoplex Pty Ltd
		eCastle Pty Ltd	Geospatial Intelligence Pty Ltd
			GHD Pty Ltd

Green = Industry Member

Grey = Associate Member

Current as at 1 September 2014

# rpdo

## **Our Mission**

To accelerate and enhance the Australian Defence Force warfighting capability through innovation and collaboration.







## **Edition 4 Poster**

NUSHIP Canberra is the first of two Landing Helicopter Dock (LHD) ships, the largest ships ever built for the Navy. The LHD will be able to conduct a range of roles including large scale amphibious operations and carry out humanitarian assistance and disaster relief missions. The ship's company is made up of 400 personnel from Navy, Army and Air Force. NUSHIP Canberra will commission into the Royal Australian Navy in a ceremony in Sydney on 28 November 2014 when she will become HMAS Canberra.

# rpde Program Participants *continued*

GH Varley Pty Ltd	LX Consulting Pty Ltd	QUEST Global Engineering Pty Ltd	TasKey Pty Ltd
Grey Innovation Pty Ltd	Madry Technologies Pty Ltd	Quickstrike Defence and Aerospace Pty Ltd	Tectonica Australia Pty Ltd
H. I. Fraser Pty Ltd	mbits Pty Ltd	Radixon Group Pty Ltd	Telstra Corporation Limited
Hawker Pacific Pty Ltd	McGrathNicol + Partners	RAV Geospatial Group Pty Ltd	Tenfold Network Solutions Pty Ltd
Hewlett-Packard Australia Pty Ltd	Mediaware International Pty Ltd	Raytheon Australia Pty Ltd	Tetlow Technologies Pty Ltd
Holocentric Pty Ltd	Melix Pty Ltd	Redpath Technical Services Pty Ltd	Thales Australia Limited
HP Enterprise Services Australia Pty Ltd	Microsecure Corporation Pty Ltd	Relegen Pty Ltd	The Frame Group Pty Ltd
Hyder Consulting Pty Ltd	Microsoft Pty Ltd	Rheinmetall Simulation Australia	The Simulation Group Pty Ltd
Hydrix Services Pty Ltd	MilitaryTech Pty Ltd	Rockwell Collins Australia Pty Ltd	ThyssenKrupp Marine Systems Australia Pty Ltd
<b>IBM Australia Limited</b>	Milskil Pty Ltd	Rosebank Engineering Pty Ltd	Thomas Electronics of Australia Pty Ltd
ImmersaView Pty Ltd	Mincom Limited	Royal Melbourne Institute of Technology	TIBCO Software Inc
Integrated Design & Engineering Solutions Pty Ltd	Minelab Electronics Pty Ltd	RPC Technologies Pty Ltd	Tiller Scientific + Medical Pty Ltd
InDepth Project Management Pty Ltd	Mobicon Systems Pty Ltd	Rutledge Engineering (Aust) Pty Ltd	UGL Engineering Pty Ltd
Innovation Science Pty Ltd	MTU Detroit Diesel Australia Pty Ltd	<b>Saab Australia Pty Ltd</b>	Ultra Electronics Avalon Systems Pty Ltd
Intelligent Software Development Pty Ltd	National ICT Australia Limited	Seal Solutions Pty Ltd	Unisys Australia Pty Ltd
International Seal Company Australia Pty Ltd	NEC Australia Pty Ltd	Secure Systems Limited	Unitronix Pty Ltd
Intersect Australia Ltd	NetMap Analytics Pty Ltd	Security Centric Pty Ltd	University of Melbourne via Melbourne Systems Laboratory
Iwebgate Technology Limited	NGIS Australia	Sentient Vision Systems Pty Ltd	University of Newcastle
Jacobs Australia Pty Ltd	North Australian Technologies	Siemens Limited	University of New South Wales (ADFA)
Jet Systems Pty Ltd	Northrop Grumman International Inc (NGII)	Signal Processing Know-how Pty Ltd	University of South Australia
Jenkins Engineering Defence Systems (J.D. & E Pty Ltd)	Northrop Grumman M5 Networks Security Pty Ltd	Sikorsky Aircraft Australia Limited	University of Western Australia
Kellogg Brown & Root Pty Ltd	Nova Defence Pty Ltd	Simbiant Pty Ltd	University of Wollongong
Keystone Private Pty Ltd	Noventus Pty Ltd	Simplexity Communications Pty Ltd	Unmanned Systems Australia Pty Ltd
KoBold Group Limited	Oakton Pty Ltd	Sinclair Knight Merz Pty Ltd	UXC Consulting Pty Ltd
KPMG	Ocean Software Pty Ltd	SMS Defence Solutions Pty Ltd	Vigil Consulting Group Pty Ltd
L-3 Communications Australia Pty Ltd	<b>Optus Networks Pty Ltd</b>	Sofraco Engineering Systems Pty Ltd	VIPAC Engineers & Scientists Ltd
L-3 Nautronix Limited	Orbital8 Pty Ltd	Solve Group Pty Ltd (trading as PTG Global)	Walkinshaw Performance Pty Ltd
Lange Consulting Pty Ltd	Orion Integration Pty Ltd	Sonartech Atlas Pty Ltd	WDSScott Asia Pty Ltd
Lateral Sands Pty Ltd	Pacific Aerospace Consulting Pty Ltd	SouthTech Systems Pty Ltd	Williams United Pty Ltd
Leadership Solutions Australia Pty Ltd	Panther Games Pty Ltd	Speciality Coatings (AUST) Pty Ltd	XTEK Limited
Learning Systems Analysis Pty Ltd	Partech Systems Pty Ltd	SPYRUS Pty Ltd	YTEK Pty Ltd
Liberty Industrial Pty Ltd	Pilatus Australia Pty Ltd	SRA Information Technology Pty Ltd	Zangold Pty Ltd
LISAsoft Pty Ltd	Pilatus Australia Pty Ltd	Strategic Engineering Pty Ltd	ZBOB Engineering Pty Ltd
Locata Corporation Pty Ltd	Point Trading Group	Supacat Pty Ltd	Zone Advanced Protection Systems
Lockheed Martin Australia Pty Limited	Prism Defence Pty Ltd	SVT Engineering Consultants	
<b>Lockheed Martin Australia Electronic Systems Pty Limited</b>	Procept IP Pty Ltd	Syndetic Pty Ltd	
	Project Outcomes Pty Ltd	SYPAQ Systems Pty Ltd	
	PWC Strategy (Australia) Pty Ltd	SystemWare-Pacific Pty Ltd	
	QANTAS Airways Limited	Tactical Research Pty Ltd	
	<b>QinetiQ Pty Ltd</b>		
	Queensland University of Technology		

Green = Industry Member

Grey = Associate Member

Current as at 1 September 2014



# Sponsor in the Spotlight



**Brigadier Pete Short**  
Director-General Land Development  
Branch (DGLD)

## What are Land Branch's priorities?

Land Branch is unique in that it manages a relatively high volume of active projects. It is very busy and experience has taught us many times that commencing a project correctly from the onset is the best form of risk mitigation. From this point and throughout, maintaining project discipline in a focussed way that brings together all key stakeholders while avoiding distractions leads to the best chance of delivering effective capability in a value for money and timely manner. In summary, our priority is to be the best project managers that we can.

## What challenges do you have and how are you planning to address them?

There is insufficient provision within the available budget to do what we think we really need to; and delivering effective future capability quicker, while balancing the requirements of good governance. We are not alone with these challenges. They both require a unified, collegiate solution. The first issue is best addressed by adopting an investment approach to our future capability. We need to prioritise our future needs and then agree on what we are prepared to procure and how much we are prepared to pay. This would give us a critical (provisional) way point to inform the project throughout its journey rather than step off with an unhelpful wish list that has little chance of realisation. I am a strong supporter of the Kinnaird Two Pass process but we have shortcomings in its application. Too often, usually because we start projects with some wrong way points, we allow ourselves to become distracted and lose discipline along the way. Secondly, we are too risk adverse to tailor the process to reflect relatively simple and low risk projects. Our plan is to keep progressing well thought through opportunities to senior committees to realise new capability sooner; and release important resources for redirection elsewhere while balancing the needs for good governance.

## What value does RPDE bring to the Australian Defence Organisation?

We believe that time invested early in the project that gets it off on the right foot is time never wasted. RPDE is a well schooled independent inquisitor in testing that we are doing exactly that. Have we got the scope right? Do we sufficiently understand the future environment to be sure we have all our integration and technical risks covered? I find it difficult to think of a reason why any project would not be using RPDE to test them at the start line. Through RPDE, the bringing together of industry, academia and other Government experts is accessible to all agencies within the Department. RPDE is a skilled facilitator, experienced in collaboration and innovation that can break down seemingly complex problems to find solutions. This resource is not limited to Capability Development Group.

## What could RPDE participants do to expand their knowledge of the capability issues?

Up front, any potential RPDE customer should educate themselves as to what RPDE offers. I see too often, a limited employment of RPDE only because we ask them to tackle 'known problems'. My experience has taught me that in addition to known problems, RPDE can scan our future environments and help us recognise other risks and issues that are not immediately apparent. RPDE's exposure to countless projects and problems means they are well positioned to test our understanding of the future environment. In keeping with our mantra of starting projects on the right foot, we intend asking RPDE to help us identify the questions we don't know but should.

## In future, what will make RPDE relevant?

Right now, nothing about RPDE is broken. It is a capable facilitator for informing the environment and working toward solutions to complex problems. Its future relevance is proactive education of all participants, maintaining resourcing, protecting what it does well and building upon the success by expanding the external participation of industry, academia and other sources of expertise.



# CASE STUDY

## Task 049 SEA 1430 Digital Hydrographic System and MGI Project Relationships

By Anthony Cassidy

DEFENCE RELIES HEAVILY ON GEOSPATIAL INFORMATION AND SERVICES TO ENABLE ITS OPERATIONS TO THE POINT WHERE IT IS NOW CONSIDERED TO BE A KEY DECISION SUPPORT TOOL. GEOSPATIAL WEB SERVICES ARE HELPING TO BUILD A STANDARDISED, SHAREABLE GEOSPATIAL FOUNDATION TO EFFECTIVELY SUPPORT OPERATIONS.

Project SEA1430 Ph5 Digital Hydrographic System (also referred to as the Digital Hydrographic Database upgrade capability) was established to provide Defence with a certified database for maritime Military Geospatial Information (MGI).

The project vision included data management capable of incorporating various datasets that currently exist within legacy, bespoke and unconnected systems. The fusion of this information will provide a detailed Recognised Environmental Picture (REP) across an Area of Operations.

Task 049 was established to answer the following question:

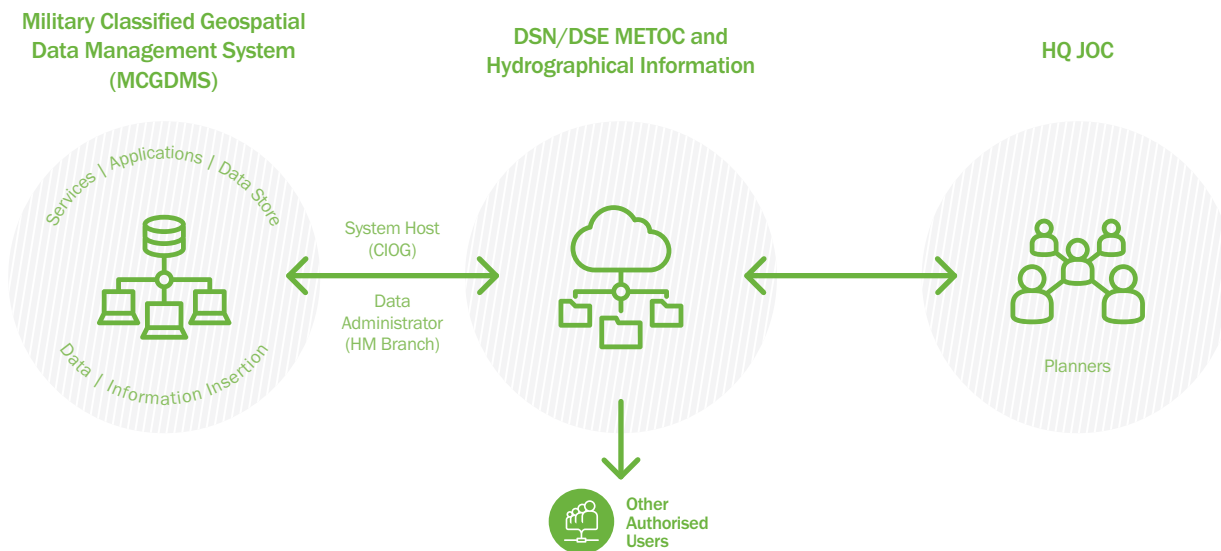
What are the options for the provision of a digital hydrographic system, classified and unclassified capability for JP1770 Ph1 and JP1771 Ph1 prior to the realisation of SEA 1430Ph5?

### Discovery Phase

The initial scope of Task 049 was to:

- Explore problems, opportunities, and relationship impacts on other MGI related projects caused by the delay of Project SEA1430 Ph5;
- Identify the interdependencies between the relevant projects and the geospatial community specifically from a maritime perspective;
- Identify and document the various stakeholder viewpoints by discussing capability relationship gaps, overlaps and directions;
- Present options ranging from the sustainment of existing legacy systems, enterprise architecture concepts, reorganising the current geospatial governance model and developing de-risking initiatives; and
- Design, develop and deliver a DSN-accredited, web based geospatial solution.

## Context diagram of the capability:



Task 049 supported the objectives by developing a set of capability options and an associated geospatial enterprise architecture to inform the development of a coherent Defence Geospatial system. During the Solution Development Phase the objectives were amended at the sponsor's request to include the development of the Maritime Classified Geospatial Data Management System (MCGDMS) to meet an urgent operational need. To accommodate the MCGDMS requirement a de-risking proof-of-concept was developed to enable the MCGDMS to:

- Provide fit-for-purpose, relevant and timely digital maritime geospatial information to support Headquarters Joint Operations Command planning for operations;
- Enable Hydrography, Meteorology and Oceanography Branch data custodians to serve data to many clients while still retaining control over the data and how it is portrayed; and
- Support Anti-Submarine Warfare, Littoral and Coalition operations by providing customised maritime spatial web services and data.

### Solution Development Phase

The Solution Development/Support to the implementation phases of Task 049 started in March 2013 in close co-ordination with HM Branch

and the Chief Information Officer Group (CIOG). The MCGDMS was developed and implemented in accordance with the following steps:

- **Step 1** Agile Backlog Development involved undertaking 14 sprints in total; six Sprints during the Solution Development Phase and eight Sprints during the Support to Implementation Phase;
- **Step 2** Development on the Defence Restricted Network (DRN) as a development platform with Pre-Production development and Pre User System Testing development of the MCGDMS being completed on the DRN;
- **Step 3** Implementation on the DSN which was completed within nine months from our initial engagement with CIOG; and
- **Step 4** Plan for Production and handover to HM Branch.

### Summary

The desired outcomes for RPDE task 049 were successfully delivered to our sponsor in December 2014. This Task showcased what can be achieved by a small, multi skilled team that is focussed on end user needs and requirements within an environment that fosters innovation and encourages the introduction of leading edge technologies.

# rpde Out and About



Land Forces conference participants viewing RPDE's vignette at our stand.

## THE RPDE STAND HAS FEATURED AT THE LAND FORCES CONFERENCE AND THE AVALON AIR SHOW.

The stand provides meeting facilities for senior Capability Development Group staff, RPDE staff and RPDE members and an opportunity for RPDE staff to highlight the benefits of the RPDE program to potential customers and prospective members. RPDE attendance provided the opportunity for RPDE staff and sponsors to visit exhibiting members to better understand the innovation, technology and services they bring to the RPDE program. Over 120 enquiries were recorded over the Avalon Air Show ranging from new activities from sponsors and expressions of interest in upcoming activities, through to new membership enquiries. RPDE staff also presented vignettes to showcase current RPDE activities. Look for us at Pacific 2015.

## Notice to RPDE Participants

### Relationship Agreement 2016

The current RPDE Relationship Agreement (RA) and accompanying Standing Offer expire on 30 December 2015. A new Relationship Agreement (RA2016), Standing Offer (SO) and supporting policy have been drafted and will be available for review on the RPDE Extranet. RA2016 will carry our engagement model into the next ten years of the program and we strongly encourage you to review the documents and provide your feedback before 30 May 2015. RPDE participants will be invited to execute RA2016 and the new SO in the final quarter of 2015.

The major changes to the document suite are as follows:

- RA2016 incorporates changes to the role, composition and rotation policy of the RPDE Board;
- The SO includes;
  - An option for the Commonwealth to review and determine rates in consultation with the RPDE Board, and
  - A new rate for Workshop Attendance that has been approved by the RPDE Board;
- Changes have been made as required to ensure compliance with the Work Health and Safety Act 2011 (Cwth) and Work Health and Safety Regulations 2011 (Cwth); and
- The policy document has been developed to incorporate policy detail previously held within the RA, to reduce the need to amend RA2016 when Commonwealth and Defence policy changes.

Please note that RA2016 has not altered the RA clauses relating to Risk, Liability and Intellectual Property.

A 'Hot News' item will be issued when the documents are available for review. To review the documents and provide your feedback:

- Locate the documents on the RPDE Extranet under the 'publications' tab in the folder marked 'RA2016';
- Complete your feedback and comments using the spreadsheet provided; and
- Email your completed spreadsheet to [RA2016@rpde.org.au](mailto:RA2016@rpde.org.au) by close of business on 30 May 2015.

Please direct questions or enquiries to John Chapuis, RPDE Commercial Manager, by email to [RA2016@rpde.org.au](mailto:RA2016@rpde.org.au)

### Biennial Meeting of Participants

The first Biennial Meeting of Participants for 2015 will be held from 0900-1230 on the 16th April 2015, at the Brindabella Conference Centre, Brindabella Business Park.

Please forward your registrations for attendance to Danielle Monahan, RPDE Office Manager, by email to [danielle.monahan@rpde.org.au](mailto:danielle.monahan@rpde.org.au) by close of business on the 10th April 2015.



# Employee Profile



**Dr Neil Miller**  
Operations Manager RPDE

**Commenced:** December 2014

**Location:** Canberra

**Role:** RPDE Operations Manager with responsibility for the delivery of high quality and innovative products and services.

**Qualifications:** Bachelor of Engineering (Hons), Master of Engineering (Trafficability), Doctorate of Philosophy (Change Management), Fellow of Australian Institute of Management

**Expertise:** Program, project and work management, change management, software development, innovation, system dynamics modelling

**Secondment:** TASKey Pty Ltd

"With an innovative culture, smarter more cost effective solutions will become the norm."

## What attracted you to RPDE?

RPDE provides a unique opportunity to facilitate the synergy of Defence, industry and academic ideas. By creating an agreed understanding of what is possible, the acquisition of ADF warfighting capability can be accelerated and enhanced.

## Why is innovation important?

The innovative use of technology is rapidly changing the battlespace of the future. With an innovative culture, smarter more cost effective solutions will become the norm.

## What has surprised you?

The broad scope of RPDE activities from battlespace management and platforms to counter-IED prototypes has been surprising. Also the significant insights for Defence and industry that one RPDE independent report can provide.

## Why is collaboration important?

In complex problems, it is unlikely that one person or organisation will have the total solution. Collaboration is required to engage people, enhance understanding and reduce risks.

## What gives you the most satisfaction?

Working with a range of people to develop and effectively implement practical solutions. The satisfaction is greatest when cultural change is achieved.

## Who is your greatest influence?

The people who can see what needs to be done and have the courage and perseverance to do it.

## Like to propose an Industry Initiated Quicklook?

All Program Participants are invited to propose an Industry Initiated Quicklook to solve a current or future capability issue. For more information contact: Andrew Fullgrabe, RPDE Engagement Manager (02) 6127 4905 or [andrew.fullgrabe@rpde.org.au](mailto:andrew.fullgrabe@rpde.org.au)

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**Cover:** HMAS Dechaineux leads HMAS Waller and HMAS Sheean in formation. **Page 4:** HMAS Newcastle and HMAS Arunta conduct Officer of the Watch manoeuvres with Pakistan Navy Ship, PNS Saif during Exercise KAKADU 2014. **Page 6:** Arrival of US Navy FA18 Super Hornets at RAAF TINDAL

**Back Cover:** RPDE TASK 032 Air Combat Officer In-Flight Instructor Aid.



**RPDE delivers  
a significant return  
on investment for  
Defence by de-risking  
complex issues**

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**Contact us**

**Telephone** (02) 6127 4900 **Email** [info@rpde.org.au](mailto:info@rpde.org.au)

**Address** Second Floor, 18 & 20 Brindabella Circuit,  
Brindabella Business Park, Canberra Airport ACT 2609

**Mailing Address** The RPDE Program, Department of Defence,  
BP20-2 PO Box 7925 Canberra BC, ACT 2610

[www.rpde.org.au](http://www.rpde.org.au)