



*Rapid Prototyping Development  
and Evaluation Program*

# Strategic Plan 2014–2016





# Supporting Defence to integrate capability

The premise that founded the Rapid Prototyping Development and Evaluation Program (RPDE) in 2005 was relatively simple – rapidly gain a comprehensive understanding of a problem in order to present solutions that accelerate capability enhancements for the warfighter. The means by which RPDE continues to achieve this goal is through early and ever-broadening collaboration with a wide cross-section of industry and academia to find the best solutions.

The Program has had some spectacular successes, and has learnt and adapted to provide strong support to Defence in many activities. This outcome is even more pronounced with the increase in support to Pre-1st Pass projects for the Capability Development Group (CDG).

Since inception, RPDE has completed over 140 Tasks and Quicklooks, and in the past 12 months has reached capacity, requiring careful prioritisation of projects. With over 230 participating organisations including many of Australia's top tertiary institutions, the RPDE brand is solid and trusted.

A key strength lies in the objective approach that underpins every project delivered – all of which are undertaken by participants of the Program, with a collective commitment to the Australian Defence Force (ADF) and its mission. The Program's success centres on early industry and participant engagement, resulting in a *collaborative industry based solution*. Increasingly, the problems Defence has are being more readily identified by industry with innovative solutions being presented to RPDE and Defence.

This Strategic Plan provides the framework for the Program's future development and growth by articulating a series of goals, and objectives that underpin the Mission Statement. Importantly, this plan will inform the development of a new Relationship Agreement beyond 2015, that will further enhance the RPDE mission: To accelerate and enhance ADF warfighting capability through innovation and collaboration.

A handwritten signature in blue ink, appearing to read 'John Caligari'.

**Major General John Caligari, DSC, AM**  
RPDE Board Chair

# Mission

To accelerate and enhance ADF warfighting capability through innovation and collaboration.

# Charter

In executing this Strategic Plan and associated annual business plans, the RPDE Board, Management Team, One Star Steering Group and participants will adhere to the RPDE Charter.

We are a responsive organisation committed to:

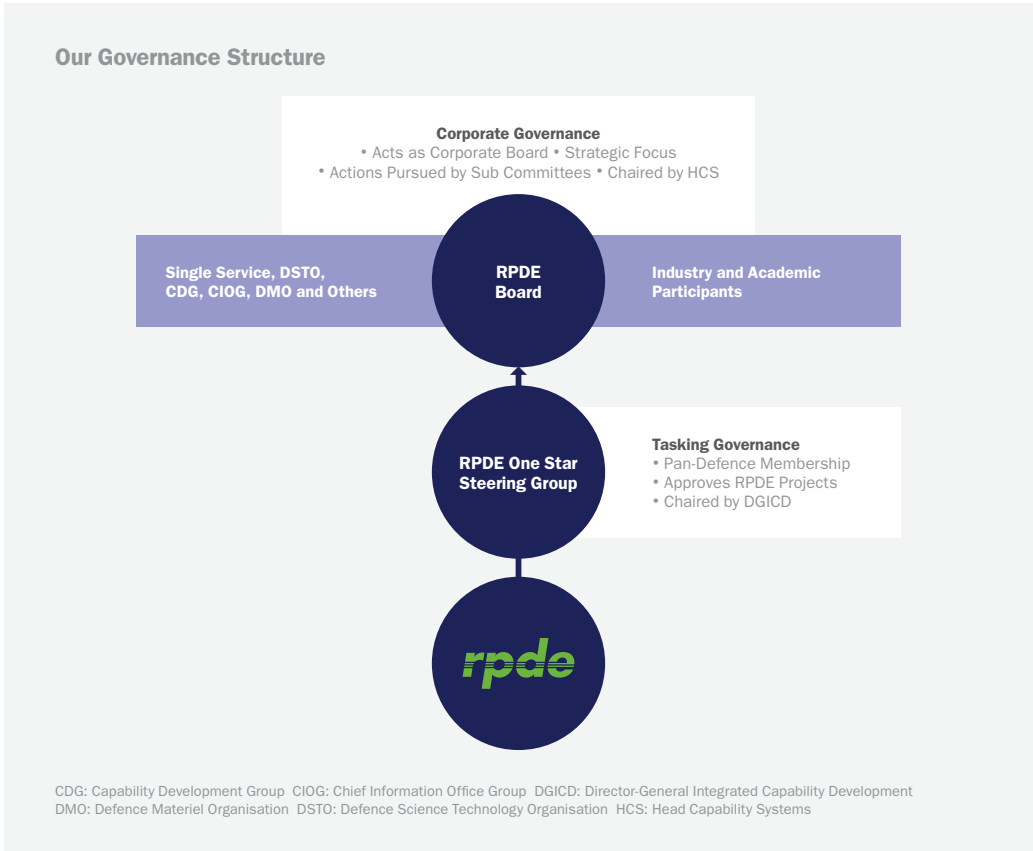
- Providing an innovative way of doing business that harnesses the collective power of Defence (and other Government agencies) and Industry in a collaborative way.
- Quickly solving problems endorsed by Defence and other Sponsors that conventional acquisition processes may not solve.
- Rapidly (within 18 months) delivering capability for warfighters.
- Creating an environment that encourages and maintains broad stakeholder engagement.
- Managing the Foreground Intellectual Property (IP) and respecting Background IP utilised in RPDE's work.
- Taking an approach to problem solving that takes into account all Fundamental Inputs to Capability (FIC).
- Being lean and agile and not overly bureaucratic to ensure responsiveness.
- Ensuring work is allocated across the membership on a best talent-for-money basis.
- Promoting effective cooperation and/or competition for all work (which involves both promoting competition amongst members to ensure the best team is available and promoting competition between members to ensure that the best outcome is achieved).

In our everyday dealings with each other we will:

- 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.

## Governance

There are two lines of governance that involve doing things right and doing the right things. The RPDE Governance Structure is shown below.



## Value Proposition

The core and seemingly unique RPDE value is the combination of:

- The ability to rapidly create teams across traditional corporate boundaries (*rapid industry teaming*).
- A commercially safe environment where Intellectual Property (IP) and liability protections exist (*commercially safe*).
- Processes that provide for rapid consideration of problems and articulation of options and solutions that address stakeholder concerns (*rapid and relevant outcomes*).
- A culture that encourages behaviours of participation and cooperation, and discourages competition within the boundaries of RPDE (collaborative behaviour).

## Being Agile and Innovative

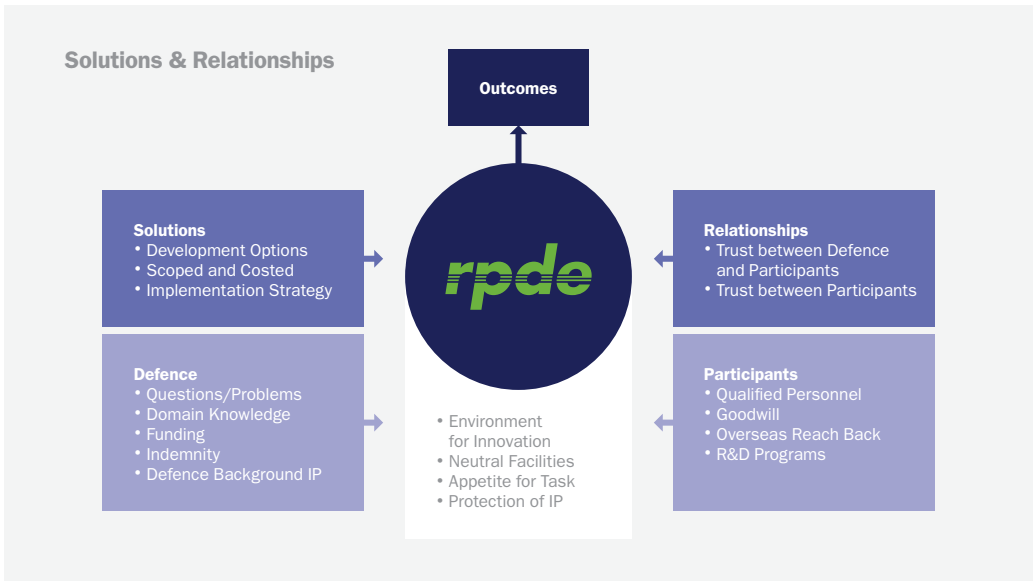
RPDE works as a catalyst to accelerate capability decisions for Defence. It does this by taking on complex and risky problems that require broad engagement with industry and academia. All of RPDE's efforts are focused on developing solutions quickly, to accelerate the delivery of ADF capability.

RPDE extends across all areas of Defence to analyse problems, examine options and develop prototypes. It provides a collaborative and impartial environment, where commercial interests are put aside to find the best, workable solution for Defence. Increasingly, other federal Government agencies are using RPDE to help solve some of their problems.

The Sponsor (mainly Defence) presents a problem or question to RPDE, which then brings together the expertise and innovative ideas from the RPDE Participants, who represent a diverse range of organisations across all sectors. RPDE develops appropriate responses to address the problem or question, which can range from a report through to a prototype.

## RPDE Manages Two Main Solution Products

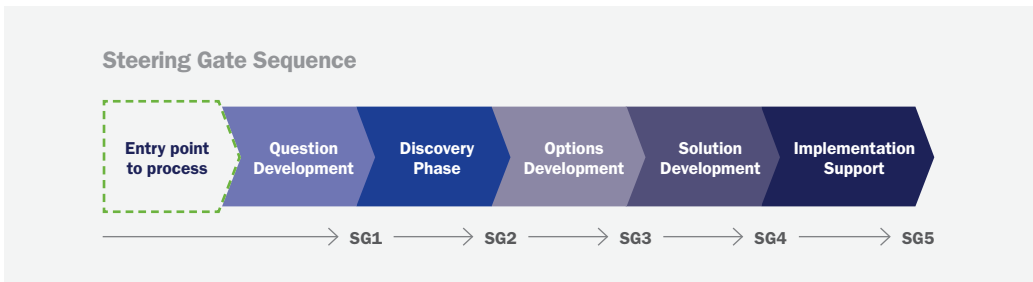
- A **Quicklook** that delivers guidance, advice and input on a Defence issue by rapidly bringing together experts from industry and academia. It normally takes three months to complete. Quicklooks have been expanded to address new Defence Capability Plan (DCP) projects (as part of the Capability Development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



## Effective Controls

As the nature and size of the problems vary, RPDE’s approach to solving them offers flexibility and agility. Of note, however, is that over the life of this Strategic Plan, Defence (and all Government agencies), RPDE and industry will be operating in a tightly constrained fiscal environment.


To provide effective control over the conduct of a Task, the Steering Gate process as illustrated below has been adopted. Most Tasks finish at Steering Gate 4, although RPDE can assist the Sponsor to implement the solution, taking the Task to Steering Gate 5.





## **Strategic Goal 1**

Cultivate and exploit collaborative Defence and Australian Industry relationships to provide an enhanced problem solving capability.



**RPDE is an innovative collaboration between Defence, industry and academia that harnesses their collective knowledge and expertise to solve Defence's complex capability problems. RPDE will maintain a collegiate and cooperative environment that encourages and maintains broad engagement between all stakeholders.**

## **Objectives and Performance Measures**

### **Objective 1.1**

Create and foster opportunities for collaboration between Defence, Australian Industry and Academia.

Performance Measures:

- The extent of involvement of Participants in RPDE activities.
- The number of prospects as represented in the Hopper being an appropriate mix of Tasks and Quicklooks.

### **Objective 1.2**

Enhance the visibility of industry expertise and knowledge to Defence.

Performance Measure:

- Industry knowledge and expertise is identifiable.

### **Objective 1.3**

Provide access to Foreground IP to enhance Australian Defence Industry research and development.

Performance Measures:

- The number of unique IP products generated and registered by RPDE.
- The number of unique IP products requested by Industry.

### **Objective 1.4**

Encourage the involvement of the broad diversity of Participants in conducting analysis and delivering solutions.

Performance Measures:

- Level of Participant involvement in RPDE program.
- Level of stakeholder satisfaction with experience in RPDE program.

The extent to which Industry and Defence provide RPDE with required resources to undertake activities.

A photograph of a military vehicle, possibly an Armored Personnel Carrier (APC), in a desert environment. The vehicle is olive green and has a New Zealand flag on a pole. Two soldiers in camouflage uniforms and helmets are visible. One soldier is standing in the foreground, holding a rifle, while another is positioned on the vehicle. The background is a vast, arid, sandy landscape under a clear sky.

## Strategic Goal 2

Deliver timely analysis, advice and innovative solutions to complex problems to support Defence decision making.





**RPDE is outcomes focused with results of its activities firmly directed towards finding solutions that will support the warfighter. RPDE supports this through:**

- Its innovative and collaborative approach to its work.
- Addressing complex problems.
- The rapid timeframes to which it adheres.

## **Objectives and Performance Measures**

### **Objective 2.1**

Deliver analysis and solutions within agreed timeframes (nominally within 18 months of Task initiation and within 6 months of Quicklook initiation).

Performance Measures:

- The degree of achievement of an 18 month target for the progression of Tasks from SG1 to SG4.
- The degree of achievement of a six month target for the progression of Tasks/Quicklooks from SG4 to SG5.
- The average time from Quicklook launch to delivery of 12 weeks.

### **Objective 2.2**

Mitigate risk and enhance capability for Defence through delivering solutions and advice to highly complex and challenging problems.

Performance Measures:

- The extent to which solutions meet the needs of sponsors.
- 80 percent plus of RPDE “advice” is utilised by Defence.

### **Objective 2.3**

Stakeholders (Participants and Defence) nominate their most talented people for the RPDE program.

Performance Measure:

- Number of suitable candidates for each position.

## **Strategic Goal 3**

Be recognised as a well-governed organisation that delivers value for money.





**The problems presented to RPDE are unique and require rapid, novel and innovative solutions. RPDE will manage and monitor its internal processes in a similar manner.**

## **Objectives and Performance Measures**

### **Objective 3.1**

Execute RPDE program in accordance with the Relationship Agreement and Standing Offer.

Performance Measure:

- Number of complaints, breaches and representations to the Board requiring resolution.

### **Objective 3.2**

Effective, collaborative and engaged Board.

Performance Measure:

- Board effectiveness.

### **Objective 3.3**

Approval and allocation of RPDE activities undertaken by One Star Steering Committee.

Performance Measure:

- Activities approved by One Star Steering Committee in accordance with Defence priorities.

### **Objective 3.4**

Meet all accountability, compliance and reporting requirements.

Performance Measure:

- The degree to which all accountability, compliance and reporting requirements to Head Capability Systems (HCS) are met.

### **Objective 3.5**

Use resources effectively and efficiently to ensure maximum return on investment for Defence.

Performance Measure:

- The ratio of overhead spend to activity spend (ensuring it does not become too excessive).

### **Objective 3.6**

Exchange of information between similar national and international organisations that can assist in capability development.

Performance Measure:

- The effectiveness and relevance of engagements with domestic and international bodies.



#### 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)**



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**Cover:** Able Seaman Naomi Bloxidge mentally prepares to conduct a boarding in the Middle East Area of Operations (MEAO). In July 2013, the Royal Australian Navy ship HMAS Newcastle completed two successful weeks of counter terrorism operations in the Red Sea with the multi-national Combined Task Force 150 (CTF 150). Over the fortnight, Newcastle's crew executed 81 boarding actions, and her S-70B-2 Seahawk Helicopter, conducted 32 surface search sorties to gather 'patterns of life' intelligence, and detect and deter illegal activity in the area.

**Strategic Goal 1:** Five Australian warships trail behind HMAS Darwin (front) as she follows HMAS Sydney into Sydney Harbour for the International Fleet Review from 3–11 October 2013. The Review commemorates the centenary of the first entry of the Royal Australian Navy's Fleet into Sydney on 4 October 1913. Approximately 40 warships from the Royal Australian Navy and navies from around the world as well as, up to 17 tall ships participated in the event.

**Strategic Goal 2:** Mentoring and Reconstruction Task Force 2 (MRTF2) Company Sergeant Major (CSM) Warrant Officer Class 2, Peter Turnbull patrols the streets of Mirwaise traverse Southern Afghanistan. Elements of Combat Team Alpha (self-referred to as the 'Spartans') were conducting presence patrolling focussed on engaging the local populace through a hearts and minds approach aimed at establishing a positive influence over the locals, thereby disrupting the insurgents capability to use the civilian populace as a support base.

**Strategic Goal 3:** RAAF Hawk-127 aircraft from 76 Squadron and F/A-18 Hornets from 77 Squadron fly in formation toward Sydney Harbour to conduct a flypast for the International Fleet Review from 3–11 October 2013. Aircraft from the Royal Australian Navy, Royal Australian Air Force, Australian Army as well as aircraft from the United Kingdom, Canada and Pakistan conducted the flypast over the harbour.

**Back cover:** Platoon Commander of the 7th Battalion Royal Australian Regiment Task Group Other Government Agency Platoon One, Lieutenant Patrick Rooney (left) and his Platoon Signaller Private Jai Michel, on patrol with the Managed Works Team Four (MWT 4) at a construction site in Uruzgan Province. Personnel deployed to Tarin Kot with the MWT 4, rely on the men from two 7th Battalion Royal Australian Regiment Task Group Other Government Agency Platoons (OGA 1 and 2), for protection and mobility to visit civilian Afghan contractors and building construction sites. Without the assistance from the two OGA platoons, the engineering projects could not be monitored or completed on time and the personnel from MWT 4 could not do their important job of assisting with the construction of facilities for the Government and people of Afghanistan.