

**Nova Systems**

**Adelaide Office**

27-31 London Road  
Mile End South SA 5031

Telephone: +61-8-8252 7100

Facsimile: +61-8-8252 4141

Email: [team@NovaSystems.com.au](mailto:team@NovaSystems.com.au)

Web: [www.NovaSystems.com.au](http://www.NovaSystems.com.au)



Enclosure 1

**SUBMISSION TO THE JSCFADT REVIEW ON THE DEFENCE ANNUAL REPORT 2012-13**

**1.0 Submarine capability – status of implementation of recommendations from the Coles Report**

Nova considers the Submarine and Air Combat capabilities to be vital to Australia's security in the forthcoming decades, and also vital to the future of its defence industry. These two capabilities together comprise the major elements of Australia's deterrence in the 21st century. It is therefore essential that the ADF understand the capabilities in detail and manage them closely to achieve their intended outputs, during both the acquisition and sustainment phases.

Nova considers it a matter of sovereign importance that Australian companies are fully involved in developing, understanding and sustaining future Submarine and Air Combat capabilities. The Coles review into Submarine Sustainment showed the risks we face when we don't fully understand our most complex capabilities. Nova was pleased to be involved in the recent final phase of the Coles review and notes the performance improvements that have resulted from the determined application of system engineering principles to the Collins submarines' capability, even though this was initiated mid-way through the Collins lifecycle. We consider it a key 'lesson learnt' that the Future Submarine capability must be closely managed throughout its lifecycle and that the skills and expertise needed to understand the capability fully must reside in Australia – either in Defence or in industry. Australia cannot afford to 'lose control' of these key deterrent capabilities in the uncertain security future that we face.

Test and Evaluation is a key area of expertise in understanding and managing our most complex capabilities. The ADF can only be assured that its capabilities are performing at their intended level by a comprehensive Test and Evaluation program across the entire lifecycle. While some aspects of testing will be always be conducted overseas we cannot allow someone else to tell us whether our capabilities meet our needs – we need a sovereign ability to decide this ourselves.

Fortunately Australian defence industry has considerable high-end systems engineering skills to bring to bear on this task. Companies like Nova Systems and others have the skills and experience to contribute to a sound sovereign Australian understanding of our defence capabilities, and will be there over the capability lifecycle. For example, Nova is currently working on the early Test and Evaluation planning for the Future Submarine on behalf of the Defence Department. This work is informed by our recent role in the Collins sustainment review. We hope to be involved in the conduct of submarine Test and Evaluation in the future. An open approach from Defence to Australian companies' participation in capability development, acquisition and sustainment will lead to an environment where ideas from 'outside' are welcomed and continuous improvements flow.





## **2.0 Defence Materiel Organisation and Capability Development Group – Review of Capability Development Improvement Program initiatives and Test and Evaluation support**

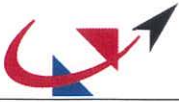
### **2.1 Review of CDIP Initiatives**

Nova has supported Capability Development Group (CDG) with the initial engagement of the CDG Industry Partnership. The partnership was established to provide CDG with the ability to rapidly engage consulting support to prepare documentation or investigations for pre second pass DCP projects. During the initial two year engagement, Nova worked with CDG on over 150 prospective tasks resulting in approximately 100 contracted activities in areas such as Cost Estimation, Scheduling, Capability Development Documentation authoring, (ADTEO) Australian Defence Test & Evaluation Office Trials Management support, Risk Management and Training Needs Analysis. The partnership engagement process reduced the typical engagement time from a normal eight week DMOSS process to a one and a half week engagement process – sometimes as short as three days. This rapid engagement greatly improved the support to CDG Project Managers and significantly reduced administration on the Commonwealth's side. The partnership has recently transitioned to the CDG Contractor Support Arrangement which increased the number of supporting entities from one to six. This will provide CDG with a greater level of flexibility and capacity during peak workload periods. Nova has also been involved in the Capability Development Improvement Program initiatives (CDIP) review of the extensive CDG Project Documentation Suite (PDS) and revision of the associated templates. Due to the varying priorities of associated stakeholders, CDG has found it difficult to finalise this task.

The main difficulty for partnership members has been the relatively short notice of support requests. Many requests require highly experienced and specialised personnel with an "ASAP" start date. The lack of sufficient forward resource planning makes it more challenging to find the best resource to efficiently fulfil the task. CDG has a large number of Project Managers (Desk Officers) who come directly from operational units rather than DMO. Clearly there are benefits of recent operational experience; however, CDG Project Managers are required to staff a large number of documents, whereas more DMO experience in the organisation would be beneficial. Furthermore, Nova believes that the requirement to produce the extensive PDS needs to be reviewed. The current requirement to produce the PDS will generally exceed the capacity of CDG Project Managers, even when supplemented by DMO. CDG is presently, and should continue to utilise experienced contracting organisations to provide short term specialist support.

### **2.2 Test and Evaluation Support**

In Oct 2012, ADTEO released a Notification of Proposed Rule Making (NPRM) for the conduct of ADF Test and Evaluation. As Australia's only Recognised Training Organisation (RTO) offering T&E Training and a significant provider of T&E expertise to the ADF, Nova was provided the opportunity to respond to the NPRM and participate in the T&E Principles forum to discuss the NPRM. In formulating a response, Nova was asked to develop a proposal for the provision of a T&E training continuum that would offer a pathway for the development of T&E professionals across all three services. Nova Systems provided detailed comments on ADTEO's NPRM, developed a proposal for a training pathway for T&E professionals and participated in the T&E Principal's forum. After the forum, Nova also contributed to the development of the T&E guidance in the re-issued Defence Capability Development Manual (DCDM).



Since the issue of the NPRM and the update of the DCDM, Nova has had a number of opportunities to support ADTEO, through the provision of T&E expertise to supplement the ADTEO Trials Management workforce and Directorate of Early Test Plans. Nova believes that the updates to the DCDM, including the requirement to develop more detailed and accurate Test Concept Documents and Test and Evaluation Master Plans earlier in the Capability Lifecycle has definite potential to contribute to better identification and understanding of the technical and capability risks associated with the acquisition of systems. Nova believes that the next step is to enshrine a process of T&E professionalization and culture of accountability to acknowledge and use the information delivered as a result of conducting more focussed and better resourced T&E programs in support of system acquisition.

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