

The Joint Decision Support and Simulation Centre

## Securing the southern seas in the Philippines

By Justine O'Brien

**When the Philippines looked to Australia to help with developing solutions for a Coast Watch program, the Defence Science and Technology Organisation (DSTO) Joint Decision Support and Simulation Centre (JDSSC) was asked to step up and assist.**

"When IP Division came to us for support to deliver a capability-development for the Philippines, we jumped at the chance to help them conceptualise an initiative to keep their seaways safe and secure," Director JDSSC Jamie Watson said.

The Philippines Coast Watch South (CWS) program is the equivalent of our Border Protection Command – an interagency construct for maritime surveillance, patrol and response – and operates in the Sulu-Celebes Seas<sup>1</sup> along the southwest coast of the Philippines.

Jamie said the waters of the southern Philippines present a significant risk to regional security and are known for piracy and as transit routes for criminals.

"The CWS looked to Australia, through the Defence Cooperation Program operated by IP Division, to help them test a mix of capability solutions to inform a technical needs analysis for this initiative," Jamie said.

"The JDSSC is all about using a range of existing methods and tools to conceptualise a future program or capability.

"If we can help to identify capability gaps early on in the process then we help the client to save time, money and effort in the later stages of capability development."

Discussions were held between IP Division and the JDSSC, and other parts of DSTO to develop the structure and select the methods to demonstrate and use for the activity.

A DSTO team was then assembled from these areas to provide the necessary skills and expertise – collaborating to prepare for and conduct the activity.

Jamie explains how Border Protection Command and the Australian Customs Service were also involved in discussions for advice and support.

"Collaboration within DSTO and Defence, and with other agencies brought together a number of different and complementary methods for the activity to address the operational complexity and capability development issues faced by CWS," Jamie said.

The range of methods employed for the project were:

- **Engle-Matrix Games:** These games use concepts and discussions to assist decision-making in complex environments. A map and limited technology were used to facilitate the exercise.

Participants were briefed on the types of actors in a scenario. They then assumed roles to play and were required to give an argument, evidence and justification for the outcome of each turn. The outcome was a common understanding among participants, and it drew out possible issues for conducting CWS operations.

- **C4ISR Architecture Workshop:** A C4ISR strawman architecture was developed from previous work undertaken by the Joint Systems Science Discipline, and was tailored to the CWS operational environment.

It elicited a structured understanding of such things as the units involved, activities performed, information types, information flows and dependencies. The end product contained sophisticated linkages and an impressive amount of data.

- **Exploratory Simulation Experiment:**

A simulation-based wargame was used for this exercise, where participants were immersed in a scenario that explored the concepts and solutions created during previous sessions.

The simulated environment demonstrated the range of operational and capability issues that CWS would encounter and an understanding of the challenges that lay ahead to address those issues.

- **Demonstration of Tools:** The activity also demonstrated a range of tools with different levels of sophistication and purpose that CWS could use to test capabilities.

The range of methods used in the activity allowed for a sound understanding of the capability gaps and challenges of the CWS initiative.

The activity was attended by five Philippine CWS representatives and a representative from the US Coast Guard.

The Philippine delegation returned home empowered by the experience to tackle the challenges they faced and with a range of techniques to assist them.