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Queensland Government

# Exercise Torres

## Evaluation Report

2018



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Aboriginal and Torres Strait Islander people should be aware that this document may contain images of people who may have since passed away. AMSA offers our apologies for any distress caused if this occurs.



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## Acronyms

AIIMS-4	Australasian Integrated Incident Management System – Version 4
AMSA	Australian Maritime safety Authority
COP	Common Operating Picture
DDMG	District Disaster Management Group
DFAT	Department of Foreign Affairs and Trade
IAP	Incident action Plan
ICC	Incident Control Centre
IMT	Incident Management Team
IT	Information Technology
JRCC	Joint Rescue Coordination Centre
FOB	Forward Operating Base
LDMG	Local Disaster Management Group
LO	Liaison Officer
MSQ	Maritime Safety Queensland
NPSCC	National Plan Strategic Coordination Committee
OIL	Observations, Insights, Lessons.
QCCAP	Queensland Coastal Contingency Action Plan
QPS	Queensland Police Service
REEF VTS	The Great Barrier Reef and Torres Strait Vessel Traffic Service
TMR	Queensland Department of Transport and Main Roads.
TSC	Torres Shire Council
TSIRC	Torres Strait Island Regional Council

# Steering Committee commentary

## Executive summary

Maritime emergencies cause significant and complex disruptions when they affect communities. They are characterised by jurisdictional complexity, can impact the natural environment, the built environment, the economy, and have significant consequences on community psychosocial health. This is especially so where the community relies on the marine environment for subsistence and where the environment itself is of significant cultural value to the Traditional Owners.

Exercise Torres 2018 practiced a multi-agency and multi-jurisdictional response to an oil spill in the Torres Strait and Kaiwalagal Region (the region traditionally owned by the Kaurareg People), focusing on the interaction of the QLD maritime incident and disaster management arrangements with the National Plan for Maritime Environmental Emergencies (National Plan).

Key agencies involved in the exercise were, The Australian Maritime Safety Authority (AMSA), The Queensland Department of Transport and Main Roads (TMR), Maritime Safety Queensland (MSQ), the Torres Shire Council and Torres Strait Island Regional Council (TSC and TSIRC), representatives of the Kaurareg people and the communities of Thursday, Sabai, Poruma and Warraber Islands. In addition, the broader QLD emergency management system was engaged through off-site exploration of recovery issues through the District Disaster Management Group (DDMG) and Local Disaster Management Group (LDMG).

The Exercise was designed to explore the impact of a multiple release oil spill scenario occurring in waters adjacent to remote communities in the Torres Strait and Kaiwalagal Region. The scenario was considered plausible and was developed following extensive consultation. The exercise was held in two phases.

Phase One consisted of a discussion exercise that examined the wider operational and recovery issues of responding to an oil spill in very remote traditional communities.

The discussion exercise was attended by over 100 participants representing 22 organisations and traditional owner groups.

Phase Two saw a Queensland led Incident Management Team (IMT) working with a Forward Operating Base (FOB) to respond to the incident. The exercise commenced on day three of the incident with a handover from the outgoing IMT notionally played by Exercise Control. The field components of the exercise were held at locations in Cairns and Thursday, Poruma and Warraber Islands.

The Steering Committee has reviewed the insights of the Evaluation Team and has identified lessons applicable to the training and engagement of Traditional Owners, National Plan Policy and Guidance, jurisdictional disaster management arrangements, planning, IMT Personnel and investigations. These lessons address those insights that the committee considers priority issues.

Other insights, while not addressed with specific lessons, may be relevant to other response organisations. From the insights, readers may find additional examples of good practice to implement or sustain and also areas for improvement. The lessons identified by the Steering Committee and the insights from the evaluation team should be read in the spirit of continuous improvement.

The Exercise was a large undertaking that effectively replicated the difficulties of remote area operations, the results confirm that the aims and objectives were effectively achieved.

The Exercise Steering Committee notes that the consistent focus throughout the exercise, including during its planning and preparation phase, is that inclusion of Traditional Owners is paramount to success. We note that this will be even more vital in the event of an actual incident. The Steering Committee wishes to thank the Traditional Owners of the Torres Strait and the Kaiwalagal Region for their enthusiasm and engagement in Exercise Torres 2018.

## Lessons identified by the Steering Committee

### Lessons on community development

Recognising the remoteness of the Torres Strait and Kaiwalagal Communities, and the risk inherent in the level of shipping there, efforts should be made to sustain and extend the training provided to the local response capability. To shorten the time taken to deploy and gather intelligence, training should be provided in shoreline clean-up and assessment techniques. This will allow concurrent activity on the ground while preliminary incident response personnel and equipment are deployed. Additional training should be provided in equipment operation to allow local communities to lead teams of responders operating on their traditional lands.

Traditional Owners should also be provided with IMT training. This will build on the valuable experience for response personnel and also maintain the momentum gained during the exercise.

#### Recommendation:

The Steering Committee recommends that a training strategy be developed with a view to building local capacity to assist with the response to incidents.



### Lessons on National Plan policy, guidance and training

A number of opportunities exist to enhance the National Plan Policy and associated Guidance. Firstly, a lessons management and real-time learning policy should be developed and incorporated into the National Plan for incidents and exercises. The incorporation of qualified lessons management staff was found to not only enhance the validity of exercise insights but also to have a direct effect on the performance of the IMT. IMT leadership utilised lessons identified from previous exercise experiences to enhance the performance of the IMT.

#### Recommendation:

The Steering Committee recommends the development of a Lessons Management and Real-time Learning policy for incorporation into the National Plan.

There was no process for the management of the situational awareness displays in the IMT resulting in the lack of a clear, consistent Common Operating Picture. While situational awareness processes improved throughout the exercise, a lack of situational awareness across the broader IMT persisted. This is an enduring lesson identified, with the recommendation made by the Exercise Constant Bearing Steering Committee (2017) to develop a National Plan Guidance document on situational awareness displays and endorsed, but delayed, by the National Plan Strategic Coordination Committee (NPSCC)

#### Recommendation:

The Steering Committee recommends the development of a National Plan Guidance document on situational awareness displays.

To improve inter-section communications, IMT Section and Unit Leaders would benefit from the opportunity to train together through a proposed marine pollution response combined training program e.g. a course that combines the current Operations, Logistics and Planning courses to occur concurrently. Such a course is currently under development.

**Recommendation:**

The Steering Committee recommends that AMSA training continues to develop the combined marine pollution response training program and that this lesson is noted for the curriculum.

### Lessons on jurisdictional disaster arrangements

As observed in Exercises Nautical Twilight (2016) and Constant Bearing (2017), the integration of maritime emergency response into broader jurisdictional disaster management arrangements was again proven to be beneficial. The linkages developed between TMR/MSQ and the DDMG and LDMG was of particular note given TMR/MSQ's role as lead agency under a hazard specific plan. The local DDMG and LDMG Leadership noted the opportunity to practice a hazard specific plan was valuable and the focus on community recovery from the IMT can be attributed in part to the involvement of both groups.

**Recommendation:**

Jurisdictions should continue to pursue opportunities to involve broader disaster arrangements into maritime incident response planning, incidents and exercising.

### Lessons on planning

A key factor for the success of the exercise was the robust liaison officer (LO) network implemented, including the provision of liaison officers to the IMT. TMR/MSQ considered early and appropriate placement of LOs from Traditional Owners and communities, and government agencies. This was achieved through a process of Stakeholder mapping, which reflects the benefits of jurisdictions including stakeholder mapping in their planning processes with the view to the timely deployment of LOs to the IMT and from the IMT to other key bodies e.g. DDMG/LDMG.

**Recommendation:**

Jurisdictions should consider conducting detailed stakeholder mapping to ensure a solid foundation for their liaison officer network.

Deployment of equipment to the remote islands of the Torres Strait and Kaiwalagal Regions presented difficulties with many islands lacking deep water access for vessels and limited access to infrastructure such as heavy lift forklifts.

**Recommendation:**

Jurisdictions and AMSA should review equipment stockpiles with a view to determining deployment options for equipment in such circumstances.

## Lessons for IMT personnel

As observed in previous exercises there was a lack of clarity regarding the roles of sections at all levels. This led to delays in production of key response documentation while role responsibilities were determined. All response personnel deployed to an incident or exercise should ensure they familiarise themselves with the requirements of their role by reviewing the appropriate Aide-memoire for Marine Pollution Response (NP-GUI-026). This applies equally to functional and leadership teams.

### Recommendation:

Incident responders should ensure they utilise the Aide-memoire for Marine Pollution Response (NP-GUI-026) before and during exercises and incidents. Joining instructions for exercises and inductions to incidents should specifically reference the Aide-memoire.

### Recommendation:

A table should be incorporated into the Aide-memoire that:

- lists the key deliverables,
- identifies the role responsible for ensuring delivery
- identifies other roles that should provide input



## Lessons on Investigations Cell

This was the first National Plan exercise to embed an Investigations Team in the IMT. A key insight was the effective interaction between the Investigations and Operations cells, particularly with respect to the gathering of evidence. Jurisdictions should consider embedding investigations cells in the IMT for future exercises and incidents.

### Recommendation:

Jurisdictions should consider embedding investigations cells in the IMT for future exercises and incidents.



## The Torres Strait and Kaiwalagal region

The Torres Strait is located between Australia and Papua New Guinea, with 17 of the 274 islands in the Torres Strait having permanent settlements. The settlements have a population of approximately 7,000 people.

The Kaurareg people possess the native title rights to the Kaiwalagal Region including several islands in the south-west of the Torres Strait. Malu Lamar, which translates to deep water spirit, was appointed as the Registered Native Title Body Corporate (RNTBC) for Part A of the Torres Strait Regional Seas Claim.

The Torres Strait Islander and Kaurareg cultures have a strong connection to sea. The Torres Strait Islanders and Kaurareg have traditionally utilised the marine environment and its resources for subsistence, cultural and economic purposes.

The Torres Strait and Kaiwalagal Region is ecologically significant with extensive sea grass areas, and internationally important breeding populations of dugongs and turtles. The prawn and lobster fisheries are extremely valuable commercial fisheries.

The Torres Strait and Kaiwalagal Region is integral to international shipping, making trade economically feasible between Australia and many Asian countries. The heavy usage of the passage, as well as factors including shallow waters, including approximately 580 coral reefs, strong tidal currents, persistent high winds, and narrow channels greatly increase the risk of a marine pollution incident occurring.

Under the Queensland Coastal Contingency Action Plan (QCCAP), the Torres Strait has been identified

as one of six Marine Environment High Risk Areas in Queensland waters. These areas have been recognised as having a 'higher than average risk of a serious marine pollution event'. Due to this higher risk, particular focus is given to these areas when formulating preparedness & response plans.

The International Maritime Organization has declared the Torres Strait as a Particularly Sensitive Sea Area recognising the unique and complex marine ecosystem and its vulnerability to damage by international shipping activities.

This means that the Torres Strait must be supported by associated protective measures which prevent, reduce or eliminate the risk of marine pollution.

The measures implemented include a two way route in the Great North East Channel, compulsory pilotage for large vessels, monitoring of shipping movements by the Great Barrier Reef and Torres Strait Vessel Traffic Service (REEFVTS), and the implementation of an under keel clearance management system.

The ecological, environmental and cultural importance of the Torres Strait and Kaiwalagal Region coupled with the local geography, remoteness of the region and limited local infrastructure present significant logistical challenges for a response to a maritime environmental emergency.

It is critically important that response agencies meaningfully engage with local agencies and communities to effectively prepare for a marine pollution incident.



## Exercise governance

The National Plan Strategic Coordination Centre (NPSCC) is responsible for the commissioning and formal response to the Exercise. The Exercise was managed on behalf of NPSCC by the Exercise Steering Committee ('the Steering Committee) in accordance with the governance structure depicted below.



Figure 1: Governance Structure for Exercise Torres 2018



The Exercise Steering Committee was responsible for:

- management of the exercise
- setting exercise objectives
- oversight of the writing team
- review of the exercise
- production of the Exercise Evaluation Report and recommendations.

The Exercise Writing Team conducted detailed exercise planning and development.

Membership of the Steering Committee and Exercise Writing Teams are specified in Table 1 below.

Exercise Steering Committee	Exercise Writing Team
Australian Maritime Safety Authority (Chair)	Australian Maritime Safety Authority (Chair)
Queensland Department of Transport and Main Roads	Maritime Safety Queensland
Queensland Inspector-General of Emergency Management.	Kaurareg Native Title Aboriginal Corporation Registered Native Title Body Corporate.
Kaurareg Native Title Aboriginal Corporation Registered Native Title Body Corporate	Risk and Emergency Management (REM) Associates
Malu Lamar (Torres Strait Islander) Corporation, Registered Native Title Body Corporate	Queensland Department of Environment and Science
Queensland Fire and Emergency Services	Queensland Fire and Emergency Services
Queensland Police Service	Queensland Police Service
Queensland Ambulance	

Table 1: Membership of Steering Committee and Writing Team

## Exercise background

In accordance with the National Plan and the North East Shipping Management Plan, the Exercise was conducted to practice and review marine incident management and oil spill response arrangements in the Torres Strait.

The Exercise tested a National and State capacity to respond to a level 3 maritime incident within the Torres Strait and Kaiwalagal Region. The multi-agency and multi-jurisdictional exercise focused on understanding the impact of strategic decisions on local communities and placed a strong emphasis on community engagement. Other focus areas included environmental impacts on subsistence communities and communications in remote locations.

The Exercise effectively enabled MSQ and relevant stakeholders to identify and capture cultural, environmental and jurisdictional considerations of a major oil spill, which has enhanced their strategic and operational readiness to respond to an incident in the region. Exercise participants demonstrated a proactive, agile and adaptive learning culture that is reflected in the successful outcomes of the Exercise.

The aim of the Exercise was to practice a Queensland led response to a significant ship sourced oil spill in the Torres Strait and Kaiwalagal Region. The Exercise was delivered in two phases:

**Phase One:** a two-day strategic discussion exercise held in Cairns on 1 and 2 August 2018



**Phase Two:** a two-day operational (field) exercise in Cairns and the Torres Strait and Kaiwalagal Region during the week 17–21 September 2018.

### Phase One

The aim of this exercise phase was to develop the strategic consequence management, community engagement and communication arrangements and strategies of the National Plan, QCCAP and Queensland Disaster Management Arrangements within the context of the Level 3 oil spill response within the Torres Strait and Kaiwalagal Region.

The objectives of this phase were to:

- Develop the strategic management arrangements of a Level 3 oil spill response in a multi-jurisdictional setting and the interface between the National Plan and Queensland Disaster Management Arrangements.
- Explore the consequences of a ship-sourced marine pollution incident and the mitigating strategies in the context of a unique and remote community and a vital international shipping route.
- Develop public engagement and communication strategies including coordinated messaging.



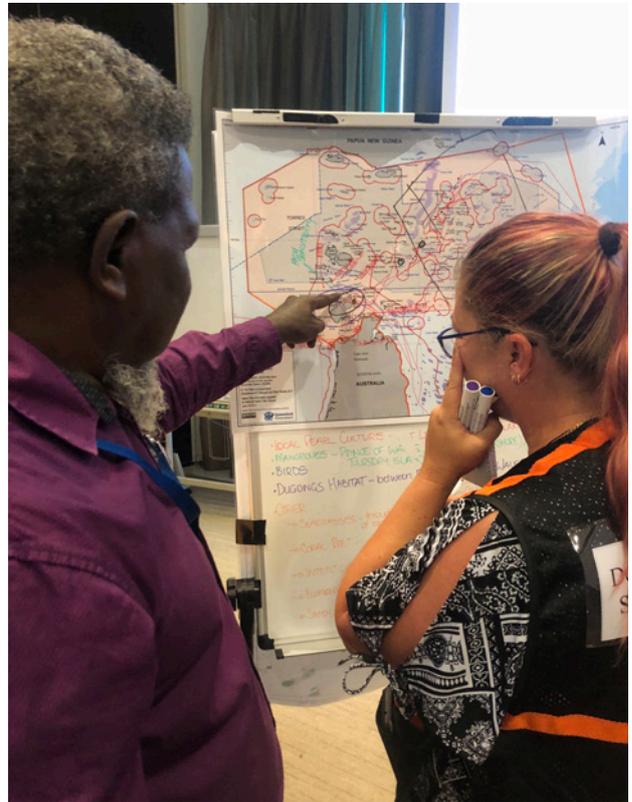
# Exercise background

## Phase Two

The aim of Phase Two was to test the response arrangements to a Level 3 oil spill within the Torres Strait and Kaiwalagal Region, as detailed within QCCAP and local/regional arrangements.

The objectives of this phase were to:

- Exercise the safe operational management of a Level 3 incident involving a multi-agency, multi-jurisdictional and cross sector Incident Control Centre (ICC):
  - Practice the management of an ICC in Cairns
  - Practice the establishment of an IMT using the Australasian Inter-Service Incident Management System (AIIMS-4)
  - Practice the establishment of a Forward Operating Base (FOB) on Thursday Island
  - Establish control of the tactical response through the ICC and FOB – Maintain situational awareness of the incident response between the ICC, FOB and field teams
  - Develop operable multi-directional communication and coordination arrangements between the ICC, Marine Pollution Controller, and Local and District Disaster Management Groups.
- Exercise the safe tactical deployment of resources and response personnel to conduct shoreline protection and cleanup operations in geographically remote and dispersed locations:
  - Coordinate the logistical support of tactical operations, including communication
  - Demonstrate the ability to implement, manage and coordinate field response operations
  - Practice the safe deployment and use of spill response equipment, technology and oiled wildlife response equipment.
- Establish and maintain effective community liaison, engagement and inclusion with community members:
  - Integrate trained community members into response operations
  - Practice public engagement and coordinated communication and messaging



## Exercise scenario

On Monday 17th September 2018, the bulk carrier, MV Noble Tasman, was transiting through the Torres Strait on a voyage to Singapore. At approximately 1100hrs, whilst undertaking an internal transfer, the MV Noble Tasman discharged a quantity of intermediate fuel oil into the sea north of Poruma Island. The vessel immediately contacted the Reef VTS and AMSA Joint Rescue Coordination Centre (JRCC). Following notifications and inspection of the vessel, the Master continued on the planned voyage.

On the morning of Tuesday 18th September 2018, a second discharge occurred near the entrance to East Strait. The master reported the second discharge to Reef VTS and AMSA JRCC. AMSA subsequently detained the vessel and directed it to Darwin. Over the ensuing days shoreline impacts were reported on Poruma, Warraber, Hammond, Horn, Thursday and Prince of Wales Islands.

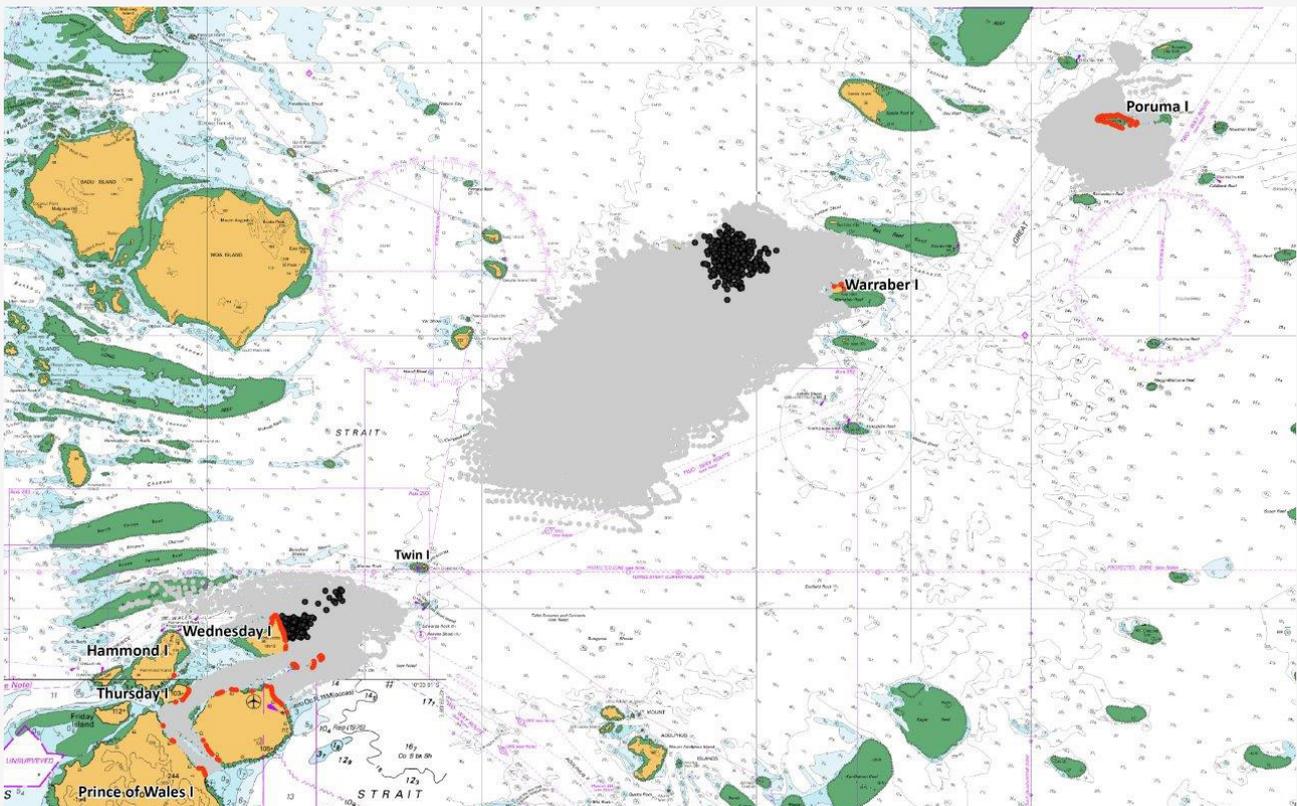


Figure 2 - Trajectory modelling and shoreline impacts

# Conduct of the exercise

## Phase One

Phase One commenced with information sessions that provided an insight into life in the Torres Strait and Kaiwalagal Region for response personnel and an overview of maritime incident prevention and preparedness for participants unfamiliar with the intricacies of maritime emergencies.

Sessions covered daily life from the perspective of participating communities and Queensland, national and international arrangements for preventing and responding to maritime emergencies.

Following the information sessions the exercise scenario was introduced and facilitated discussion occurred covering response actions, community impacts, transboundary issues and stakeholder engagement, communications and media.

The discussion groups consisted of a mix of personnel from Queensland Government Response and Recovery Agencies and National Plan partners as well as over 30 participants from communities in the Torres Strait and Kaiwalagal Region including representatives from the Kaurareg People, Thursday, Poruma, Sabai and Warraber Islands.

Attendance at the discussion exercise exceeded 100 participants each day including exercise participants, observers and exercise control staff.



## Phase Two

The field exercise was conducted on the 19th and 20th of September with an IMT in Cairns coordinating a simulated field response on Thursday, Warraber and Poruma Islands.

The exercise notionally started on day three of the incident with the IMT receiving a handover from the outgoing team at the commencement of the exercise. This allowed the IMT and field teams to have an accelerated start to the response by inheriting an initial Incident Action Plan (IAP) and field orders. This allowed the IMT to plan a response based on modelled impacts including pre-positioned equipment and personnel. Attendance at phase 2 exceeded two hundred personnel each day including exercise participants, observers and exercise control staff.



## Exercise evaluation

An evaluation was conducted to systematically examine both phases of the Exercise and identify learning opportunities. The Evaluation Team consisted of members from MSQ, AMSA, Department of Home Affairs and Emergency Management Victoria. During Phase One of the exercise, the evaluation focused on participant and syndicate discussion to capture data against specified discussion questions.

During Phase Two, evaluation was based on a plan that specified questions that enabled data collection and analysis against the exercise objectives and sub-objectives. The evidence chain outlined in the framework defined focal areas of data collection for the Evaluation Team. A blended model of real-time learning and evaluation was undertaken during Phase Two, which enabled the Evaluation Team to identify learning opportunities during a hot de-brief and feed them back into day two of the exercise.



### Data collection and analysis

Data was collected using the following methods:

- Participant discussion questions
- Direct observation
- Hot debriefs
- End-of-exercise debriefs
- Targeted informal interviews
- Review of exercise documentation and IT systems
- Participant and Observer Questionnaire

The analysis methodology adopted during the exercise was derived from the OIL (Observations-Insights-Lessons) Model as documented in the Australian Emergency Management Handbook – Lessons Management. The elements of the OIL Model are:

#### ■ Observation

A record of a noteworthy fact or occurrence during the exercise captured in the data collection phase of the evaluation. Observations may be negative or positive. The complete list of exercise observations can be found in the supporting Master spreadsheet. Observations have been used as the evidence to evaluate the achievement of exercise objectives and sub-objectives.

#### ■ Insight

Thematic analysis of observations to identify learning opportunities from the observations collected. Insights can provide guidance for future analysis and potential action; can be positive or negative; and can contribute to reinforcing positive behaviour or changing practices. Insights have been developed and validated using observations from multiple sources which ensures a greater level of rigour.

#### ■ Lesson Identified

A viable course of action based on the analysis of one or more insights or observations that can either sustain a positive action or address an area for improvement. This process includes identifying and implementing recommendations.

## Exercise insights – General

### Torres Strait and Kaiwalagal Region communities

The Torres Strait and Kaiwalagal Region communities were an integral part of both exercise phases; during Phase One community members were active in strategic discussions and in Phase Two they proactively and willingly assisted across all exercise locations. In particular, the Traditional Owners embedded within the IMT provided invaluable local knowledge and intelligence on places of environmental, cultural and social significance. This commitment, coupled with a passionate and willing approach from the community throughout the exercise, resulted in positive exercise and incident preparedness outcomes.

Evidence of community involvement was the considerable number of community members who attended response sites to volunteer, offer assistance or learn about an incident response. Community awareness of the exercise was significant, with evidence confirming that community members are proactive, passionate about their community, want to learn and be involved, and are willing to assist protect their traditional lands. Furthermore, community members know the local area as well as the cultural considerations and can quickly mobilise to contribute to a response.

Training and development opportunities for the Communities were identified in both phases of the Exercise to enhance the community's ability to respond to oil spills and incidents, participate in the protection of their own environment, and move towards community resilience. While MSQ delivers a state-wide training program that includes the Torres Strait, the opportunities to enhance this program include training community members to be the 'eyes and ears' during an incident to collect and feedback accurate and timely information during an incident.

### Learning culture / real-time lessons

A learning culture was evident throughout both phases of the Exercise; however, this culture specifically came to the fore in Phase Two of the Exercise. A hot debrief was conducted at the end of day one which identified a number of learning opportunities for the IMT and Incident Control Function. These real time lessons centred on information sharing between sections, process flows (e.g. procurement requests), planning processes and IAP development, and situational awareness.

At the commencement of day two, the Incident Controller and his Deputy addressed the need to learn from day one and allocated an hour for sections to map information flow and processes, both within their section and to/from other sections. This dedicated learning period led to sections developing clarity on roles and responsibilities, processes and information flow that greatly enhanced the effectiveness of day two activities.

### Strategic priorities

During Phase Two, the strategic priorities of the response were set and briefed by the Incident Controller at the commencement of the exercise. The briefing included a situation briefing (type and location of incident) and advised of specific cultural and community considerations to be aware of when planning and implementing the response, in particular the reliance of the local communities on subsistence fishing and waterborne transport.

This briefing effectively set the objectives for the response and provided the IMT with a good understanding of the environment and communities that needed protection. However, strategic priorities and actions were not re-visited to ensure they were being achieved and effectively mitigated risks to the community.

## Disaster management

Queensland's disaster management arrangements incorporate the development of hazard specific plans for incidents such as pandemics, biosecurity matters and ship-sourced marine pollution.

QCCAP is regarded as a hazard-specific plan under Queensland's disaster management arrangements. MSQ an entity within TMR is the lead response agency. Given the regularity of natural disasters in Queensland, response agencies are familiar with the Queensland Police Service (QPS) acting as the lead agency. The Exercise provided the opportunity to test alternative arrangements.

Throughout the exercise all participating agencies demonstrated an agile and adaptive culture which made the event a valuable learning opportunity. In particular, both QPS and TMR through MSQ tested disaster specific control arrangements. This learning also exposed the LDMGs and DDMGs to a ship-sourced marine pollution incident, as well as exposing TMR to the wider community recovery activities that are managed by the DDMG and LDMG during such events.



## Liaison Officers

MSQ invested in a LO network from the outset of exercise planning, recognising that LOs enable the timely flow of information. Effort to identify and request stakeholder representation during exercise planning and Phase One resulted in effective placement of LOs, which proved critical for the timely flow of information between stakeholders.

LOs and Traditional Owners, either embedded in the IMT or readily accessible to the IMT, proved to be very valuable in enabling the timely flow of information. This included the passage of advice and action to and from the IMT from LDMG/DDMG, AMSA, Protection & Indemnity Club (Insurance) and Traditional Owners. To further enhance the flow of information between the IMT and DDMG it was strongly suggested that QPS officers be embedded in the IMT.

An LO was not initially embedded within the LDMG, with information flow relying on the existing DDMG/LDMG relationship and regular briefings from the forward operating base controller. While effective, there was some concern raised by the LDMG on the timeliness of information about local activities flowing to the LDMG. This was remediated by the FOB Controller through the placement of an LO in the LDMG, which improved information flow and relationships and ensured a reliable COP across all areas.

Some agencies were invited and unable to attend, such as Department of Foreign Affairs and Trade (DFAT), Biosecurity, Department of Agriculture and Fisheries. It was identified that future response activities would benefit from having LOs from these agencies who play a vital role in the business, recreational and social activities of the region.

Overall, ongoing and sustained effort is essential to achieve early and appropriate placement of LOs from Indigenous communities, and other government agencies (national and state). During a response, the Incident Controller needs to continually assess the benefit of LO placement and be flexible and decisive by allocating or moving LOs to meet operational requirements and improve information flow if required.

# Exercise insights—Phase One

## Cultural considerations

The importance of including cultural considerations in incident planning, response and recovery was highlighted during Phase One of the exercise. Having a knowledge of cultural considerations and significant areas for protection enables jurisdictions to manage a response in a way that is sensitive and respectful to cultural law / heritage and recovery.

The flow-on effect of this insight is that a response needs to have a dedicated mechanism or process to capture and input cultural considerations. In this example, Traditional Owners were embedded during strategic and operational level activities and this achieved sharing of cultural, environmental and heritage knowledge.

## Intelligence

Strategic discussion identified that quality and timely intelligence is critical to inform the management of the response. A mechanism identified to achieve this outcome was to utilise local rangers and first responders to collect information to contribute to the intelligence process. The benefits of Community Members being ‘eyes on the ground’ during a response was also highlighted during Phase Two of the exercise, with community members able to ground-truth information.



## Human resources

In remote locations there are limitations on the number of human resources that are trained and available to respond. When combined with the limited logistics available (e.g. accommodation, catering, water) planning will need to consider use of the local community as the bulk or significant component of the labour force especially for “first strike”.

## Resources

Several logistical challenges were identified during the planning of this exercise. There are significant barriers to the efficient deployment of equipment due to the remoteness of the Torres Strait and Kaiwalagal Region. Limits on local shipping, shipping infrastructure, airstrip capacity and biosecurity concerns needs to be a planning consideration for real-life situations. Specifically, planning effort needs to consider the weight of equipment deployed, biosecurity inspection of the equipment, and timing for the deployment and arrival of oil spill response equipment. If an incident were to occur in the region, logistics would have to be resourced extensively very early in the response. More broadly, this insight reflects considerations associated with accessing and responding to incidents in remote areas.



# Exercise insights – Phase Two

## Roles and responsibilities

Day one saw over 80 people from various state and federal agencies come together to form the IMT. The Incident Controller provided a succinct overview of the incident, advised the IMT of the importance of considering local community issues when carrying out their tasks and set the daily schedule for the ICC.

The Control Function allowed time for the IMT to settle in, get up to speed on the situation and team-build. Observations reflect that there was no clear guidance given on section tasks and responsibilities. The development of the IAP was a key exercise outcome, however some sections did not fully understand their role in contributing to the development of the IAP. An absence of strategic priority setting to inform incident planning and response preparation was observed to make compilation of the IAP difficult.

Confusion also existed between areas on which functional areas were responsible for key deliverables such as producing the situation report, developing operational plans, maintaining status boards/COP and the overall incident log. Across the Planning, Intelligence and Operations functions, the delineation of other roles and responsibilities, including assessments of risk, were also not clear at the commencement of the Exercise.

While the multi-jurisdictional and multi-agency workforce and exercise artificiality probably contributed somewhat to this lack of clarity, there was a considerable lack of cross team

communication and process that resulted in a loss of situational awareness and planning across most of the IMT. Reference to the National Plan for Maritime Environmental Emergencies Aide-memoire for Marine Pollution Response (NP-GUI-026) may have assisted to elevate the observed lack of clarity on roles and responsibilities.

This was the first time the TMR/MSQ Public Information cell was exercised as part of an IMT. While there was clear understanding of the roles within the team, it was identified that the Public Information Strategy developed could have been completed earlier during the exercise to inform and advise other teams.

Planning and development of the IAP improved considerably on day two through cross functional meetings and interactions, the delineation of planning and operations roles and responsibilities, and the embedding of personnel into other functional areas to directly obtain information to assist in developing the IAP. This was a credit to the IMT members and leadership who at the end of day one identified opportunities for improvement and successfully implemented them at the start of day two.

The allocated period of process and information flow mapping at the start of day two enhanced workforce cohesion and relationships, with members of the IMT engaging across areas and with other members both formally and informally to exchange and validate information that contributed to decision-making processes.



## Investigations Cell

The Exercise was the first time an Investigations Cell was exercised as part of an IMT. Overall, observations reflect that the Investigations Cell had robust processes and systems to collect information from incident sites, including remote sites with capability and technology limitations. Investigations personnel were observed to engage with the Operations Cell on sampling and collecting evidence from the oil spill, which enabled early processing of information to assist with the investigation process.

## Relationship building

During Phase Two of the Exercise a dedicated period of relationship building occurred at the commencement of the Exercise on day one which enabled initial interaction and communication. This period consolidated existing relationships with Traditional Owners and other agencies, and laid the foundation for participants to work professionally and cohesively for the duration of this exercise phase.



## Community recovery

Community recovery was a consideration during the response, with the ICC, DDMG and LDMG commencing work on recovery plans/planning on day one of the exercise. It was apparent that recovery is an ingrained consideration of incident response in Queensland. This finding is evidenced by community and economic recovery being key items of discussion at DDMG and LDMG teleconferences and key contacts being established between the IMT, DDMG and LDMG to initiate local recovery planning activities.

The Public Information Strategy should have more fully addressed and advised on political, environmental, people and their safety, social, economic, and food and water security considerations. This includes factors such as food shortages, public health concerns, and possible risks to life and community backlash.

Overall, recovery was a major influence on the exercise and the IMT demonstrated their ability to consider current and future operations, which was highlighted in both exercise phases.



# Information Management

Information Management was a constantly improving area during the Exercise as best practices were sustained and deficiencies identified and remediated. Business as usual technology, such as MSQ's mobile intelligence gathering platforms, Collector Geographic Information System app and evidence.com, enabled information to be obtained from the field and provided to the Intelligence functional area. The use of these systems was identified as a practice that should be continued.

Maintaining situational awareness was an ongoing challenge for participants. The SharePoint site proved to be a useful repository for response documentation due to its structured file system. However, it was observed that some IMT members had initial problems accessing the SharePoint site which resulted in inconsistent practices that carried through for the whole response. Overall, while a useful Information Technology (IT) system, more effective governance and ease of access is required to enhance the effectiveness of SharePoint as an incident management information system, including specifying file naming conventions and incident logs capturing decisions and rationale.

There was an observed absence of standards for record keeping and decision-making logs. The use of running sheets as a log, posted into SharePoint, and hardcopy notebooks was observed which resulted in little consistency in relation to recording of conversation method, decision or action, and time of conversation.

Inconsistent and ad hoc information flow processes between the IMT, FOB and tactical response meant that at times incident information was not recorded, disseminated or actioned consistently across functions in the IMT or between the IMT, FOB and field.

The inefficient use of Status Boards to display information and intelligence was an issue raised at the ICC and FOB, with both locations not optimising the use of boards to display information. The ICC remediated this on day two of the exercise when functional areas began using boards to share information within and across the IMT. During day two, information was turned into useful intelligence products, for example, the Intelligence cell mapping and assessing risks of culturally sensitive areas after engaging with the Traditional Owners embedded within the IMT.

It was observed that critical information remained within some sections, such as Intelligence and Investigations, and was not being shared at a common point. An example of this was a map and list of sensitive areas for water, food and cultural locations. These observations reflect the importance of dedicated mechanisms to facilitate effective information flow to achieve consistent situational awareness. These can include regular IMT or section briefs, and documented processes that demonstrate how information flows between cells. These specific mechanisms enable the sharing of information on a common and consistent basis.



## Field operations

There is consistent evidence that reflects field operations were planned and conducted very effectively during the Exercise. This conclusion was identified from a number of examples, including the FOB Controller providing effective tactical tasking involving shoreline assessment and response activities informed by trajectory modelling, economic and cultural impact of mitigation strategies, environmental impacts, and liaison and coordination with LDMG. Additional evidence includes Wildlife teams being highly responsive to reports of affected sea and wildlife, and providing treatment and maintaining records of activities and losses.

At the field level a number of safety issues were identified, including a lack of first aid kits, sufficient signage and transportation. Team leaders had no transportation on site in the event of a medical event or if there was a need to re-locate.

A few observations reflect that the co-location of the Wildlife Team and Pollution Operations was not ideal, with work required to find an alternative location for either team in the event of an incident.

A de-brief with the Wildlife Team identified that pre-knowledge of the equipment was critical in

setting up the Wildlife Response Centre. In addition to training providing the requisite skills, it enabled the development of relationships with other staff, which in-turn developed confidence within the team that everyone was capable to do their job. This observation identifies the benefit of a regular training activity to both further develop skills and network.



## Governance processes

Participants indicated that some IMT processes existed at the commencement of the Exercise which enabled them to complete their roles, however some had to be developed in real time to support effective information flow and decision-making. Some participants observed there was an absence of general plans, process or procedures templates for logistics, field operations activity, finance, and intelligence, with the trouble experienced in accessing MSQ's SharePoint site perceived to contribute to these observations. Despite these

challenges, participants showed remarkable resilience to adapt and adopt by developing ad hoc mechanisms to enact their duties in an effective and efficient manner.

The team reflection time at the end of day one and the allocated learning period at the start of day two of the exercise went some way to capture and implement processes, however it was identified documenting these will assist IMT staff with their roles, and mitigate the need for personnel to develop ad hoc processes to fulfil their IMT roles.

# Achieving objectives – Phase One

## Objective 1

Develop the strategic management arrangements of a Level 3 oil spill response in a multi-jurisdictional setting and the interface between the National Plan for Maritime Environmental Emergencies and Queensland Disaster Management Arrangements.

### Comments/Observations:

QLD has well established disaster management frameworks, arrangements and plans. The QLD disaster management arrangements are robust and well tested in far North QLD due to regular activation for exercises and natural disasters in the region.

**Achieved**

## Objective 2

Explore the consequences of a ship-sourced marine pollution incident and the mitigating strategies in the context of a unique and remote community and a vital international shipping route.

### Comments/Observations:

A broad range of recovery considerations were discussed and identified. Most recovery issues identified are consistent with recovery from disasters caused by other hazards. The key areas of difference for recovery from an oil spill in the region was identified as the reliance on the sea transportation, for fishing/food and the subsistence nature of some communities.

The remoteness of the region and the communities/islands in the area will always present challenges of distance, time and access, as well as logistical challenges due to limited resources/facilities.

The importance of coordination between agencies/stakeholders in the management of an incident especially given the additional issues of isolation and remoteness was identified and reinforced.

**Achieved**

## Objective 3

Develop public engagement and communication strategies including coordinated messaging.

### Comments/Observations:

The contents of these strategies were identified and documented, including reassuring the community that while there has been a spill, a response has been mobilised. Additional information requirements include situational understanding (location of spill, potential impact and response strategies).

The need for initial messaging and engagement to be clear and consistent was also identified.

**Achieved**



## Achieving objectives—Phase Two

### Objective 1

Practice the safe operational management of a Level 3 incident involving a multi-agency, multi-jurisdictional and cross sector ICC.

#### General comments

Exercise participants effectively practiced the operational management of a multi-agency, multi-jurisdictional and cross sector ICC response to a Level 3 incident. This is reflected in achievement of the sub-objectives below.

The majority of exercise participants in Phase two were from Queensland, with disaster management and/or oil spill response knowledge and experience effectively demonstrating that Queensland has the capability and capacity to respond to a significant ship-sourced marine pollution incident.

#### ■ Sub-objective 1.1 **Achieved**

Practice the management of an ICC in Cairns

##### Comments/Observations:

Overall, the management of the ICC was efficient. This outcome was significantly enabled by participants having a learning culture that saw them reflect and implement learnings from day one. Taking the time to reflect on and implement learnings clarified roles and responsibilities and greatly improved the flow of information leading to a more efficient response.

#### ■ Sub-objective 1.2 **Achieved**

Practice the establishment of an IMT using the Australasian Inter-Service Incident Management System

##### Comments/Observations:

Roles and responsibilities within IMT functional areas were generally well understood as evidenced by participants using checklists, documentation and legislation to undertake their roles. Some areas confirmed team member roles and responsibilities at the establishment of the IMT which was observed to enhance the effectiveness of these teams.

To enhance the establishment of an IMT, effort is required to ensure that IMT reporting is timelier, informative, accurate, and written with the target audience in mind.

#### ■ Sub-objective 1.3 **Achieved**

Practice the establishment of a FOB in the Torres Strait

##### Comments/Observations:

The establishment of a FOB was observed to be sound. This was evidenced by the allocation of functional roles according to tasking in Field Operations, Consequence Management, Wildlife Management, Staging and Resources.

There was no observed entry/exit registration log into the FOB or security arrangements in order to maintain physical security of the site.

#### ■ Sub-objective 1.4 **Achieved**

Establish control of the tactical response through the ICC and FOB

##### Comments/Observations:

Clear direction was given by the FOB Command Function, including the outline of incident objectives and key messages which enabled effective control of the tactical response.

#### ■ Sub-objective 1.5 **Achieved**

Maintain situational awareness of the incident response between ICC, FOB and field teams

##### Comments/Observations:

Situational awareness on day one of the exercise was hampered by the absence of a clear, consistent and regularly updated COP/ Situation Status Board at the IMT and FOB. Direction was given on the requirement for a COP at the IMT, however status boards were not updated in a timely manner and information obtained by some functions was not shared to inform situation reports, risk registers or the IAP.

This was remediated on day two within the IMT, with information being translated into intelligence and products displayed.

At times incident information was not recorded, disseminated or actioned consistently across functions in the IMT or between the IMT, FOB and field. This was observed to result in an incomplete picture of the current situation in documents such as the IAP and situation reports.

■ **Sub-objective 1.6** **Achieved**

Develop operable multi-directional communication and coordination arrangements between the ICC, Marine Pollution Controller, and Local and District Disaster Management Groups

**Comments/Observations:**

MSQ was able to focus on specific activities related to the oil spill response while the DDMG and LDMG, while also assisting the response effort, were able to monitor and respond to the wider issues around community resilience and recovery.

Overall, communication and coordination arrangements were effectively enabled by IT systems and sound passage of information. Technology used during the Exercise worked well and resulted in participants having good network access and connectivity. Embedding IT technicians in the IMT proved beneficial as problems were resolved in a timely manner.

LOs and Traditional Owners enabled effective information flow, which resulted in sound arrangements. However, a reliance on email directly to individuals was observed, which restricted communication arrangements if people were not at their desk to further disseminate.

To maximise arrangements, the IAP should be re-assessed on a regular, perhaps daily, basis to ensure the strategic priorities and subsequent response actions continue to be effective and mitigate the risks to the community.

## Objective 2

Practice the safe tactical deployment of resources and response personnel to conduct shoreline protection and clean-up operations in geographically remote and dispersed locations.

**General comments**

A safe tactical deployment of resources and response personnel was a key outcome of the Exercise, with all sub-objectives being achieved.

■ **Sub-objective 2.1** **Achieved**

Coordinate the logistical support of tactical operations, including communication

**Comments/Observations:**

While logistical resource management was not addressed early by the FOB, this was remediated at the Staging Area. The Staging Area located at MSQ was observed to result in effective resource management resources.

An assessment of whether supply of resources (human and physical) on Thursday Island could meet the demands of an incident was required to ensure any deficiencies could be addressed, for example the four-day sea transit of supplies and booms from Cairns to Thursday Island.

■ **Sub-objective 2.2** **Achieved**

Demonstrate the ability to implement, manage and coordinate field response operations

**Comments/Observations:**

This sub-objective was achieved in a number of ways, including through effective liaison with other stakeholders (e.g. LDMG) which enabled cooperation with all relevant agencies and affected communities.

Furthermore, the response was considerate of a broad range of requirements and effectively integrated other stakeholders and agencies to achieve these requirements, for example the relief assistance and counselling services organised by LDMG for affected communities.

■ **Sub-objective 2.3**

**Achieved**

Practice the safe deployment and use of oil spill response equipment and technology and oiled wildlife response equipment

**Comments/Observations:**

Shoreline safety operations worked well with strong compliance with Job Safety and Environment Analysis. Constant monitoring by Safety Officer was evident providing safety assurances for field teams over each of the three islands.

**Objective 3**

Establish and maintain effective community liaison, engagement and inclusion with community members.

**General comments**

This was the first time that a National Plan exercise has involved the local community. Community liaison, engagement and inclusion was observed to be an ingrained consideration from the outset of Phase Two, to the extent that these practices can be considered part of organisational culture. Overall, community engagement was very successful, with the exercise informing and educating both the communities and the response agencies.

■ **Sub-objective 3.1**

**Achieved**

Integrate trained community members into response operations.

**Comments/Observations:**

Community members were very effectively integrated into all aspects of the Exercise, including response operations.

Community members, who MSQ have trained in oil spill response, were integrated into every field team.

Local community members are proactive, passionate about their community, and volunteered to assist during response operations.

The early and ongoing involvement of community members prior to and during the Exercise, including integrating Traditional Owners within the IMT, enabled a culturally considerate response.

■ **Sub-objective 3.2**

**Achieved**

Practice public engagement and coordinated communication and messaging

**Comments/Observations:**

This was the first time that the Public Information function has been exercised as part of an IMT. Overall, traditional and social media processes were effectively managed and coordinated.

The proactive (versus reactive) flow of information from the Public Information cell, both external and internal to the IMT, was an identified area of improvement that was addressed by day two. These improvements were in regards to gaining approval for releasing social media posts and the feeding of information gathered by social media into the IMT.



# Exercise management insights

## Exercise artificialities

It is acknowledged that all exercises have a degree of artificiality. The cold start for Phase Two of the Exercise with a very large fully staffed Incident Management Team combined with the scenario starting on day three of the incident created a number of exercise artificialities. The initial exercise participant brief did not have a lot of detail and consisted mostly of dot points on a PowerPoint slide and modelling. It was identified that maps, pictures, video etc. should be used to assist participants get a full understanding of the current situation when they are initially briefed into the exercise.

Emails on the notional emerging exercise situation were forwarded to participants in the two days leading up to the start of Phase Two. While some participants had read these background emails, some had not and this resulted in varying levels of exercise start-state. Participants had the opportunity to ask questions at the end of the brief, however, very few questions were asked potentially because they did not yet know what to ask. The above all combined to add to the normal delay in getting a group of people who hadn't worked together before up to a good operational tempo.

## Exercise control

The interaction between exercise control and exercise participants could have been more effective. Exercise participants were not sure how to interact with exercise control or what exercise control's role was in facilitating and/or directing participant activity. This resulted in participants sending emails and contacting people external to the exercise.

The initial exercise participant briefing included minimal detail on how participants should interact with exercise control (e.g. what detail was required to request resources, what was real and what was notional, and exactly how to contact areas/agencies that were or were not in play for this exercise).

To enhance future exercises, the following was suggested:

- The Exercise Participant Pack/Joining Instructions include exercise rules.

- The initial briefing explains exercise rules at a suitable pace and in more detail.
- The IMT Briefing to include a briefing on how the exercise will run and explain the exercise rules.
- Exercise phone numbers/email addresses are more readily available, including provided in hard copy.
- One-on-one IMT handovers following the IMT Briefing to provide the opportunity to absorb information and ask questions.
- Exercise planning team, exercise control and evaluation team should meet face-to-face prior to the exercise to walk-through the whole exercise including all exercise material.

## Exercise evaluation

In addition to conducting the exercise evaluation, the Evaluation Team implemented real-time learning practices to enable the IMT to learn from their experience in a systematic manner. The incorporation of qualified lessons management staff enhanced the performance of the IMT through facilitating de-briefs and conducting analysis to provide the IMT with specific opportunities to improve day two of the Exercise. IMT leadership was proactive in utilising lessons identified from the real-time learning process to enhance the performance of the IMT. The value of real-time learning was proven and dedicated learning practices and processes should be incorporated into future exercises.

## Conclusion

The insights gained from the Exercise form a body of knowledge and experience that will contribute to future activities. Analysis of data collected from multiple sources reflects that exercise objectives and sub-objectives were effectively achieved in a collegiate and professional manner. Overall, the Exercise was a great success from a learning and development perspective, with all participants demonstrating an agile, adaptive and learning culture.

