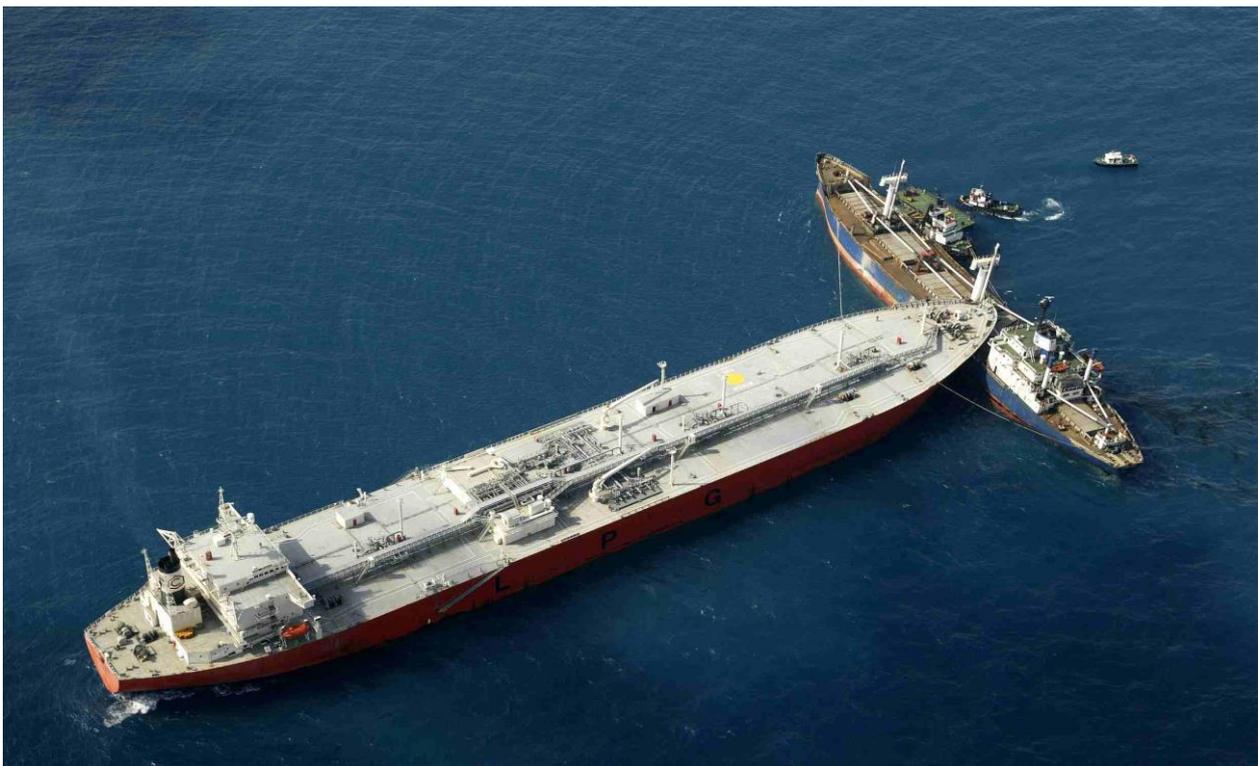


Exercise Whakautu II 2016

Post-Exercise Report



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Amendment schedule

The following table describes amendments that have been made to this Post-Exercise Report.

Document amendments

Date	Brief description of amendment
14/06/2016	First draft – Programme Manager
17/06/2016	Second draft – Exercise Directors
1/07/2016	Third draft – Maritime NZ internal review
15/07/2016	Final version – Following consultation with MOT and DPMC

Acronyms

AOG	All-of-Government
CIMS	Coordinated Incident Management System
COP	Common Operating Picture
DPMC	Department of Prime Minister and Cabinet
ECC	Emergency Coordination Centre
ExCon	Exercise Control
GLN	Government Legal Network
HNS	Hazardous and Noxious Substances
HRB	Hazard Risk Board
IMT	Incident Management Team
KPIs	Key Performance Indicators
MCDEM	Ministry of Civil Defence & Emergency Management
MIRT	Maritime Incident Response Team
MTA	Maritime Transport Act 1994
MOT	Ministry of Transport
NC	National Controller
NCC	National Coordination Centre
NCCMC	National Crisis Management Centre
NEP	National Exercise Programme
NO	National Objectives
NOSC	National On-Scene Commander
NRT	National Response Team
NSS	National Security System
NSSD	National Security Systems Directorate
ODESC	Officials' Committee for Domestic and External Security Coordination
PIM	Public Information Management
RC	Regional Controller
RCCNZ	Rescue Coordination Centre New Zealand
SITREP	Situation Report

2 EXECUTIVE SUMMARY

Background

Exercise Whakautu II is a key way-marker in the Maritime Emergency Response Programme – which is focused on building Maritime New Zealand (Maritime NZ) preparedness and capability to lead the response to a major maritime incident, and engaging support from All-of-Government (AOG) to do this effectively. The exercise was designed to assess the strengths and on-going issues within this increased response capability.

This Maritime NZ led, but AOG exercise was the second major exercise in the 2015-2019 DPMC coordinated National Exercise Programme (NEP). The NEP is designed to build AOG capacity to respond to nationally significant incidents. The exercise involved activation of the National Security System including the convening of a Watch Group and the Officials' Committee for Domestic and External Security Coordination (ODESC).

Exercise Whakautu II was a three day command post exercise (with no field operations) that involved 278 participants from over 55 central, regional and local government agencies, industry, and emergency management agencies. These participants were spread across a response front (the Emergency Coordination Centre (ECC)) in New Plymouth and a response rear (a National Coordination Centre (NCC) and National Crisis Management Centre (NCMC)) in Wellington. The exercise was attended by observers from a number of international bodies in the maritime incident response field.

Outcomes

Overall, it is clear that Maritime NZ, with key central and regional government partners, has made significant advances at both the national strategic and the operational levels in its preparedness and capability to respond to a major maritime incident.

“The Wellington based evaluation team judged the exercise response to be a significant improvement over that made at the initial stage of the *Rena* response. Considerable progress was evident in the conduct of the MIRT and the Maritime NZ's management of the NCMC functions. In the NCMC phase planning, recovery and PIM activities stood out as good performances.” *Evaluation Report MIRT and NCMC*, p. 13

“...[T]he exercise [response] was executed in a thoroughly professional and highly skilled manner. This is supported by extremely positive commentary from the international observers during the ECC hot debrief. The exercise demonstrated that the effort and resources that have gone into development and training of the National Response Team in recent years since *Rena* have been well directed.” *Evaluation Report ECC*, p. 22-23

All objectives that were being evaluated in the exercise were assessed as ‘achieved’ or ‘mostly achieved’, with particularly notable enhancements in engagement and support from across government, the delivery of the Public Information Management (PIM) functions, and incorporation of recovery planning from day one of the response. The ECC effectively developed response plans and discharged its responsibilities across all of its operational arms.

This was the Maritime NZ's first large scale exercise of the front and rear response functions for a major maritime incident response. While many lessons for enhancing exercise planning and control were identified, the exercise was a real success, providing a valuable learning experience for those involved, and effectively enabling the objectives to be assessed. In the view of the lead evaluator for the Wellington end “Maritime NZ is to be congratulated for the breadth, depth and quality of the preparation that preceded the exercise... The material produced has set a new benchmark and provides valuable resources that could be used by other agencies in designing and implementing their exercises.” *Evaluation Report MIRT and NCMC*, p. 3

Key Lessons and Recommendations

This post-exercise report identifies key lessons from the exercise and formulates these as a series of forward looking recommendations. Section 5 - Recommendations (below) includes six recommendations for enhancing AOG readiness and response capability and eight Maritime NZ specific recommendations.

The AOG recommendations, directed in the first instance to the Hazard Risk Board (HRB), are focused on the development of further guidance and training to enhance AOG strategic readiness and response capability (and resourcing this). In particular this includes:

- more clarity around the strategic role of the NCMC, particularly with respect to key functions and structural arrangements
- more clarity around the interaction between the NCMC and the National Security System (and the role of the National Security Systems Directorate in facilitating this)
- clarification of responsibilities for ministerial engagement
- effective coordination with other government agencies and incorporation into the NCMC
- social media management
- legal support for any strategic response effort using the Government Legal Network.

For Maritime NZ, the recommendations are, in the main, focused on further enhancing the Integrated Maritime Incident Response Strategies and Plans (and associated capability). Key themes include:

- development of further guidance around the command and control arrangements for a major maritime incident response
- further efforts to integrate the oil spill response with other response, and response oversight, activities
- further guidance around the criteria and mechanisms for scaling up an incident response
- consideration of opportunities to enhance response information and technology capability
- enhancing the guidance for: the operation of the Maritime Incident Response Team; public information management; and the provision of legal advice.

The Maritime NZ recommendations and wider lessons from the exercise will provide the core structure and direction for the next phase of Maritime NZ's ongoing programme of work to continuously improve its maritime incident readiness and response capability.

Conclusion

Exercise Whakatutu II was highly successful. Overall, the exercise demonstrates that strong progress has been made in increasing Maritime NZ and AOG preparedness and response capability for a major maritime incident, significantly due to the excellent engagement between Maritime NZ and its government partners at the national and regional levels.

This report identifies areas for further improvement, and focuses on issues and lessons, but these should be read in the context of the independent evaluators' assessment that Maritime NZ has an effective and well-developed response capability overall.

3 INTRODUCTION

3.1 Background

The maritime sector in New Zealand is complex, diverse and a major contributor to, and enabler of, New Zealand's wellbeing and productivity.

As was clearly demonstrated by the MV *Rena* incident in 2011, a major maritime incident has the potential to significantly impact the marine environment, economy, local community, and New Zealand's international reputation. Therefore, major incidents in the maritime domain must be managed effectively and efficiently giving due regard to operational and tactical matters, and also to New Zealand's strategic interests. While incidents of this type are infrequent, the impact of a major maritime incident is very significant, and response and recovery activities are likely to be protracted and costly.

An independent review of the MV *Rena* incident (published 2013) highlighted the need for Maritime NZ and partner agencies to improve certain aspects of the processes and procedures for responding to a major maritime incident. In response to the recommendations of that review, and through its own internal review of the response, Maritime NZ is undertaking an on-going programme of work to enhance readiness and response capabilities (systems, plans and agreements).

A key element of this programme to date is the development of the Integrated Maritime Incident Response Strategy (the 'Response Strategy') and Plans (the 'Response Plans'). These two documents, alongside the New Zealand Marine Oil Spill Response Strategy and the National Marine Oil Spill Contingency Plan, contain the latest developments and improvements to Maritime NZ's processes for responding to a major maritime incident. These strategies and plans, in concert with guidance from the Department of Prime Minister and Cabinet's (DPMC) National Security Systems Directorate (NSSD), provide the current framework for the strategic, operational and tactical elements of an All-of-Government (AOG) response to a major maritime incident.

Alongside the development of the response systems, strategies, plans and agreements, Maritime NZ has undertaken extensive capability building activities (both internally and with government partners). This has significantly strengthened oil spill response capability and further developed non-oil related response capability.

This exercise provided an opportunity to test the progress that has been made and to bring greater focus to the on-going work.

3.2 Exercise Aim and Objectives

Exercise Aim: To exercise strategic, operational and tactical elements of the whole of government response to a major maritime incident.

"Whakautu" is Maori for "response" – and emphasises the focus on testing response systems and capability.

Exercise Whakautu II is a useful checkpoint in the Maritime Emergency Response (development) Programme, and was designed to ensure that future stages of the programme build on strengths and clearly identify areas for further attention to support continuous improvement for readiness and response capabilities.

This Maritime NZ led, but AOG exercise is the second major exercise in the 2015-2019 DPMC coordinated National Exercise Programme - designed to build AOG capacity to respond to nationally significant incidents.

The exercise was developed in conjunction with the NSSD and endorsed by the Hazard Risk Board (HRB). The exercise included activation of the National Security System (NSS) including the convening of a Watch Group and the Officials' Committee for Domestic and External Security Coordination (ODESC).

A key emphasis throughout was that the aim of the exercise was to test systems and processes, not people.

Exercise Objectives: As part of the NEP exercise programme, the exercise objectives are aligned with the National Objectives (NO) 1 – 9. They are to:

1. Exercise command, control and coordination functions of the response (front – ECC and rear NCC) – NO 1, 2 and 8.
2. Exercise liaison and coordination arrangements with central, regional and local entities – NO 2, 3 and 4.
3. Exercise operational management functions of a major maritime incident involving a multi-agency and cross-sectoral incident control centre - NO 3, 4, 5, 6 and 9.
4. Exercise the tactical deployment of resources and response personnel in response to a major maritime incident – NO 1 and 2.
5. Deliver effective public information management (PIM) – NO 6.

The National Objectives 1-6 are used to frame the exercise outcomes in section 4.3.1 below. While continuity of business as usual (NO 7) is an important component of Maritime NZ's response capability, it was not a focus of the evaluation and was not specifically tested in the exercise. NO 8 and 9 relate to continuous improvement and post exercise activities, and as such will be a feature of the on-going work, but are not explicitly considered below.

3.3 Exercise Construct and Scenario

The exercise was a Command Post Exercise for an AOG response to a major maritime incident, including a Tier 3 oil spill. It ran in real time (but for daylight hours only), and aimed to test Maritime NZ capability to initiate and establish an appropriate response structure and approach, with AOG support, for this type of incident. The focus on the initial hours and days responds to Simon Murdoch's comment in the *Independent Rena Review* "...when faced with a major incident and risks far in excess of the planned response capability, how soon [a coastal state] can establish an overall response environment that has structure, order and coherence [is critical]. This is the strategic platform that the operational and functional elements need in order to become effective and perform optimally." Pg. 4.

The scenario involved two merchant vessels which collided in bad weather early in the morning of 9 May 2016 in the North Taranaki Bight. One vessel remained under command while the other (a container ship) was holed and disabled and drifted onto the reef just north of Waitara. Cargo included dangerous and hazardous (HNS) items. In addition to a substantial amount of fuel oil in the water and ultimately on the beaches, containers were also lost overboard and breached. Operational response activities included an oil spill response, a salvage operation and non-oil pollution clean-up, as well as a small scale and short term evacuation due to dangerous gases released from some of the HNS cargo.

The exercise was conducted across three coordination centres, beginning with the Maritime Incident Response Team (MIRT) at Maritime NZ offices in Wellington, and scaling to an AOG response with a forward Emergency Coordination Centre (ECC) at New Plymouth, and a combined National Coordination Centre (NCC) and National Crisis Management Centre (NCCMC) under the Beehive (parliament buildings) in Wellington.

3.4 Participating organisations

The exercise included active participants from 25 central government agencies as well as participants from thirteen Regional Councils (mainly as part of the National Response Team), the regional District Health

Board and Civil Defence and Emergency Management Group, as well as industry participants, representatives and observers.

In total, 225 participants were actively involved in the exercise (at Maritime NZ national office (the MIRT), the NCMC, the ECC, or as part of ODESC or a Watch Group. Another 53 were involved in the Exercise Control and Evaluation.

As is clearly evident from the number of participants from across government, as a small crown entity, Maritime NZ heavily relied on support from other government agencies to make up its incident response workforce, as it would in a real event.

Representatives from the International Oil Pollution Compensation Fund (IOPC), the International Group of Maritime Insurance (Protection and Indemnity) providers (IG – P+I), the International Tanker Owners Pollution Federation (ITOPF), and the Australian Maritime Safety Authority (AMSA) also attended, to observe, contribute at points as role players, and support evaluation activities. Maritime NZ also brought in a salvage expert from London Offshore Consulting (LOC) under contract to assist the exercise delivery and response activities.

A full list of participating organisations is included at appendix 1.

4 EVALUATION

An Evaluation Plan (*Exercise WHAKAUTU II: Evaluation Plan May-June 2016*) described the evaluation objectives and methodology. These are summarised below.

4.1 Evaluation Objectives

The plan had two primary evaluation objectives and a secondary evaluation objective.

Primary Evaluation Objectives:

- **Preparedness:** to assess overall Maritime NZ's preparedness for leading the response to a major maritime incident, supported by AOG (aligned with the NEP National Objectives)
- **Strategies and Plans:** to assess the specific developments in the Maritime NZ strategies and plans as a result of the recommendations arising from the *Rena* review.

Secondary Evaluation Objective: **Exercise Planning:** to assess the planning and conduct of the exercise.

4.2 Evaluation and Final Report Methodology

The evaluation was primarily conducted by dedicated independent evaluation teams in Wellington and New Plymouth. Each team had a lead evaluator contracted by Maritime NZ to oversee the evaluation at each end of the exercise and to collate observations into individual evaluation reports.

The lead evaluators were:

- John Hamilton, Kestrel Group, Wellington Lead Evaluator
- Tony Parr, Hapai Consultancy, New Plymouth Lead Evaluator

Each of their reports provided reflections and observations about the conduct of the response in relation to the evaluation objectives, and a view as to how well the response required the NEP National Objectives being exercised.

In addition, a number of other data sources have contributed to this final exercise report:

- Hot debriefs occurred at the conclusion of the exercise. Key participants and observers shared their observations and insights based on their immediate reactions. Notes taken at the hot de-briefs were incorporated into the Lead Evaluator's Reports.
- Feedback Forms were completed by exercise participants. The questions asked in the feedback forms and the observations were linked to the NEP National Objectives and Key Performance Indicators (KPIs), and the conduct of the exercise. In addition many participants provided supplementary written feedback.
- A formal half-day 'cold' debrief was completed 19 May 2016. This involved a formal review of the exercise to identify key lessons and themes. It included key participants and agency representatives, exercise planning staff and the lead evaluators.

All of these data sources have been used to draw together the key exercise outcomes, and a final list of recommendations (section 5 below). The recommendations are grouped into two categories: general recommendations for consideration at an AOG level; and specific recommendations for consideration by Maritime NZ, and inclusion in its on-going work programme.

4.3 Exercise Outcomes

The overall assessment from the exercise is that Maritime NZ and its government partners are in a significantly improved position compared with the outset of the MV *Rena* incident. It is noted that a lot of good work has gone into building capability internally, and across government. The challenge ahead will be

to sustain and enhance this capability. The evaluation outcomes are documented below, and the recommendations are directed to this end.

The commentary that follows does not credit observations to particular evaluation sources (except where direct quotes are used), but rather draws from these sources to provide a synthesised view.

4.3.1 Primary Evaluation Objective One: Preparedness

The focus of this objective was to assess Maritime NZ's (and the wider government's) preparedness for responding to a major maritime incident.

In the initial documentation for the exercise, the exercise specific objectives were structured to align with key elements of the *Rena Review* recommendations that would be tested in the exercise, and links to the NEP National Objectives were identified. The evaluation schedules in the Evaluation Plan follow the NEP National Objectives, which provide an additional level of granularity through a number of Key Performance Indicators (KPIs). Achievement against each of the NEP National Objectives is summarised below, and key issues that were identified are highlighted – these inform the recommendations in section 5.

National Objective 1.0 - Lead a coordinated inter-agency response to major security incidents including overseas agencies where necessary

Overall, both Lead Evaluators identified this objective as '**Mostly Achieved**'.

"As the lead agency Maritime New Zealand was effective in establishing control of the response using its statutory authority and it was well supported in the NCMC by its partner agencies through established operational relationships and the National Security System (NSS) framework." *Evaluation Report MIRT and NCMC, p. 6*

"Strong leadership in the ECC at operational and tactical levels, and impressive levels of commitment and technical expertise from individuals and teams was a significant feature of the exercise. There was evidence of almost seamless teamwork for all concerned in the ECC, including local agencies and responders such as Police and Fire Service." *Evaluation Report ECC, p. 21*

At the Wellington end, ten KPIs were identified as 'achieved', five 'mostly achieved', and two 'partly achieved'.

Key issues:

Wellington

- Familiarity with the MIRT guidance and processes could be improved, as these were not always carefully followed. This would support a stronger focus on risks, early planning and engagement of national and international support.
- Developing shared situational awareness (and a common operating picture (COP)) was a challenge well into the response.
- Not all Liaison Officers were clear on their roles (the lack of a COP may have impacted this) and this impacted on how well Chief Executives were briefed prior to ODESC.¹

New Plymouth

- Exploration and articulation of risks took longer than ideal. Early risk identification supports the development of a COP.
- Engagement with international interests/support could have taken place earlier.

¹ The role of a Liaison Officer is defined by Maritime NZ as:

- to contribute to the response planning activities (bringing a combination of their own expertise and knowledge of the agency they represent (including its resources and capabilities)
- to ensure that their agency (and Chief Executive) is briefed on the incident, aware of its implications for that agency, and empowered (with situational awareness and advice) to determine contributions to the main response effort and to direct any agency specific response activity.

- The building of integrated situational awareness and response planning/oversight between the operational lines – particularly between Oil and salvage/non-oil pollution – could have been enhanced.

National Objective 2.0 – Support a coordinated interagency response to major incidents including overseas agencies where necessary

Both Lead Evaluators identified this objective as '**Achieved**'.

The exercise response was exceptionally well supported by other agencies at the central, regional and local level, both in the front and the rear, with participation by many government agencies, and industry (particularly in the National Response Team). See appendix 1 for details.

As noted above, while overall participation rates were very good, and agencies engaged well in the exercise and the NSS meetings, there was some variability in role clarity for the Liaison Officer role at the NCMC: "some more experienced Liaison Officers were quite active in their engagement [...] while others were passive, waiting for information or tasking to come to them, rather than seeking it out and supporting" *Evaluation Report MIRT and NCMC, p. 8.*

This seemed to be less of an issue in the ECC, where tasks were more operational and tactical: "Local support agencies appeared to invoke common standard operating procedure responses, including H & S requirements, rather than specific[ly] developing action plans in support of the ECC plans and tasks assigned to them. [...] tasks were communicated by the ECC but in reality well anticipated by support agencies who were quick to implement." *Evaluation Report ECC, p. 12.*

Key Issues:

- There is a need for more clarity around the strategic policy function, and how this is delineated from the strategic communications function². Processes for providing advice to ministers and cabinet could be improved (both strategic policy advice and tactical advice around situational awareness and key messages/media pre-briefs etc.).
- There is a need for more familiarity with the functions and roles of the NCMC for a major maritime incident response and around how supporting agencies were expected to contribute to the national strategic effort.

National Objective 3.0 – Conduct effective high level all of government decision making

The Lead Evaluator Wellington identified this objective as '**Mostly Achieved**'. Three KPIs were 'achieved', and one each were 'mostly achieved' and 'partially achieved'.

"The combination of NSS processes, Watch Groups and ODESC worked adequately to provide strategic direction to agencies and ensuring coordination of support to the lead agency." *Evaluation Report MIRT and NCMC, p. 11*

Key issues:

- Better Liaison between DPMC/NSSD staff and the Maritime NZ/National Controller would have improved the alignment of messaging and approach.
- Support to develop briefing material for ODESC and Watch Groups was a significant draw on the resource of the NCMC responders and diverted focus from planning activities.

² In Maritime NZ's view, the strategic policy function should advise Ministers about the incident (provide situational awareness), the risks associated with the incident (people, environmental, property, reputation etc.) and actions and mitigations in place or proposed in order to support Ministers in their collective and individual responses, including taking appropriate decisions that ensure public confidence in the response.

Further, the strategic communications function (delivered by DPMC) supports NSS and the NCMC PIM function (which has a strategic communications focus) by providing an independent perspective to ODESC on communications advice, and by leading all Ministerial media-briefing for the incident.

Maritime NZ's future work on these matters (e.g. see section 5, Maritime NZ rec 5) will be on this basis until further AOG guidance is provided on these matters, at which point Maritime NZ will align with this guidance.

- NSS processes were not as effective as possible due to “uneven understandings of what was expected of participants at both levels and weak information flows within the NCMC.” *Ibid.*

National Objective 4.0 – Integrate Recovery Planning and arrangements into the Response

The Lead Evaluator Wellington identified this objective as ‘**Achieved**’.

The Recovery Plan was structured according to the emerging doctrine on recovery and was well aligned with the National Action Plan. The recovery planning lead role was under-taken by Ministry of Transport (MOT), and supported by recovery planning guidelines that were developed by MOT in the lead up to the exercise. The MOT has indicated that it would reprise this role as the initial recovery planning lead in a real major maritime incident. This is a significant enhancement to the AOG response capability for major maritime incidents.

National Objective 5.0 – Effectively manage information horizontally and vertically

Overall, both Lead Evaluators identified this objective as ‘**Mostly Achieved**’.

At the Wellington end, four KPIs were identified as ‘achieved’, one ‘mostly achieved’, and two ‘partly achieved’.

Building initial situational awareness and a COP were identified as significant challenges at both the front and rear of the response, although at both ends information management and flow improved as the response progressed: “Once established [on day three] the Power Point based ‘common operating picture’ hugely increased situational awareness across the ECC, including the PIM organisation which struggled initially for situational awareness” *Evaluation Report ECC, p. 16*

The Evaluation teams were satisfied with the interaction between the front and rear at the controller/NOSC level, however they noted the opportunity for further clarity at the Wellington end around the strategic role of the NCMC and its interaction with the operational response, and the need to plan carefully for the handover of the operational lead from the MIRT to the ECC.

Key issues:

Wellington

- Clearer assignment of tasks and responsibility in the MIRT would have improved efficiency and avoided any duplication.
- More effective information displays would have enhanced situational awareness
- Engagement with international partners could have occurred earlier.
- Situational awareness was primarily gained through tracking WebEOC (the Maritime NZ Incident Management System) logs, however, at the early stages, this was not available to all participants; and while the logs are a good source of information they need to be carefully compiled in order to ensure completeness and eliminate inaccuracies. Additional mechanisms for building a COP, and so for improving overall situational awareness should be considered, such as resource dedicated to developing SITREPs and information displays. This role could include the verification of information.
- Liaison Officers could have been better integrated into circles of information (e.g. IMT briefings). This would have improved their ability to offer appropriate support and to brief up for Watch Group and ODESC.
- The configuration of the NCMC facility created physical barriers that contributed to the challenges around managing information flows.
- The systems provided for information management (WebEOC and Office 365) were both relatively untested for a national and AOG response, and greater familiarity (through training or effective induction – e.g. A YouTube clip was proposed) would have improved information flows. It was also noted that a number of agencies use a common SharePoint EMIS system, and it may be worth exploring the use of this system for AOG components of a Maritime NZ led response.

- Mapping support (provided by NZ Fire) in the NCMC was not well connected with the SITREP (and may have provided a different depiction to the ECC map display), and could have been better integrated.
- While classified or restricted information was not a significant feature of the exercise, the systems used (WebEOC and Office 365) are cloud based and could not support the distribution of secure (including SEEMail, and restricted or classified material) or other sensitive information. This could be a liability under certain circumstances.

New Plymouth

- The development of COP took longer than ideal.
- Having two information management systems (WebEOC and Office 365) could create risks of inefficiency through duplication or confusion about where to access critical information.

National Objective 6.0 – Deliver effective public information management

Both Lead Evaluators identified this objective as '**Achieved**'.

At both the front and rear, the evaluators noted a significant improvement in the performance of the PIM teams when compared to previous Maritime NZ large-scale incidents/exercises, both in terms of media engagement and effective liaison with other government stakeholders, community and particularly iwi. The PIM team “had rejuvenated their planning and tool box after the *Rena* grounding and in the main this preparation served the team well particularly as they referred to and used the plans and information management platform to good effect” *Evaluation Report MIRT and NCMC*, p. 11. “The iwi liaison function of the PIM became well established over time, assisted by the inclusion of the [Taranaki Regional Council’s] TRC’s iwi liaison staff in the ECC from Day One. Iwi and hapu were well engaged, consulted and informed throughout the exercise, to the extent that there was active interest and support from ECC staff at large for the iwi’s role in the incident.” *Evaluation Report ECC*, p. 16

It was also noted that in a real incident the interest from media, key stakeholders and the community would likely be significantly more intense and broad, which is difficult to simulate in an exercise, and accordingly, a number of considerations for future work were identified.

Key issues:

Wellington:

- At the NCMC the PIM function was physically separated from the main operations room which delayed their appreciation of changes in the situation and response.
- The social media component, while it worked well, had only two staff and would in reality most likely need significantly greater resourcing to avoid being quickly overwhelmed – consideration should be given to how this function would be rapidly scaled up.
- The DPMC Strategic Communications role requires further clarification and demarcation from the NCMC and ECC PIM roles. In particular the responsibility for providing media briefings and key messages to Ministers needs clarification (and its relationship to the role of providing strategic policy briefings and situational awareness to Ministers).
- At times it was felt that the NCMC PIM team was “pulling the initiative away from the local response who were better placed to provide the local context to, say, public health risk and evacuation advice” – options for improving the operating model should be explored with this in mind. The Wellington evaluation report proposed a single integrated PIM team across the front and rear.

New Plymouth

- Initial challenges in developing sufficient situational awareness were noted and greater integration with the response operations would have enhanced this.
- Greater clarity around the PIM ECC interface with the national level PIM functions would improve the overall delivery of the PIM functions.

- The information management platforms posed some particular challenges for developing and managing PIM products (in particular traceability of document iterations was difficult).
- Early and clear agreement around who would front the media would have improved media interaction.

4.3.2 Primary Evaluation Objective Two: Strategies and Plans

This objective is focused on Maritime NZ progress following the *Rena* incident in enhancing its Response Strategy and Response Plans.

Overall, it is clear that Maritime NZ has made significant advances at both the national strategic and the operational levels in developing its documented overall approach and specific plans to respond to a major maritime incident.

“The Wellington based evaluation team judged the exercise response to be a significant improvement over that made at the initial stage of the *Rena* response. Considerable progress was evident in the conduct of the MIRT and the Maritime NZ’s management of the NCMC functions. In the NCMC phase planning, recovery and PIM activities stood out as good performances.” *Evaluation Report MIRT and NCMC*, p. 13

“...the exercise [response] was executed in a thoroughly professional and highly skilled manner. This is supported by extremely positive commentary from the international observers during the ECC hot debrief. The exercise demonstrated that the effort and resources that have gone into development and training of the National Response Team in recent years since *Rena* have been well directed.” *Evaluation Report ECC*, p. 22-23

Usefully, the exercise has identified a number of areas that require further work and can be built into the on-going programme of enhancing readiness and response capabilities. Indeed, the exercise provided an opportunity to ‘road-test’ Maritime NZ’s progress in a way that no smaller scale exercise could have, and supports consideration of areas of focus for the next stage.

The Integrated Maritime Incident Management Strategy and Plans

In the *Rena Review*, Murdoch identifies that in line with the prescriptive nature of the Maritime Transport Act 1994 (MTA) around oil spills, Maritime NZ had “quite properly” focused its efforts on developing a well-established oil spill response system ahead of other kinds of pollution combat (*Rena Review* p.17). The recommendations of that review propose an addendum to the national oil spill contingency plan to cover non-oil pollution or other risks associated with a major maritime incident, and on-going work to identify legislative and resourcing implications (which would likely include to accession to the international convention on liability and compensation caused by hazardous substances (HNS96)).

Since that time, Maritime NZ has developed the Response Strategy and the Response Plans to articulate more clearly Maritime NZ’s wider response roles beyond the legislatively mandated oil spill response functions (which have dedicated funding), and to ensure this wider response mandate is managed appropriately in concert with the oil spill response.

Under the present arrangements, although the Director of Maritime NZ has significant powers to take control in a maritime incident response situation, it is considered preferable that the owner and their representatives are subjected to informed oversight but remain clearly responsible for the salvage and non-oil pollution response operations. Direct intervention by the coastal state using legislative powers would only be exercised when necessary – as the use of those powers may create confusion over liability matters and expose the state to risks around costs.

The Response Strategy and Response Plans have been developed to underpin an ‘integrated’ approach (compared to the somewhat ‘separated’ model during the *Rena* incident). The assessment during the exercise, overall, was that further work is required on this integrated approach; the Lead Evaluators

considered that activities in the exercise were more 'complementary' than 'integrated' – that is, good progress has been made but more remains to be done:

- “Maritime NZ should review its organisational strategy in order to add emphasis and capacity to the non-oil spill responses in addition to its responsibility for managing the response to a large scale oil spill” *Evaluation Report MIRT and NCMC, p. 8*
- “There are opportunities to improve the organisational structure to provide for a more integrated approach to the ECC response so that there is a well understood commonality of purpose and common awareness of oil, non-oil, salvage and investigation functions” *Evaluation Report ECC, p. 21*

While it remains important that the difference between the oil spill response role and the salvage and non-oil oversight function is clearly understood (because of their different legislative bases), the exercise points to opportunities to continue moving towards integration.

In this context, through the various debrief processes, it was proposed that the salvage and non-oil pollution operations oversight also required access to intelligence, planning and logistics support, and more integrated leadership across all operational activities should be considered.

While the end goal is a well-integrated response (beyond complementary), it is clear that the Response Strategy and Response Plans have moved Maritime NZ forward significantly from the *Rena* response, with particular enhancements in the PIM function (which includes stakeholder, community, and iwi liaison) and in investigation capability. It was evident in both of these areas that not only were the plans well developed, but they were understood and used by responders.

MIRT operation

It was noted by the evaluation team that “there was some confusion about where to find specific information and there seemed to be a reluctance to refer to the SOPS and checklists available. It was clear that during the first hour, the MIRT would have benefitted considerably from a set of guidance principals or a list of necessary or suggested considerations.” *Evaluation Report MIRT and NCMC, p. 4.*

Noting that the MIRT personnel for the exercise were somewhat inexperienced in the role (as the majority of experienced staff were involved in Exercise Control) the evaluator's comments indicate a need for greater familiarity for staff with the existing SOPS, checklists and guidance as well as a review of those documents to incorporate the lessons learned from the exercise. Additional training and exercising around MIRT operations (including any revisions from the exercise) will help to address these issues.

One aspect of the MIRT's response role that needs further guidance (and associated training and exercising) is how it delivers both strategic *and* operational response leadership when there is no operationally focused ECC. This dual leadership role requirement was evident at the start of the exercise and in a real 'Major' incident would exist until the point that an ECC was established and ready to take over the operational, 'front-line' leadership. It is particularly important to be delivering both leadership roles in regards to the non-oil aspects of a major incident given their local, regional, national and international complexities and since established systems for an initial regional response to the oil spill are in place and will be overseen by the duty NOSC.

While the escalation of the incident to the NSS system and NCMC was predetermined as part of the exercise scenario, the Wellington Evaluation team noted that while the NSS system and transition to the NCMC was appropriately activated, “there was little discussion on the criteria that would have been used to arrive at that decision. Factors that should have been discussed include the likely trajectory of the crisis, the capacity of Maritime NZ to manage the response, the need for the involvement of other agencies to assist with aspects of the response and the interest of ministers. Maritime NZ should consider how it could provide its staff with this guidance.” *Ibid p. 5.*

The exercise also highlighted that Maritime NZ should further consider the interaction between the MIRT and the RCCNZ and provide appropriate guidance through the Strategy and the Plans (and training on this).

In the formal debrief it was suggested that an amalgamation or co-location of the MIRT with the RCCNZ for the management of certain maritime incident responses might be beneficial as the “present arrangement requires some double handling of information and overlapping of responsibilities” *Ibid*, p. 5. The RCCNZ has excellent communications systems and the facility has the ability accommodate a dynamic and expanding MIRT but its physical location (20 km north of central Wellington) would introduce other challenges; isolating it from AOG stakeholders, and reducing the ability to draw on the wider expertise within Maritime NZ’s national office. The matter needs further consideration but one possibility would be using the RCCNZ facility for the MIRT during ‘Significant’ responses (as defined in the Strategy) but remaining Wellington based for ‘Major’ incidents (as defined in the Strategy).

National Strategic role in a complex, major AOG incident

For Maritime NZ the MIRT uses a CIMS based structure given that almost all incidents that are managed are at the ‘Significant’ level. As such the focus is on operational leadership at the agency level rather than on the wider strategic leadership requirements of a ‘Major’ incident with a complex AOG component.

For the exercise, after consultation with DPMC – and in accordance with the CIMS Manual guidance – Maritime NZ used a structure for the NCMC component that was closely mapped to the CIMS organisational structure, supplemented with Strategic Policy and Recovery Planning functions.

The Wellington evaluation team noted significant challenges with understanding the purpose/function of the NCMC (and the NCC within this), in respect of role clarity, and in keeping the focus on the strategic elements of the response (rather than duplicating the operational activities). This view was shared by the exercise planning team.

While the National Action Plan and draft Recovery Plan were commended by the evaluators, it was noted that engagement with and coordination of different agency inputs and key perspectives (e.g. legal/ economic/ technical) was hampered by structural arrangements or a lack of role clarity.

Maritime NZ notes that in the *Rena Review*, Simon Murdoch identified that, in the early stages of the incident, Maritime NZ’s response systems and processes did not effectively deliver the strategic functions required of it, in particular:

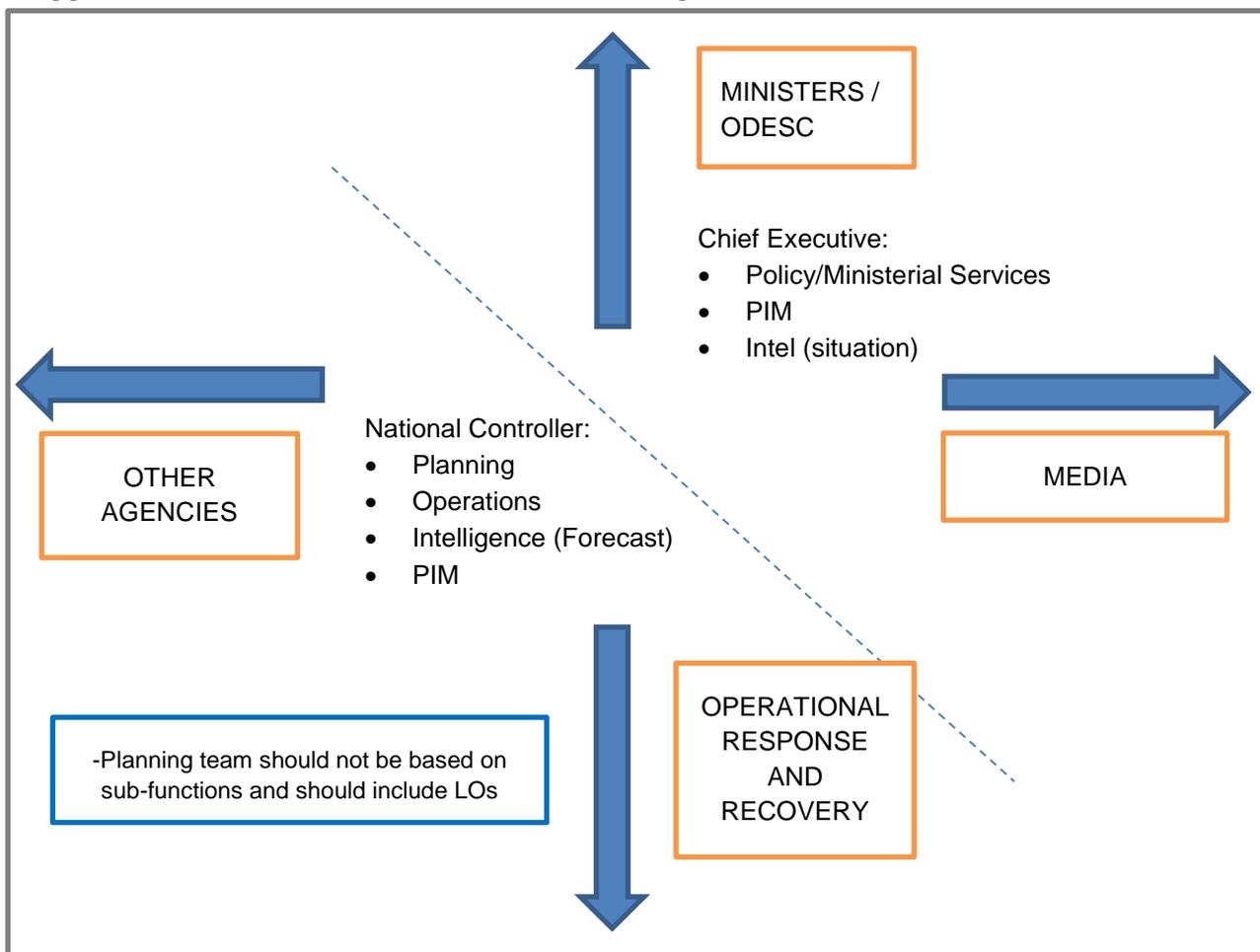
- building a COP shared by all government departments with an active interest in the incident
- identifying what support was required for the response and from which agencies, and requesting this.
- building an appreciation of risks to ‘NZ Inc.’ strategic interests and engaging in “broad based future-focused scenario planning”(p.53) to oversee and manage these (including direct costs, reputation, economic impact and recovery).

In his view it is the discharge of these functions that enables the NSS system to effectively support and guide the response. For a Lead Agency, these national strategic functions are in addition to overseeing the operational response.

Further, he notes that in recent large-scale, complex emergencies (including Pike River and the Christchurch Earthquakes, and the 2009 Australian Bushfires), “the limits of CIMS have been exposed. It has become quite widely accepted that CIMS structures and processes can become stretched, possibly to the point of counter-productivity, when emergencies are complex; escalations are rapid; larger numbers of people become affected; supporting agency inputs proliferate; and media scrutiny and public information demands abound”. *Rena Review*, p. 37-38. Murdoch goes on to note at several points that there may be merit in exploring other models that “lend themselves more to integration and coordination than to tactical command” and highlights that the “necessary structural redesign of the [*Rena*] response moved it beyond CIMS towards unified command and like best practice models” *Ibid*, p. 92.

Maritime NZ has made considerable improvements in its ability to deliver the strategic leadership role but the exercise highlighted that further consideration around the appropriateness of the CIMS structure for the national strategic response is warranted, in addition to a clear need for greater guidance and training with respect to the functions and particular roles in the NCMC. In the formal debrief, the following diagram was presented as a way of conceptualising the national strategic response effort, and may be a good start point for future work. The upper right side denotes that the Chief Executive would lead the effort to support ODESC and respond to the needs of Ministers and the Media, while on the lower left, the National Controller is focused on the across government coordination and planning, and the oversight of operational activities:

Suggested structure for the national level strategic coordination:



Legal advice

In the exercise, the provision of legal advice was considered timely and adequate, although the exercise constraints in terms of time and scenario-scope meant that a number of legal considerations were not fully explored; these are listed below for consideration as part of the on-going capability development programme:

- The Government Legal Network (GLN) 'Emergency Response Group' was not activated in the exercise, but this would be a high-value support asset in any real and sustained response, both in deconflicting competing legal powers, but also in providing cover for Maritime NZ's small legal team.
- Consideration should be given to developing a specific legal exercise for a major maritime incident to test thinking about competing legal powers to reduce issues in a real event.

- Consideration should be given to more general ‘raise, train, sustain’ activities for the GLN to support nationally significant incident responses.
- The roles for legal advisors need further consideration and articulation, along with clarity of legal functions and the division of strategic, operational, and tactical legal roles (for example: strategic consideration of the domestic and international instruments under which the response activity should occur; operational advice about the legal implications and advisability of certain actions (such as use of certain powers); and tactical legal support in drafting letters and contracts etc.). This will ensure the ‘form’ fits the ‘functions’.
- Maritime NZ should continue to develop a clear and considered organisational view of the proactive application of legal powers in a major maritime incident, and ensure there is clear guidance around this.
- A letter/document should be prepared to articulate in writing the capacity in which other agencies assist in a major maritime incident (using MTA powers, and being afforded MTA protections).
- Legal advisors should be included in deliberations and IMT meetings by controllers at the front and rear, so they are empowered to provide proactive legal advice.

Information and Technology

The *Rena Review* highlighted a number of issues around the emergent approach to managing information and technology, with all systems established from scratch in the first days of the response. In addition all information that was collected and developed at the response front was locally stored and inaccessible at the rear, hampering national response activities.

For exercise Whakautu II, an ambitious suite of new response IT capability was being tested, including:

- the introduction of a cloud based information management system – Office 365 – to support the existing system WebEOC (which was used for *Rena*, but has been considerably enhanced since)
- a bespoke pre-established response domain, with associated role based email addresses
- a telecommunications system based on an 0800 number with an automatic call directory to direct calls to pre-allocated cell-phones, which can be immediately activated in a major incident
- a supply of dedicated response laptops especially refurbished from old stock.

Overall, the Information management and communications set up worked much better than *Rena*, and was functional from the beginning of the response, and significant feedback was received about the helpfulness of the IT support team. A number of issues and opportunities for further improvement were identified, and the response effort would have benefitted from increased familiarity with the IT systems.

Key issues/opportunities identified were:

- The time required to establish the IT infrastructure at the response front is considerable. Establishing and resourcing a ‘forward operating team’ and a readily deployable response IT “grab and go” kit/setup would significantly enhance capability. This could be achieved in-house or through a third party provider on a retainer.
- WebEOC is a critical tool to aid the response, however for users beyond the NRT, greater familiarity with WebEOC is required and the Wellington Evaluation Report proposes a video (YouTube) introduction/basic tutorial, to familiarise users who have not been trained.
- A raft of technical adjustments for WebEOC were provided (these have been supplied to the WebEOC administrator separately from this report), including the following key themes:
 - Enhanced ability to provide Situational Awareness (through a consolidated (and auto updating?) SITREP or PowerPoint)
 - Enhancements that help to clarify information flow and integrate (without duplication) the national and regional logs
 - A mechanism for identifying when information has been verified (to avoid instances of incorrect information impacting response activities)
 - Enhancing or further integrating the mapping functionality so all visual aids are integrated with WebEOC information.
- Office 365 was unfamiliar to participants in the way it enables creation and sharing of documents, and functioned less than optimally in an environment with role based (rather than personal) access. In addition, it was highlighted that there are risks associated with having two information

management systems, and that this could lead to inefficiencies through duplication of information, or worse critical information being overlooked or 'lost'. Further consideration is required around whether Office 365 combined with WebEOC is the best approach to support response information management, and if so, what adjustments are required to the setup.

- Further consideration is required about how sensitive or classified information will be handled in a response.
- Greater flexibility with the IT hardware at the NCMC would have enhanced information flows and Situational awareness (e.g. ability to operate any data projector off any computer; projectors able to display the same or different information; PIM room has displays matching ops room; a videoconference feed into ops room).

4.3.3 Secondary Evaluation Objective: Exercise Planning

The secondary evaluation objective was to reflect on how well the exercise was prepared and conducted, in order to identify lessons for future exercise development, planning and execution.

The exercise was prepared by Maritime NZ over a period of about 15 months, with the intensity of effort increasing as the exercise date approached. Overall the exercise ran very smoothly, and enabled Maritime NZ and other participating agencies to effectively test systems and plans (including the activation of the NSS system) for a major maritime incident.

The Lead Evaluator Wellington complemented the exercise preparation:

“Maritime NZ is to be congratulated for the breadth, depth and quality of the preparation that preceded the exercise... The material produced has set a new benchmark and provides valuable resources that could be used by other agencies in designing and implementing their exercises.” *Evaluation Report MIRT and NCMC, p. 3.*

Within this overall success, a few key lessons were identified, and these are compiled below.

- Maritime NZ primarily resourced exercise preparation though using existing staff with appropriate skill sets, but who had other substantive roles. This added significant pressure to the workloads of these staff, and potentially extended preparation timeframes. While broad engagement of staff with experience and technical expertise is critical to prepare effectively, this could supplement a core team. In the estimation of the exercise coordinator, the optimal resourcing for this scale of exercise would be 4 dedicated FTEs for about six months:
 - Exercise Coordinator
 - Exercise Administrator
 - Exercise Planner: Coordination and documentation
 - Exercise Planner: Scenario development.
- The exercise control and support effort for an exercise of this scale is very significant. All up, there were 53 people that operated in ExCon or other support and evaluation roles through the exercise – almost a fifth of the total participants. Support at a senior level from other agencies was critical to delivering the exercise.
- Maritime NZ engaged widely with key stakeholders in late 2015. This meant the lead up to the exercise was somewhat drawn out, and it was difficult to maintain engagement from other agencies until shortly before the exercise dates, at which point there was a rush of interest. In retrospect, it may have been more effective to have issued the initial Warning Order for the exercise (to enable agencies to book and plan ahead) but then to have progressed the exercise planning as far as possible internally before seeking wider engagement through the issue of the Exercise Coordinating Instruction. This would have reduced the requirement to attend to exercise preparations alongside stakeholder engagement under pressured timeframes.
- Some comments were made about gaps in or issues with the information that was able to be provided by ExCon during exercise play (lack of scenario detail or technical expertise). While these did not ultimately affect whether the exercise objectives were achieved in any material way, better planning around the ExCon function could have assisted the response. This could either take the

form of carefully assigning the ExCon roles to ensure a range of appropriate expertise, or producing more highly developed inject materials that could be drawn on by ExCon to support information requests from the responders.

- At times, it was difficult for ExCon to keep track of activities that were underway as a result of an inject intended to test particular elements of the response, and thus to evaluate the outcome effectively and/or to supplement the inject if necessary. In future, it would be better to use more 'closed-loop' injects – where the inject is structured to generate a specific product or outcome that is fed back to ExCon during exercise play.
- Earlier completion of the Scenario and the Master Events List (a final internal draft three months or more before the exercise) would have enabled better cross-agency engagement in the planning, and enhanced the value derived from the exercise.
- Given a high level of artificiality in an exercise anyway, exercise play may have been usefully suspended at some points (for example at the beginning of the NCMC phase) to brief all participants on where the scenario was at, and ensure there was role clarity so that the maximum amount of learning could occur.
- Where participants are new to roles, introduction of 'mentors' with greater experience (particularly for key leadership positions) could enhance learning and response effectiveness (this was done effectively within the NRT component of the response).

Exercise Costs:

Running an AOG major incident exercise with two Coordination Centres is hugely valuable, but is costly to do well. In addition to direct cash costs in the order of \$440,000 associated with the direct exercise and exercise planning expenses, an estimated 10,795 personnel hours were invested in the exercise and exercise preparation (Maritime NZ and AOG planning, delivery, and participation). The costs are broken down in Appendix 2.

Maritime NZ had funding for the cash costs in its appropriation for the Maritime Emergency Response Programme, but absorbed the personnel related costs for its own staff. Most partner agency and department incidental costs were covered through the cash costs however many partners also absorbed their own staff-time costs. Currently Maritime NZ does not have the funding required to repeat this type of exercise in the future.

5 RECOMMENDATIONS

This section shapes the lessons from the exercise into forward looking recommendations or areas for further consideration (where a single solution is not appropriate or apparent). There are two overall sections: AOG and Maritime NZ. Recommendations from the independent Evaluators' reports are not explicitly replicated here, but are covered by the recommendations below.

All-of-Government recommendations.

These recommendations are not directed at any one agency, as they explicitly pertain to the development of capability across agencies. Given this exercise was supported as part of the NEP, they are in the first instance directed to the HRB, the governing body for the NEP. Following consideration, the HRB may wish to assign the follow-up of the recommendations to particular agencies.

It is recommended that:

1. Further, more detailed guidance is developed on the functions, roles and associated structure for the NCMC component of a nationally significant AOG response. This guidance should be relevant for any AOG response, irrespective of the scenario. This work should consider the following elements:
 - a. The strategic functions of the NCMC, and what these entail, including clear delineation from the NCC and operational response functions, and advice on the purpose of the strategic response and its operating processes.
 - b. Advice on the appropriate structural arrangements to support these strategic functions (including the appropriateness of CIMS going forward).
 - c. Guidance on the interaction with the NSS component and how this should be managed in concert with response planning and control activities.
 - d. Guidance on the role of DPMC/NSSD in the response activities (in particular, but not limited to, guiding the development of the lead agency's objectives and planning processes).
 - e. Guidance on the strategic planning process (drawing on the MCDEM guidance and framing it for AOG).
 - f. Guidance on the strategic policy function, delineating this from the strategic communications function, and a comprehensive articulation of how advice is provided to ministers and cabinet (both strategic policy advice and tactical advice around situational awareness and key messages/media pre-briefs etc.).
 - g. Role cards or aide-memoires for functional roles in the NCMC, including for CIMS functions, Liaison Officers, Strategic Policy, Recovery Planning, Legal advice, and NSSD and strategic communications (if these functions remain appropriate in the context of 1. b.).
2. Centralised training, complemented by mentoring and strategically focused exercising, is developed and delivered. This would assist in consistent understanding and competency in the required skills, knowledge and relationships across a core of officials who could be used to support any response, irrespective of scenario. It would be beneficial for training to include:
 - a. An overview of the NCMC strategic purpose and role in nationally significant incident response
 - b. Explanation of the key functions delivered by the NCMC (e.g. strategic planning, AOG coordination, advice to ministers etc.) and how they are covered by organisational arrangements (i.e. what does the IMT do at the strategic level, and which branches are responsible for what functions)
 - c. A focused module or course on strategic level action planning
 - d. The role of Liaison Officers.
3. Consideration is given to the allocation of centralised funding to cover:
 - a. resourcing the development of the guidance recommended in 1 above
 - b. the training and development of staff who could fulfil a role in a NCMC (in 2 above)
 - c. exercising the strategic AOG elements of a major incident response.
4. Consideration is given to developing or enhancing across-government social media capability for incident response, through recruitment and training activity.

5. Consideration is given to exploring options to improve the functioning of the NCMC facility, to reduce physical barriers between response functions and to improve information and technology capability to enhance situational awareness.
6. The potentially significant contribution from the GLN Emergency Response Group in any sustained national response is noted, this group is maintained, and consideration is given to desk-topping or otherwise testing how this group would support a nationally significant incident of any kind, if response activities are prolonged, and/or multiple legal frameworks are at play.

It is recommended that Maritime NZ:

1. Undertakes further work on the Strategy and Plans. Key improvements required are:
 - a. More guidance on the command and control arrangements for a major maritime incident response. This could include further work to delineate the roles of different Controllers/ Commanders, adjustments to areas of responsibility, and consideration of financial delegation arrangements in the first days of a major response.
 - b. Further consideration around the integration between oil spill response activities and other response functions – in particular salvage and non-oil pollution oversight. Consideration should be given to including salvage and non-oil pollution oversight functions in the National Response Team.
 - c. Guidance on how escalation and de-escalation occurs in a major maritime incident response. This should include the criteria for recommending escalation to an AOG response/activation of the NSS system and/or activating the NCMC, and the criteria for establishing an ECC. Further consideration (and subsequently guidance) is required on the best approach to managing transition phases, in particular the processes for shifting control of the strategic and operational response from the MIRT to the NCMC and the ECC respectively.
2. Continues and enhances its rolling training programme for Maritime NZ staff who hold response roles, to enhance and sustain familiarity with the Strategies and Plans for Maritime Incident Response.
3. Includes a work programme, within the wider Strategy and Plans work recommended above, specifically focused on enhancing the effectiveness of the MIRT in a major maritime incident response. The work programme should include:
 - a. Refreshing Standard Operating Procedures: Key elements that should be included are:
 - Activation procedures, incorporating an activation checklist
 - An explanation of the Strategic and Operational responsibilities of the MIRT in the early hours of a major maritime incident response, and guidance for managing these
 - Clear delineation between the roles of the MIRT and RCCNZ in the initial hours of a major maritime incident (and on-going) including where Search and Rescue *is* a component of the incident and where it *is not* a component
 - Further advice/guidance around the key functions of the MIRT and the roles with responsibility for these functions (e.g. situational awareness, record keeping, international engagement, forward planning, briefing preparation etc.)
 - Criteria for escalation (as in Maritime NZ rec 1 c. above)
 - Clarity around control arrangements and handover following transitions (as in Maritime NZ rec 1 c. above)
 - Appropriate risk assessment and management processes
 - Guidance on early and appropriate engagement with international partners including LOC (as salvage advisors), and P+I representatives
 - High level SOP for the Director with key contacts (e.g. Ministers, the Board, Ship Owners etc.)
 - b. Further recruitment and on-going training of appropriate Maritime NZ staff for roles in the MIRT to enhance resilience, capability, leadership and team function, and role clarity.
 - c. A review of the physical infrastructure and logistical arrangements for the MIRT including:
 - consideration of using RCCNZ offices as another possible location for standing up the MIRT for certain 'levels' of incident response
 - reviewing the availability of appropriate resources including status boards (to build a common operating picture); telephones (including phones with handsets so that calls can be taken

without the involvement of the whole MIRT); and jerkins/bibs and desk labels (controller, planning, intelligence, legal etc.) to clarify different positions.

4. Incorporates the further guidance developed for AOG incident response (AOG Recommendation 1 above) into the Strategy and the Plan, in particular:
 - a. More guidance on the Maritime NZ leadership role, potentially including some pre-established draft Strategic Objectives, and guidance on the process for reviewing and refining these with AOG stakeholders and DPMC's NSSD.
 - b. Proposed structural arrangements for the strategic response in a major maritime incident
 - c. Making relevant parts of the Strategy and the Plans more accessible to AOG partners in a major maritime incident, as it is not practicable to train all possible responders in all government agencies. Simple one to two page outlines/aide memoires that explain roles or functions at the national strategic level and key tasks for responders would significantly clarify roles and expectations in a response. In particular, these outlines/aide memoires should include guidance on the role of Liaison Officers, and explain how they will engage with response planning activities.
5. Undertakes further work with MOT to build capacity and role clarity around the strategic policy and recovery planning roles that MOT would lead in a major maritime incident.
6. Develops enhancements to Maritime NZ Information and Technology readiness for a major maritime incident. This should include:
 - a. Establishing and resourcing a 'forward operating team' and a readily deployable response IT "grab and go" kit/setup (either in house or through a third party on a retainer)
 - b. Exploring the development of a video introduction/basic tutorial for WebEOC, to familiarise users who have not been trained
 - c. Further improvements to WebEOC including:
 - o Enhanced ability to provide Situational Awareness (through a consolidated (and auto updating?) SITREP or PowerPoint)
 - o Enhancements that help to clarify information flow and integrate (without duplication) the national and regional logs
 - o A mechanism for identifying when information has been verified (there were multiple instances of incorrect information impacting response activities)
 - o Enhancing or further integrating the mapping functionality so all visual aids are integrated with WebEOC information
 - d. Further consideration around whether Office 365 combined with WebEOC is the best approach to support response information management, and if so, what adjustments are required to the setup
 - e. Further consideration about how sensitive or classified information will be handled in a response.
7. Reviews the setup of the PIM function for a major maritime incident, to ensure it best serves the needs of the response. This should include exploration of a single integrated PIM team across the front and rear, consideration of how the social media function will operate and be rapidly scaled up in a real incident, and development of further guidance on the interaction between the PIM team and the Command/Control functions.
8. Further develops its guidance, capability and preparedness around legal issues and the provision of legal advice in a major maritime incident. This should include:
 - a. Further consideration and articulation of the role and responsibilities of all legal advisors, and development of greater clarity of all legal functions including the division of strategic, operational, and tactical legal roles (see 4.3.2 – Legal advice)
 - b. Developing a clear and considered organisational view of the proactive application of legal powers in a major maritime incident, and ensuring there is clear guidance around this
 - c. Drafting a form letter/document to articulate in writing the capacity in which other agencies assist in a major maritime incident (using MTA powers, and being afforded MTA protections), which can be completed and provided to assisting agencies during a response
 - d. Considering the development of a specific 'legal issues' exercise for a major maritime incident to test thinking about competing legal powers to reduce issues in a real event
 - e. Guidance clarifying that legal advisors should be included in IMT meetings and decision making by controllers at the front and rear, so they are empowered to provide proactive legal advice.

6 CONCLUSION

Exercise Whakatutu II was highly successful. Overall, the exercise demonstrated that strong progress has been made in increasing Maritime NZ and AOG preparedness and response capability for a major maritime incident. There was excellent engagement between Maritime NZ and its government partners at the national and regional levels.

This report identifies areas for further improvement, and focuses on issues and lessons within the context of the independent evaluators' assessment that Maritime NZ has an effective and well-developed response capability overall.

APPENDIX 1: EXERCISE WHAKAUTU II 2016: AGENCY PARTICIPATION

Exercise Whakautu II had excellent participation from across government and from a number of other national and international stakeholders.

In total, 278³ people actively participated over the three days of the exercise, with 186 operating in response roles, and the remainder in exercise control, evaluation or other support roles, or as members of a Watch Group or the Officials' Committee for Domestic and External Security Coordination (ODESC) meeting.

The exercise had engagement from 25 central government agencies (including MNZ), 15 regional government agencies, and 17 other domestic and international agencies with expertise relevant to a major maritime incident response.

An observer's programme was also run at both coordination centres and was attended by about 25 observers from across government and industry (around a dozen at each end).

Wellington Response:

In total, 33 agencies were involved in the Wellington response (across the response team (at MNZ and at the NCMC), in Watch Groups and ODESC, and including ExCon and the Evaluators), with a total of 160 participants. A small number of agencies also had staff participating remotely at their head offices.

87 participants operated in response roles, 39 participated mainly or exclusively in ODESC or Watch Group meetings, and 34 in ExCon, Evaluator or other exercise support roles.

Agencies involved in the National Coordination Centre (MIRT and NCMC) including in the Watch Groups and ODESC meetings

Agency	Number of Participants
CABIX Communications	2
Crown Law	2
Department of Conservation	3
Department of Internal Affairs	2
Department of Prime Minister and Cabinet	17
Environmental Protection Agency	4
International Oil Pollution Compensation Funds (IOPC)	3
International Tanker Owners Pollution Federation	1
Kestrel Ltd	1
LOC Group	1
Ministry of Business, Innovation and Employment	2
Ministry of Civil Defence and Emergency Management	7
Ministry of Foreign Affairs and Trade	2
Ministry for the Environment	5

³ NB: the total number of participants is less than the sum of participants at each coordination centre as some participants spent time at both "ends" of the exercise.

Maritime New Zealand	38
Ministry of Health	8
Ministry of Transport	8
Ministry for Primary Industries	7
Ministry of Social Development	2
NIWA	1
NZ Customs	7
NZ Defence Force	7
NZ Fire Service	7
NZ Institute of International Affairs, Wgtn Branch (Interns)	4
NZ Police	6
NZ Transport Agency	2
St John New Zealand	1
State Services Commission	1
Taranaki Regional Council	1
Te Puni Kōkiri	1
The Treasury	1
Transport Accident Investigation Commission	2
WorkSafe New Zealand	3
West P&I	1

New Plymouth Response:

In total, 40 agencies participated at the ECC, (across the Response Team, ExCon, Evaluators, and international observers/role players) with a total of 126 participants.

99 participants played in a response role, and the remaining 27 in ExCon, Evaluator or other exercise support roles.

Agencies involved in the Emergency Coordination Centre and Taranaki Emergency Management Office (Investigations)

Agency	Number of Participants
Auckland Council	5
Australian Maritime Safety Authority	1
Auckland Transport	1
Brendan Morris Consulting Ltd	1
Bay of Plenty Regional Council	2
Coastguard Taranaki	1
Department of Conservation	3
Environment Canterbury Regional Council	2
Gisborne District Council	1

Greater Wellington Regional Council	1
Griffin Emergency Management Ltd	2
Hawkes Bay Regional Council	3
Hapai Consultancy	1
Horizons Regional Council	1
ILD Consulting	1
International Oil Pollution Compensation Funds (IOPC)	3
International Tanker Owners Pollution Federation	1
Local Iwi Representation	1
LOC Group	1
Massey University	2
Ministry of Civil Defence and Emergency Management	2
Marlborough District Council	1
Maritime New Zealand	37
Ministry of Health	2
Ministry for Primary Industries	1
Northland Regional Council	2
NZ Customs	1
NZ Defence Force	4
NZ Fire Service	2
NZ Institute of International Affairs, Wgtn Branch (Interns)	2
NZ Police	3
Queenstown Lakes District Council	1
Southland District Council	1
St John New Zealand	1
Shell Todd Oil Services Ltd	1
Transport Accident Investigation Commission	3
Port Taranaki	1
Private Contractors	3
Taranaki District Health Board	4
Taranaki Regional Council	16
WorkSafe New Zealand	1
Waikato Regional Council	2
West P&I	1

APPENDIX 2: EXERCISE WHAKAUTU II 2016: EXERCISE COSTS

Direct Exercise Planning and Delivery Expenses:

Cost Area	Total Expense
Travel and accommodation: Includes all travel and accommodation costs, during exercise planning, induction, and through actual exercise delivery.	\$120,000
Exercise stationary and resources: Includes all stationary and other resource costs including preparation of inject materials, lanyards, datasticks, ID cards, and caps.	\$10,000
Venue Hire and catering: Includes venue hire and catering for induction events (including for ExCon), during exercise delivery, and for post-exercise wind up.	\$50,000
Contracts/consultants: Includes contractors that supported the planning team, independent evaluator contracts, LOC (salvage specialist) support and advice, site and observer manager at the ECC, Faux-media, and videographers.	\$200,000
IT costs: Includes full establishment of ECC (fast wireless internet, IT and Communication setup, printers etc, Video-conferencing facilities), and cloud-based response system and website hosting and adjustment.	\$60,000
Total	\$440,000

Personnel Hours:

Activity	Total Hours
Exercise Planning: 40 weeks 4 FTE staff (37.5 hr weeks) This was mostly MNZ staff, however personnel from across government were involved in regular scenario development meetings and pre-exercise maritime response capability development workshops.	6,000 hrs
Wellington Induction: 4 hrs * 100 officials from across government	400 hrs
MIRT: 12 hrs* 40 personnel Mostly MNZ staff, however included a small number of non-MNZ responders, ExCon and Evaluation staff. (Monday a.m. and Wednesday Wellington component of the exercise).	480 hrs
NCMC: 15 hrs * 100 responders and exercise support staff Core of Wellington response, from 1200 to 1730 hrs on the Monday and 0800 to 1730 on the Tuesday.	1,500 hrs
ODESC and Watch Groups: 2.5 hrs * 20 Officials * 3 meetings; and 1.5 hrs * 15 observers * 3 meetings	215 hrs
ECC and TEMO: 20 hrs* 110 Responders and Exercise support staff	2,200 hrs
Total	10,795 hrs

