

Exercise Westwind

2015



Evaluation Report



Australian Government
Australian Maritime Safety Authority



Australian Government
Department of Infrastructure and Regional Development



Australian Government
Department of Industry
Innovation and Science



Government of Western Australia
Department of Transport



AMOSC
Australian Marine
Oil Spill Centre Pty Ltd

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Steering committee commentary

Executive summary

The National Plan for Maritime Environmental Emergencies ('the National Plan') is exercised on an annual basis. The exercise is nationally significant and contributes to strategic and operational preparedness of oil pollution response throughout Australia. Exercise Westwind ('the Exercise') was the National Plan exercise for 2015.

The Exercise comprised two distinct phases. The first phase, the strategic component, was held across Canberra and Perth on 27 and 28 May 2015. This component exercised an oil industry Crisis Management Team (CMT), the Western Australian State Marine Pollution Strategic Coordination Group (SCG) and the Australian Government Offshore Petroleum Incident Coordination Committee (OPICC). The second phase, the operational component, was conducted between 8-12 June 2015 across Perth and Exmouth, Western Australia. The operational component tested an oil industry led Incident Management Team and tactical response operations.

The Exercise is the first time a scenario for an offshore petroleum incident has been conducted under the National Plan. The results confirm that the Exercise successfully achieved its aim and objectives.

This report reflects only the observations and learnings from the two phases of the Exercise. It makes recommendations regarding the use of the Exercise for the improvement of the National Plan and for marine based oil spill response. The observations and learnings are therefore drawn from the Canberra, Perth and Exmouth based teams that were convened to respond to a scenario simulating an oil spill from a fictitious oil company's activities. The recommendations should be read in that context.

Aim and objectives

The aim of the Exercise was to simulate a coordinated response by the Australian and Western Australian Governments and the offshore petroleum industry to a Level 3 maritime environmental emergency.

The objectives of the Exercise were to:

1. Exercise the arrangements of the National Plan in a multi-jurisdictional and cross sectoral setting.
2. Exercise the strategic interaction of the Australian and Western Australian Governments and the offshore petroleum industry.
3. Exercise the operational management, of a Level 3 incident, involving a multi-agency, multi jurisdictional and cross sectoral incident control centre.
4. Exercise the tactical deployment of resources and response personnel in response to a Level 3 incident.

Exercise governance

The National Plan Strategic Coordination Committee (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 in Figure 1.

**Figure 1 –
Governance structure for
Exercise Westwind**



The Exercise Steering Committee was responsible for:

- management of the Exercise
- setting exercise objectives
- oversight of the writing teams
- review of the Exercise
- production of the Exercise report and recommendations.

The Exercise writing teams conducted detailed exercise planning and development. The Strategic Exercise Writing Team was responsible for the development and delivery of the strategic sub-exercise addressing objectives 1 and 2. The Operational Exercise Writing Team was responsible for the development and delivery of the operational and tactical sub-exercise addressing objectives 1, 3 and 4.

Membership of the Steering Committee and Exercise writing teams are specified at Table 1.

Table 1 – Membership of Steering Committee and Exercise Writing Teams

Steering Committee	Strategic Exercise Writing Team	Operational Exercise Writing Team
<ul style="list-style-type: none"> • Australian Maritime Safety Authority (AMSA)(Chair) • Australian Marine Oil Spill Centre • Western Australian Department of Transport (WADoT) • Commonwealth Department of Industry, Innovation and Science • Commonwealth Department of Infrastructure and Regional Development 	<ul style="list-style-type: none"> • Australian Maritime Safety Authority (Chair) • Australian Marine Oil Spill Centre • Western Australian Department of Transport • Commonwealth Department of Transport • National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) • Commonwealth Department of Industry, Innovation and Science 	<ul style="list-style-type: none"> • Australian Marine Oil Spill Centre • Western Australian Department of Transport • Australian Maritime Safety Authority • INPEX • BHP Billiton • PTTEP • Apache

Recommendations of the Steering Committee

The report of the Exercise Evaluation Team sets out a range of findings in relation to the Exercise. The Steering Committee notes these findings and makes the following recommendations to NPSCC.

No.	Recommendations	Responsibility
National Plan		
1	The NPSCC review how the National Plan manages the strategic coordination of response operations which cross jurisdictional boundaries (being Commonwealth & State maritime boundaries)	NPSCC
2	The NPSCC consider how incident and exercise lessons can be more accessible to the broader National Plan community, including consideration of the development of an open lessons database.	NPSCC
Strategic		
3	The Department of Industry, Innovation and Science review the purpose and functions of the Offshore Petroleum Incident Coordination Framework (OPICF) and the role and responsibilities of OPICC and OPICC Secretariat to ensure that the OPICF provides an effective framework for strategic Government leadership in emergency response.	Department of Industry, Innovation and Science
4	The Department of Industry, Innovation and Science to ensure that the OPICF is supported by a formal learning and development and exercise program for OPICC members, and the OPICC Secretariat ensures an ongoing strategic response capability.	Department of Industry, Innovation and Science
5	The Department of Industry, Innovation and Science should seek greater integration between OPICF and the Australian Government capabilities for crisis management, including linkages to crisis communication capabilities within the Australian Government Crisis Coordination Centre of the Attorney Generals Department.	Department of Industry, Innovation and Science
6	WADoT to formally review WESTPLAN, and the role of the SCG in particular ensuring that the strategic intent of the Western Australian State Emergency Management Arrangements are effectively implemented.	WADoT
7	The Western Australian Government clearly communicate to stakeholders any substantive changes to the policy and practice of WESTPLAN to enable subsequent changes to be made to stakeholder planning documents.	WADoT
8	The NPSCC endorses the inclusion of the strategic level of OPICC into future offshore exercises involving the operational and tactical level of exercising.	NPSCC
Operational Issues		
9	AMSA and AMOSC review training programs to ensure that incident planning training considers how to manage remote response operations detached from the Incident Management Team.	AMOSC AMSA
10	The petroleum industry to consider more broadly arrangements for the transition from Oil Pollution Emergency Plans (OPEP) first strike actions to the Incident Action Plan (IAP) process during incidents.	Petroleum Industry
11	Given the primacy placed on the use of Fixed Wing Aerial Dispersant (FWAD) operations in many OPEPs the petroleum industry should review contingency planning to ensure that company policies and resources are fit for purpose. Consideration should be given to the FWAD Joint Standard Operating Procedures.	Petroleum Industry
12	The petroleum industry review requirements for large multi-agency Incident Management Teams (IMT) within Incident Control Centre (ICC) facilities, and the ability to locate and maintain an ICC in effective proximity to the expected area of operations.	Petroleum Industry

The Steering Committee agrees that the Exercise Aim and Objectives were met in both phase one and phase two.

Background

Phase one

Phase one of the Exercise was a real time strategic level functional exercise focusing on the practical implementation of Commonwealth and state emergency management arrangements in response to a major incident.

The Exercise was conducted from 27 to 28 May 2015 in Perth, Fremantle and Canberra and was run concurrently over two time zones, Western Australian Standard Time (WST) and Eastern Standard Time (EST). It involved the activation of, and interaction between:

- an offshore titleholder's Crisis Management Team (CMT) in Perth
- elements of the WA DoT and State Emergency Management Arrangements
- WA DoT SCG and Strategic Advisory Group (SAG) in Fremantle
- a partially activated NOPSEMA Crisis Response Team (CRT) in Perth, and
- the OPICC Secretariat and OPICC members in Canberra.

Aim

The aim of phase one was to simulate a coordinated response to a Level 3 maritime environmental emergency by the Commonwealth and Western Australian Governments, and the offshore petroleum industry.

Objectives

The objectives of phase one were to:

1. practice implementing the OPICC in response to a significant incident:
 - a. practice procedures to notify relevant agencies, initiate the OPICC and establish meeting arrangements
 - b. review processes to manage information input into and out of the OPICC during the incident
 - c. assess whole of Australian Government strategic coordination and collaboration in response to a significant incident
2. test the implementation of the West Australian State Emergency Management Arrangements in response to a major incident:
 - a. practice the implementation of WESTPLAN Marine Oil Pollution
 - b. practice the development of appropriate legal instruments in accordance with legislation
3. test strategic management and communications in a cross sector, multi-jurisdictional setting, including the ability to develop coordinated messaging and maintain a common operating picture
4. review the development and communication of a common operating picture on behalf of Australian and Western Australian governments, in consolidation with the titleholder and/or control agency.

Phase two

Phase two of the Exercise focused on operational incident management and tactical deployment of resources. Operational strategy was developed through the IMT based in Perth. Tactical operations were conducted in source intervention, aerial surveillance, FWAD, offshore, nearshore, shoreline and oiled wildlife response in Exmouth, Western Australia.

The Exercise ran in real time between 8 and 11 June 2015 and according to real-world events. A fictitious oil company, ACME Oil Company, was created to assume the function of an offshore oil exploration and production company. ACME Oil Company was formed to enable the amalgamation of a number of Australian petroleum companies to exercise industry arrangements under one banner during the exercise period.

The IMT participants responded to the incident as employees of ACME Oil Company. The ACME IMT responded to the incident and undertook activities in accordance with the ACME OPEP. The OPEP was produced for the purposes of the exercise only and had not been assessed by NOPSEMA for regulatory compliance.

The field teams played their real life part as AMOSC Core Group (CG) and the National Response Team (NRT) members. The assets assigned were 'contracted' by ACME and therefore the health safety and environmental aspects of the response were controlled by ACME (through Exercise Control).

NOPSEMA role-played its regulatory compliance functions deploying inspection teams to both the IMT and tactical deployment locations.



Aim

The aim of phase two was to exercise the response arrangements to a Level 3 oil spill resulting from drilling activity on the 'Arya Oceanier' well.

Objectives

The objectives of phase two were to:

1. Exercise the operational management of a Level 3 incident involving a multi-agency, multi-jurisdictional and cross sector incident control centre:
 - a. establish an ICC in Perth
 - b. implement a company CMT and IMT with multi-agency, cross sector and jurisdictional personnel in Perth
 - c. develop situational awareness of the incident and communicate a clear common operating picture to all stakeholders
 - d. establish control of the tactical response through the incident control centre
 - e. develop an IAP and operational orders within a timeframe that enables effective implementation.
2. Exercise the tactical deployment of resources and response personnel in response to a Level 3 incident:
 - a. demonstrate the ability to implement, manage and coordinate a first strike plan/incident action plan in response to an oil spill incident in the Exmouth region
 - b. AMOSC Core Group and AMSA NRT to practice tactical control and management of the following spill response operations:
 - aerial surveillance
 - Fixed Wing Aerial Dispersant
 - offshore/nearshore operations
 - onshore/shoreline response
 - oiled wildlife response



Exercise evaluation

Exercise evaluation was conducted independently of Exercise Control. The exercise evaluation process was led by the Victorian Department of Economic Development, Jobs, Transport and Resources.

Members of the Exercise Evaluation Team were assigned to the following functional areas within the Exercise:

- OPICC
- Western Australian State Marine Pollution Coordination Group (SCG)
- SAG
- ACME CMT
- ACME IMT
- Exercise Control
- NOPSEMA CRT.

Data analysis

Data was collected from each functional area via the following methods:

- Direct observation (through the completion of individual evaluator reports)
- Outcomes of debriefs
- Reviews of documentation
- Online questionnaire.

Observations were collated and categorised using the P2OST2E capability model and a triangulation methodology was applied. Insights related to the objectives of the exercise were formed when observations from a minimum of three different sources were identified.

Scope

The following matters were IN scope for one or both phases of the Exercise:

- Operation of the OPICC (Phase one)
- Connections between the ACME CMT and State and Commonwealth arrangements (Phase one)
- Operation of the SCG and SAG
- The ACME IMT
- Field operations.

The following matters were OUT of scope:

- The internal operation of the ACME CMT
- The internal operation of the NOPSEMA CRT and NOPSEMA's safety, well integrity and investigations functions
- Any function being role played by Exercise Control (e.g. ACME IMT for Phase 1).

Analysis

Phase One

This strategic level functional exercise focused on the practical implementation of Commonwealth and state emergency management arrangements in response to a major incident. The exercise focused on cross-sector and multi-jurisdictional interoperability and the ability to maintain effective internal/external communications via development of a common operating picture.

General Comments

1. The OPICC and Western Australian State Emergency Management Committee seemed to duplicate the work of one another. This was noted as a distraction to the functioning of the Western Australian arrangements and a challenge for the Commonwealth arrangements as it was unclear how the two entities should operate together. It also raises the question of whether the most efficient use of resources was being made. The reality is that marine pollution incidents, regardless of sources, are likely to cross jurisdictional boundaries and jurisdictions need to consider how strategic considerations can be addressed across these boundaries.

Offshore Petroleum Incident Management Framework

The Exercise was the first exposure of the OPICF, and in particular the OPICC and OPICC Secretariat, to a major exercise or event. As such the scenario presented a significant challenge to the OPICC members and Secretariat. Noting this, both OPICC and the Secretariat settled into their respective roles as the Exercise progressed and maintained a steady operational rhythm.

2. The OPICC Secretariat had minimal crisis management experience and lacked mature standard operating procedures and processes. This resulted in delays in establishing the routines necessary to manage the significant coordination demands and information flows presented by a scenario of this type. As a result the OPICC Secretariat did not maintain an effective common operating picture for the Exercise scenario.
3. OPICC was slow to engage effectively in public communications. It should be noted that state governments tend to have better practiced arrangements for disaster situations than the Australian Government due to their exposure to significant events on a seasonal basis. However, noting the event occurred in the jurisdiction of the Australian Government, it is arguable that the community would have expected more visible leadership from the Australian Government for an event of this magnitude.
4. On day two, there was a significant reset of the OPICC focus and direction initiated by the OPICC Secretariat. This was based on recognition that OPICC needed to extend from information and communications coordination to explicitly leading on behalf of the Australian Government. This led to greater engagement with the ACME Crisis Management Team, through the deployment of a liaison officer representing OPICC, and broader stakeholders. OPICC was noticeably more active in querying decisions taken by ACME ensuring awareness within the OPICC of actions and potential consequences of the actions taken by the company.

Western Australian Government

5. The performance of the Strategic Coordination Committee needs to be considered in two parts. On day one, it was considered that the response lacked structure, focus and organisation. This was noted by the SCG and following a frank debrief at the end of day one, the SCG was restructured and improvements implemented. The restructure was a significant deviation from WESTPLAN. This reflected well on the internal motivation and professionalism of the SCG members.
6. The SCG members did not appear to have a full understanding of their role and purpose, or more broadly, of incident management and information management processes.. They seemed to be operationally and tactically focused and engaged more with the Incident Management Team, rather than ACME CMT. This inhibited the SCG's ability to engage strategically and address government concerns. This likely contributed to the poor performance noted on day one.
7. The SCG demonstrated a reluctance to accept responsibility for aspects of the operational response. This was consistent with established practice within WESTPLAN where operational and tactical management of the incident were assigned to ACME, with the SCG providing strategic oversight and direction. However, this appeared to be at odds with the expectations of the State Emergency Management Committee and Western Australian Government.



Phase Two

The Perth phase of the exercise highlighted the ability of industry to form an Incident Management Team (IMT) comprised of a range of people from various companies and oil spill response organisations. The interoperability of all IMT members was a testimony to the effectiveness of the standardised incident response concepts and competencies provided in Australia (and internationally), demonstrated by all agencies working seamlessly together.

Incident action planning

It was observed that the IMT was not able to provide operational direction to the Forward Operating Base (FOB) or field teams in an appropriate timeframe. Exercise Control needed to intervene in the exercise to enable some field operations to commence. There were a number of contributing factors to this.

1. The decentralisation of incident management functions, with the IMT situated in Perth and the FOB and tactical operations in Exmouth, caused difficulties developing situational awareness. Positioning the IMT at a location remote to the incident needs careful consideration. It was observed following the Montara Wellhead oil spill that the maintenance of remote response management presented problems for incident management and these lessons should be heeded.
2. The IMT attempted to develop detailed Incident Actions Plans and operational orders for the field teams, despite their remoteness from the incident scene. Delays resulted from the IMT attempting to overcome this operational limitation and to improve their situational awareness. A better approach would have been to consider delegation of operational and tactical planning to the FOB who had a much better picture of the field, with the IMT retaining a focus on mission, strategy and resource delivery. Alternatively, the IMT may have considered locating the operations function in Exmouth.
3. The OPEP was not well utilised by the IMT who appeared to move directly to the development of an IAP based on the specific circumstances of the scenario. This is likely due to the artificiality and limitations of the ACME OPEP, where there seemed to be a disconnect between the first strike arrangements and the IAP as the key operational output. As a result some of the response procedures detailed in the OPEP were not utilised, which would have improved response efficiency and decision making/taking.



Fixed wing aerial dispersant operations

The IMT was not able to implement aerial dispersant operations in an effective timeframe, despite the availability of assets. There are a number of explanations for this, including;

1. A general lack of awareness about the management of aerial dispersant operations within the IMT. This translated to delays in effective planning.
2. The allocated helicopter support (complying with the petroleum industry standards for maritime support) did not have communications that enabled air attack supervisors to communicate with, and therefore target, the dispersant spray aircraft. Additional helicopter support was sourced locally by the FOB to effectively conduct these requisite duties.
3. There is a conflict between oil company policies with offshore aviation operations and the operational model for the FWAD capability. It is doubtful dispersant operations would have commenced within the scope of the exercise (and therefore a response) without AMSA taking control of this aspect of the operation. Reliance on AMSA undertaking this responsibility during a response should not be assumed and companies need to review internal policies that may impede response operations.

The application of air attack supervisors from the emergency services sector was a significant success factor. These personnel were well trained and practiced and integrated well within the oil spill response operation. The National Plan needs to ensure that linkages to this resource base are further developed and institutionalised within the national arrangements, as they bring both cost effectiveness (reduced training costs) and efficacy (better practiced operations) benefits.

Multi-agency response

The Exercise highlighted that the response to major oil spills in the Australian context remains a collaborative process between the Australian Government, States and Northern Territory and the petroleum industry. No single entity has the capacity or capabilities to manage the multi-faceted nature of these events. The National Plan supports such an approach and this needs to be integrated into contingency planning across all sectors.

Within the context of the exercise, the following issues were noted:

1. The ICC facility was not well suited for a large multi-agency IMT. Industry need to consider the logistical requirements of multi-agency responses to determine whether the ICC arrangements are appropriate.
2. There remained some separation between government responders and industry personnel within the IMT, though this was almost non-existent in the field. This may have resulted from a misunderstanding of the role of government responders and those agencies which have a compliance role. While the issue was generally resolved as the incident progressed, it is important to consider that in a real event, where the stakes are much higher, such an issue can have a disruptive influence on the response operation. Greater exercising between the government and industry would significantly improve this situation.

Outside the context of the exercise, all parties need to recognise that the National Plan is the mechanism for achieving multi-agency response. The National Plan recognises the need to exercise both the shipping and petroleum industry capabilities and capacities. This means that the petroleum industry should consider their need for exercising the OPICC and multi-agencies, and leverage off the opportunities as and when they occur.

Insights

Phase One

1. The National Plan does not provide effective structures for the strategic coordination of major incidents across jurisdictional boundaries. This has the potential to create inefficiencies in the allocation of resources and ineffective or confused community messaging.
2. The OPICF, in its current form, does not appear to adequately consider the need for overt strategic leadership on the part of the Australian Government. The terms of reference and purpose of the OPICC might need to be reconsidered to better address these aspects of crisis management.
3. The OPICF forms part of the AGCMF. However the OPICC and OPICC Secretariat do not have a full understanding of the framework and its supporting arrangements (e.g. AGCCC). This means that the OPICC is not able to effectively draw upon the full resources of the Australian Government to fulfil its function.
4. The OPICC Secretariat does not have sufficient experience or training in crisis management, noting the analysis that the OPICC needs to perform a greater crisis leadership role on behalf of the Australian Government. The development of such a capability requires an investment in the internal capability of the OPICC Secretariat.
5. WESTPLAN did not provide an adequate basis for the strategic management of a major pollution event. A significant number of the issues experienced by the SCG are derived from this aspect. The WADoT should review WESTPLAN in light of the issues identified during the Exercise and consider the form of leadership required for response operations within Western Australian waters.



Phase Two

1. The interoperability of the IMT, AMSA, AMOSC, industry Core Group and the NRT, represents a significant strength in the National Plan arrangements. The Exercise continued to play a fundamental role in the development of this capability.
2. The oiled wildlife and source control aspects of the Exercise were effective, and reflect the detailed planning that has been conducted within each of these functional areas.
3. The IMT favoured a process of developing an IAP tailored to the specifics of the scenario over following some of the first strike arrangements in the OPEP. This led to delays in response actions (for example, vessels deployed for containment and recovery operations, vessels deployed for surface dispersant operations) which should have been considered routine. This may have reflected the artificiality of the exercise OPEP which didn't fully represent all the regulatory or content requirements for an offshore petroleum activity.
4. The IMT was slow to issue operational orders to the FOB and field teams. This appears to be a result of an inability to develop situational awareness, and a desire to develop an overly specific IAP. Where an IMT is separated from operations by significant distance, as was the case for this event, one of two options needs to be considered:
 - a. the IMT needs to delegate tactical authority to the FOB and field teams, with a focus on mission, strategies and resources; or
 - b. the IMT should be located as close as possible to the incident scene. This was an observation identified in the Incident Analysis Team Report on the Montara Wellhead oil spill.
5. The petroleum industry need to develop a better understanding of the resources and processes required to implement a FWAD operation. Delays in the dispersant operation were significant and overcome through AMSA taking ownership of the function outside IMT processes. Particular issues noted included conflicts between the contracted FWAD capability and internal company policies (not ACME Oil Company – but own company policies), and the assignment of inappropriate helicopter resources to the task.
6. The ICC facility was insufficient to manage a multi-agency IMT of the size required to manage an event of the scale presented in the Exercise scenario. A common feature of major oil spills is that the response organisation requires the skills and experiences of both the government and industry sectors for effective management. ICC facilities need to reflect this requirement, particularly noting the majority of OPEPs draw upon the broader resources and arrangements of the National Plan.
7. The Exercise developed significant operational learning, which do not in their own right require a particular insight or remedial action. These lessons should be made available to the wider National Plan community, and the way this is implemented should be determined by the NPSCC.

Conclusion

Exercise Westwind represented a number of developments for the National Plan. It was the first time an offshore petroleum scenario had been exercised with an oil company leading the response operation. It was also the first National Plan exercise that truly tested the strategic management of an incident across multiple jurisdictions and sectors. As a result, the Exercise has presented new insight into the management of oil spill incidents in Australia and should be considered a success.

The Exercise provides an opportunity for incremental improvement but also presents a major capability development initiative. The integration of government and industry responders into combined teams was effective and supports the continued investment in the joint training initiatives of AMSA and AMOSC.



