

The Conduct of Post Event and Incident Analysis

Purpose The purpose of these guidelines is to outline the general arrangements for the conduct of post exercise and incident reviews.

Background The conduct of post exercise and incident reviews for the purpose of evaluating the performance of response arrangements and incident management is fundamental to the current and future effectiveness of the National Plan for Maritime Environmental Emergencies. It is only through critical evaluation of response management arrangements that the National Plan can seek to improve operational practice.

The National Plan therefore views post event review as a core component of the national response arrangements.

The conduct of post exercise analysis should form part of any exercise management plan. For major exercises an independent Evaluation Plan should be developed. The Attorney Generals Department Exercise Management Guidelines have been adopted by the National Plan and provide guidance on the review of exercises.

Post incident analysis

Post Event Reviews, for the purpose of these guidelines, encompasses two broad tasks:

- The systemic collection and analysis of information about an incident to make judgements about the effectiveness, efficiency and appropriateness of the response operation; and
- The implementation and dissemination of lessons learned to improve operational effectiveness for the future.

Post event review

This process is intended to provide guidance for the conduct of a post event review, embracing lessons management processes and should be read in conjunction with the Australian Emergency Management Handbook 8 – Lessons Management.

Preparation and pre planning are crucial to the conduct of the review and the lessons management process. Clear terms of reference for the conduct of the post event review and appropriate governance for the management and implementation of the review need to be established. A lessons management methodology must be determined prior to commencing collection. A straightforward method (as outlined in the Lessons Management Handbook 8) is the Observation, Insight, Lessons or OIL model.

Observation A record of noteworthy fact or occurrence seen during an activity, it is evidence or data collected based on what was observed. Observations may be positive or negative. Observations are raw data that has been de-identified and are not usually released outside of the review team.

Data obtained through observation might be supplemented by information collected through a review of documentation generated during the event. If this activity is to be conducted then that documentation selected for review must be agreed upon. The rationale for the decision made in this respect will also need to be recorded and incorporated into the methodology documentation. It should be noted that gaining access to documents, particularly in a multi-agency response, may present challenges.

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Insight	<p>A deduction drawn from observations that requires further analysis. An accepted methodology is the triangulation of observations:</p> <p>Three substantial observations from different sources providing an insight.</p> <p>Triangulation enhances the rigour of drawing insights and provides a more diversified source of evidence, limiting the opportunity for multiple observations from a single source to skew the data. Insights may be positive or negative.</p>
Lesson	<p>A viable course of action based on analysis of one or more insights that sustains positive actions or addresses an area for improvement. In setting out a methodology, it is also important to establish performance indicators and/or timelines for the conduct of the analysis.</p>

The review or 'lessons collection' team

Technical expertise

It is essential that technical expertise is represented within the collection team.

For marine pollution incidents it is critical to have someone with an understanding of response specific issues. Where possible, consider the utilisation of a collection team who are not directly involved in the incident response. This serves to reduce the possibility that personal experiences of the team members will influence the process.

Lessons management approach

A lessons management approach does not seek to attribute blame or fault. It seeks to identify issues and ways of addressing them, without the full and open cooperation of responders the lessons team will miss out on rich data. It is imperative to explain this approach and ensure that the 'just culture' approach is understood by interviewees at the commencement of the interview, especially when interviewing following a multi-agency response.

Data collection: observations

The established approach for the collection of observational data is through the interview of identified participants and a process for engagement of relevant stakeholders must be considered. It is worth noting that not all participants may be the source of noteworthy information: For example, it might be determined that the priority is to interview only those personnel who can provide longitudinal evidence; those involved over multiple days.

An interview schedule needs to be created to ensure comprehensive collection of data, acknowledging that access to interviewees (especially from other agencies) may be complicated by time delays.

Similar processes need to be applied when considering any document review: accessing documents, where ownership rests amongst several separate agencies, may prove difficult and time consuming. This factor should be weighed when considering a document review as part of the methodology.

The interview schedule should include a rotation plan for the lessons collection team with one person interviewing and one taking notes for each interview, ideally with at least one other person to be transcribing notes.

Creation of a set of standard interview questions may be of use to ensure that all aspects of the response are covered with all interviewees. It is worth exploring the option of having a technical expert involved in the framing of the questions to ensure pertinent technical data is collected.

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Data analysis

From developed insights it is possible to determine trends or themes; these can then be used to define learning opportunities. Trends or themes may be drawn out by the review team or as part of a plenary session with the identified participants. The advantage of the plenary session is that it provides an opportunity to validate the review the team’s analysis up to that point.

Trends or themes should relate directly to a root cause: They might be formed around identified elements of capability, such as:

- People/ personnel related matters
- Organisational issues/ leadership/ process/ doctrine
- Support/ facilities
- Training
- Equipment/ infrastructure

Groupings around other identified relevant subjects or topics are equally appropriate. Having analysed and structured the collected observations, recommendations or treatment options might be developed.

Data collation and analysis in this way can be represented in a simple spread sheet for audit and tracking purposes, see Figure 1 below.

Lessons identified v lessons learned

The lessons management process is one of iterative, incremental improvement. A lesson is only deemed to be learned when it is reflected in behavioural, policy and procedural change. Processes must be developed therefore that verify change and establish the appropriate authorising environment.

The dissemination of the lessons learned from post event analyses is essential for National Plan stakeholders to improve operational preparedness and practice. AMSA will maintain a central register of review reports and lessons learned from all exercises and incidents conducted under the National Plan framework. This register will be available for access by all stakeholders.

National Plan stakeholders conducting post event analyses have a responsibility to ensure that the lessons learned and actions to remedy those lessons are forwarded to AMSA in a timely manner.

Figure 1

Observation	Insight	People	Organisation	Support	Training	Equipment	Treatment Option	Owner
I am not authorised to hold a corporate credit card and could not organise meals for staff	Several key personnel from the lead agency had no access to corporate funds to pay for basic initial response needs.		Organisational financial procedures do not support emergency response personnel in the field				Develop a process to provide short notice out of hour’s access to funds. Given a three-day initial deployment with up to five staff and the need to purchase consumables, a minimum access amount of \$15,000 is recommended.	Dept. XYZ
There is no petty cash facility to assist in a response								
I had to use my own credit card to secure staff accommodation								

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