



# Maritime Environmental Emergency Response (in Western Australia)

## Incident Management System Basic Guide

### 1. THE DEPARTMENT OF TRANSPORT'S MARITIME ENVIRONMENTAL EMERGENCY RESPONSE INCIDENT MANAGEMENT SYSTEM

As the Hazard Management Agency (HMA) for Maritime Environmental Emergencies (MEE), the Department of Transport's (DoT) Maritime Environmental Emergency Response (MEER) Team utilises an Incident Management System (IMS), called the MEER IMS. The system is specifically designed for the management of MEE incidents (however it can also be adjusted and applied to other hazards) and its purpose is to support the management of and response to MEE incidents in an effective, efficient, coordinated, and controlled manner, aligned to standards and guidelines outlined in the National Plan for Maritime Environmental Emergencies and the State Emergency Management Framework.

The design of the MEER IMS includes three key components:

- It aligns to and applies the principles and structure of the Australasian Inter-service Incident Management System (AIIMS). The AIIMS is an integral part of emergency management doctrine for the emergency services industry in Australia. The system enables Australian agencies to come together to resolve incidents through an integrated and effective response.
- It aligns to and applies the forms and processes of the Incident Command System (ICS). The ICS is a management system designed to enable effective and efficient incident management by integrating a combination of personnel, procedures, forms and communications. It enables incident managers to identify the key concerns associated with an incident (often under urgent conditions) and thus to seek to resolve the incident through the application of response resources controlled by an Incident Management Team (IMT) without sacrificing attention to any component of the command system, including safety.
- It incorporates a specific Maritime Casualty Control function as defined in the National Plan guidance on Maritime Casualty Management. The guidance on Maritime Casualty Management is a key part of the National Plan and outlines a set of specific principles for Maritime Casualty Control and an approach where a Maritime Casualty Control unit is established as part of a broader IMT, aligned to AIIMS structures and principles.

The MEER IMS is one of many incident management approaches that can be used by Port Authorities in the management of MEE incidents as a Controlling Agency. Under the SHP-MEE or other related Emergency Management legislation, regulations or procedures, Port Authorities are not required to utilise the MEER IMS specifically as part of their arrangements to manage MEE incidents in Port Waters. This guideline therefore is simply provided as a general Incident Management System Guideline, based around the MEER IMS approach, that Port Authorities can utilise or consider as part of their individual incident management approach as a potential Controlling Agency for MEE incidents in Port Waters.

## 2. THE FUNDAMENTALS OF INCIDENT MANAGEMENT (AIIMS)

### Principles:

- Management by Objectives
  - A process of consultative management where the Incident Controller, in consultation with the Incident Management Team, determines the desired outcomes of the incident. These outcomes, or incident objectives, are then communicated to everyone involved, so they know and understand the direction being taken during the operation. At any point in time, each incident can only have one set of objectives and one Incident Action Plan for achieving these.
- Functional Management
  - Functional management means the utilisation of specific functions to manage an incident, AIIMS requires the key functions of:
    - Control: The safe management of all activities necessary for the resolution of an incident. There can only be one Incident Controller managing an incident at any one time and they are accountable for all the functions of incident management.
    - Planning: The development of plans for the resolution of an incident aligned to incident objectives.
    - Intelligence: The collection, analysis and dissemination of incident situation information to aid in control and planning.
    - Operations: The tasking and application of resources to resolve an incident aligned to incident plans.
    - Logistics: The acquisition and provision of resources, facilities and services and to support the achievement of incident objectives.
    - Public Information: The provision of warnings, information and advice to the public and liaison with the media and affected communities in regard to the incident.
    - Finance: The management of accounts for acquisition of supplies and equipment, the management of claims and the processing of cost data and estimates for the incident.

**Note:** In the context of the MEER IMS, the Maritime Casualty Control Unit is also considered a key function for MEE incidents where a Maritime Casualty or Marine Transport Emergency is occurring.
- Span of Control
  - A concept relating to the number of groups or individuals which can be successfully supervised by one person. Where span of control is exceeded, the supervising officer should consider delegating responsibility to others. Up to five reporting groups or individuals is desirable.
- Flexibility
  - An incident management system should be able to be applied to differing hazards, utilised by all agencies involved and also applicable to all incident levels.
- Unity of Command
  - Responders must work to achieve one set of common objectives. Similarly, individuals should report to only one supervisor.

**Structure:**

Differing teams are responsible for the management of the strategic, operational and response components of an incident. This is generally achieved through the following key Teams:

- Crisis Management Team (Strategic Coordination)
  - Structured to manage the corporate/organisational or strategic impacts or concerns from a major incident and should include components such as:
    - Executive Management (a single Crisis Management Team Leader must be identified)
    - Stakeholder/Public Relations
    - Legal and Policy
- Incident Management Team (Operational Control)
  - Structured to manage the overall incident inclusive of all the key functions of incident management (as outlined in the functional management principle) and should include the key positions of:
    - Incident Controller: Responsible for overall control of the incident and accountable for all functions of incident management.
    - Functional Officer(s): Appointed by the Incident Controller and responsible for the management of their delegated function.
    - Unit Coordinator(s): Appointed by a Functional Officer and responsible for the coordination of delegated functional responsibilities as per span of control management.
- Maritime Casualty Control Unit (Technical Control)
  - Structured to manage the Maritime Casualty Control Component of an incident and nested in the broader IMT as a specific function (as outlined in the functional management principle) and should include the key positions of:
    - Maritime Casualty Officer: Appointed by the Incident Controller and responsible for the management of the maritime casualty component of the incident.
    - Liaison Officer(s) and Advisor(s): Engaged by the Maritime Casualty Officer as required.
    - Salvage, Towage, Owner and Insurance Representatives: Engaged by the Maritime Casualty Officer as relevant.
    - Harbour Master or Place of Refuge Representatives: Engaged by the Maritime Casualty Officer as relevant.
- Field Response Teams (Field Activities)
  - Structured to achieve response actions under the coordination of the Operations Function and should include the key positions of:
    - On Scene Commander
    - Sector Commander(s)
    - Team Leader(s)
    - Individual Teams, Personnel or Resources

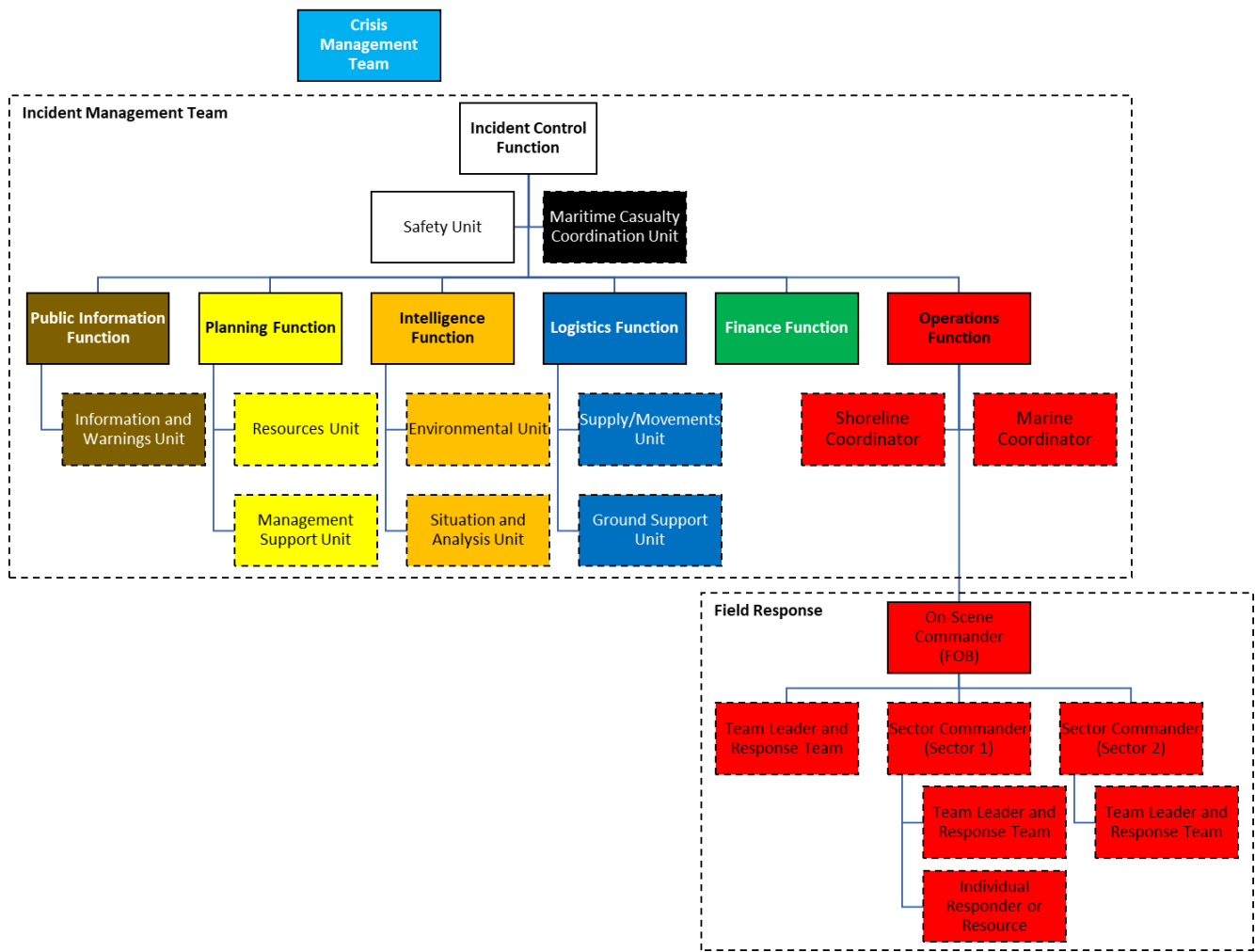


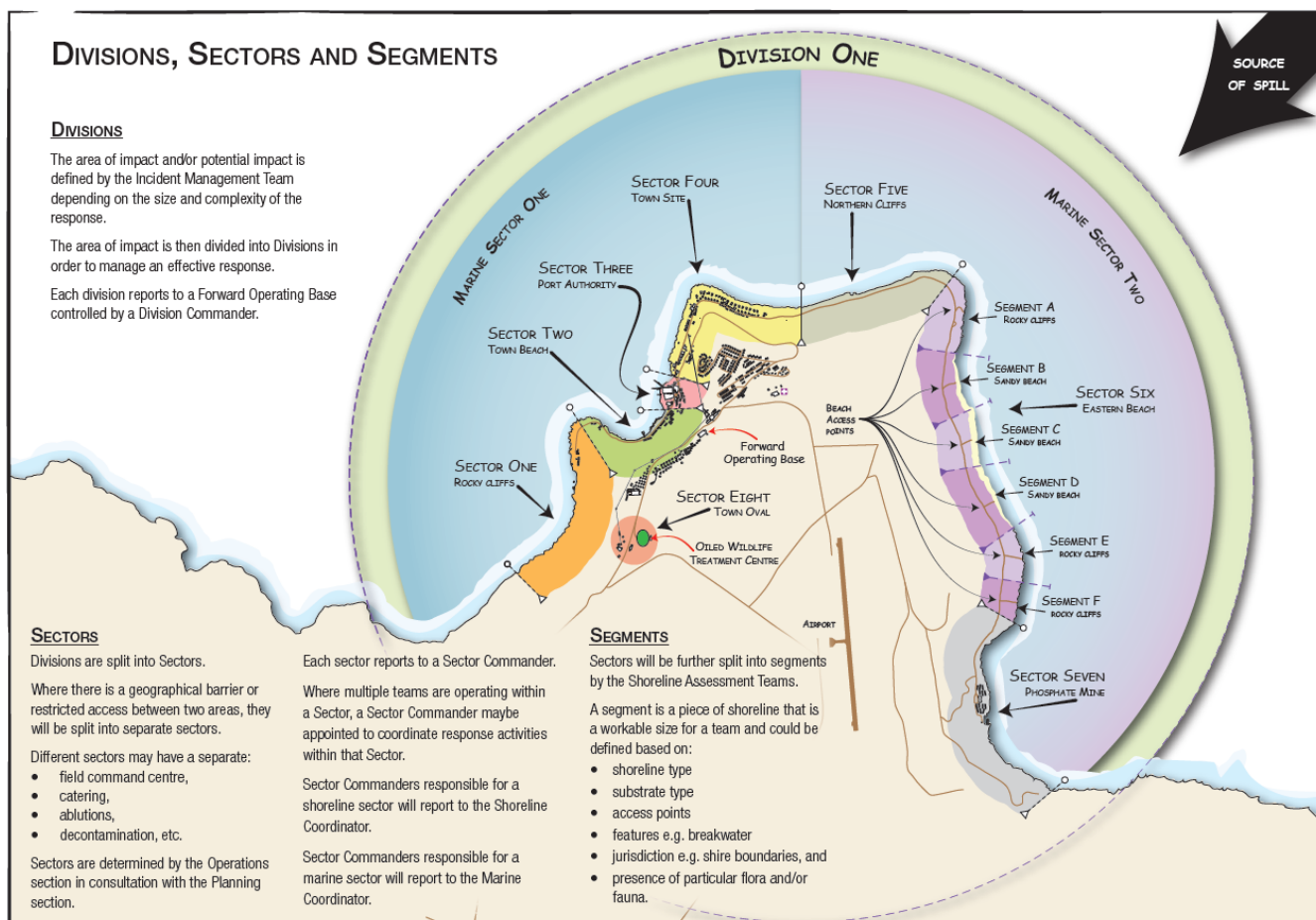
Figure A – Example Incident Management Structure

**Note:** For specific information relating to roles and responsibilities as per the structure outlined above and specifically for MEE Incidents, the MEER IMS applies the AMSA Aide Memoir for Marine Pollution Response, available via the AMSA website.

## Facilities and Coordination Locations:

Responders should be resourced with appropriate facilities and coordination locations for the conduct of incident management and response. This is generally achieved through the following key facilities/locations:

- Incident Control Centre
  - Suitable to facilitate the activities of the Incident Management Team and is generally an office space that has suitable displays and AV/IT provisions for the management of an incident.
- Forward Operating Base and Staging Areas
  - Close to the actual incident site and able to facilitate the activities of the On-Scene Coordinator, along with the management of both response personnel and equipment requirements such as briefing areas, rest/amenity areas and laydown areas.
- Response Divisions, Sectors and Segments
  - Geographical areas and control points that allow for the coordinated management of response activities as per span of control management. They should also include provisions for site control, decontamination, safety (including PPE) management and waste management in MEE incidents.



**Figure B – The MEER IMS Concept of Operations**

**Note:** This document is available on the DoT Maritime Environmental Emergency website

### 3. INCIDENT ACTION PLANNING (ICS)

#### Incident Management Cycle:

The ICS includes specific processes for the conduct of planning to produce an Incident Action Plan (IAP). The Planning Cycle, or "Planning P" as it's generally referred to, establishes a continuum for planning in two phases, the Initial Response Phase and the Proactive Phase. Sound and timely planning provides the foundation for effective incident management. The planning process represents a template that includes all steps that an Incident Management Team should take to develop and disseminate an effective IAP.

**Note:** This guide will only address planning processes linked to the Initial Response Phase of the planning cycle (the vertical leg of the "Planning P") although the MEER IMS incorporates both phases of the ICS "Planning P".

In the initial stages of an emergency a planning process will commence in conjunction with the initial response to an actual or impending incident, thus the Initial Response Phase process makes provisions for this and includes the steps required for the incremental development of a basic written IAP, along with the ongoing management of response actions.

The steps of the initial response phase are:

- First – Facilitate the following:
  - Initial Assessment (commence compiling initial response forms/displays)
  - Notifications (inform relevant stakeholders an incident is occurring)
  - Implement Pre-determined Response Plan (including mobilisation of resources and activation/implementation of pre-determined response plans)
- Second – A continuous cycle of:
  - Work (coordinate and conduct response activities, including facilitation of required planning and tasking for the application of pre-determined Response Plans or for actions required that are beyond pre-determined Response Plans and outlined as part of the previous incident brief)
  - Assess (evaluate the current situation, resource and task states, response effectiveness and possible future developments and update initial response forms/displays so they are finalised and ready for the next incident brief)
  - Incident Brief (utilise initial response forms/displays as part of a meeting of the Incident Management Team to increase situational awareness and provide direction on required actions/outcomes for the next work period).

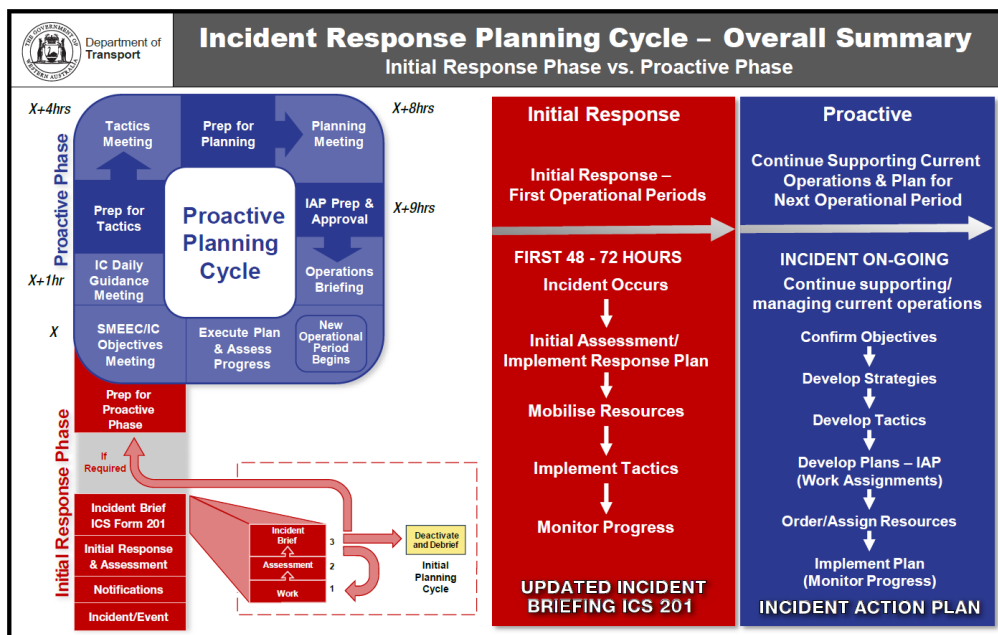
**Note:** Following the conduct of each Incident Brief the initial response forms/displays are to be recorded and collated for dissemination as a basic written IAP.

The initial response phase continues through the cycle of work-assess-incident brief at a frequency determined by the Incident Controller based in incident need until either of the following:

- The incident is adequately resolved, and the response can be ceased

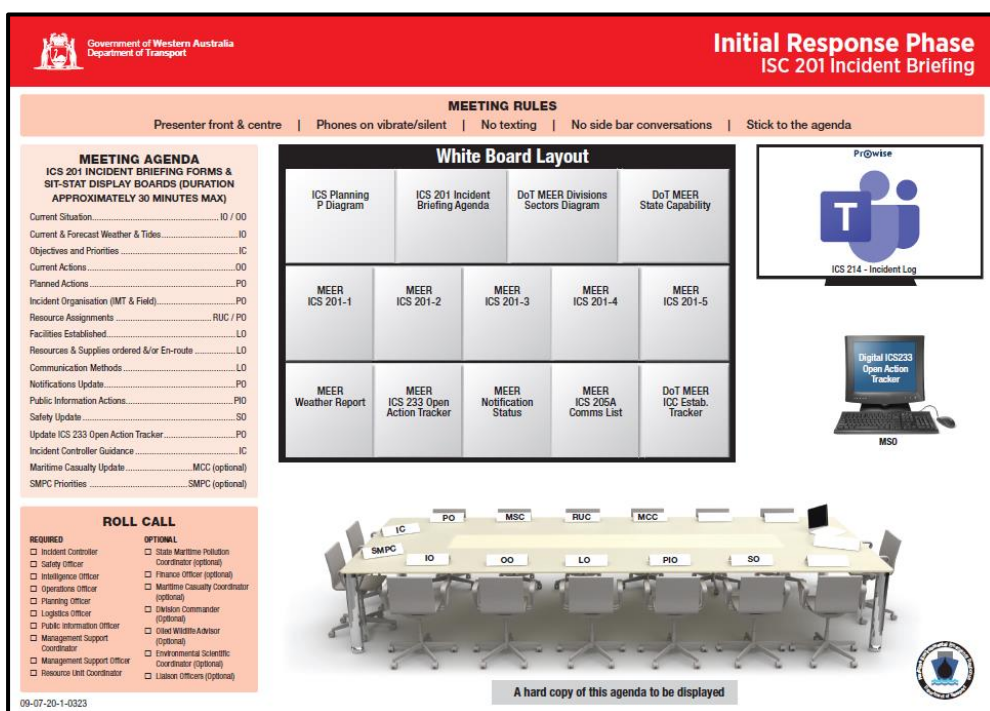


- The incident escalates to a level of complexity/resourcing that allows for transition to the Proactive Phase of the “Planning P” for the conduct of deliberate Incident Action Planning and proactive incident management.



**Figure C – The MEER IMS Planning Process**

**Note:** This document is available on the DoT Maritime Environmental Emergency website



**Figure D – The MEER IMS Initial Response Phase Incident Briefing and COP Display**

**Note:** This document is available on the DoT Maritime Environmental Emergency website

## Incident Action Plan – Initial Phase:

The ICS includes specific forms for the development and production of a written Incident Action Plan (IAP). The IAP is a tool used to define and communicate the incident objectives, strategies and resources, and other information relevant to the control of an incident. It is designed to ensure all incident personnel are working towards one set of objectives and incident arrangements. There can only be one current IAP at any time and every incident requires an IAP for effective incident management and as part of required incident records. The IAP should be based on the Common Operating Picture (COP) for the incident (the actual incident situation) and ICS makes provisions for a basic IAP as part of the Initial Response Phase and a Detailed IAP as part of the Proactive Phase.

**Note:** This guide will only address IAP forms linked to the Initial Response Phase of the planning cycle (the vertical leg of the “Planning P”) although the MEER IMS incorporates a basic and detailed IAP for both phases of the ICS “Planning P” respectively.

In the initial stages of an emergency a detailed IAP will not be feasible, hence Initial Response Phase process makes provisions for this and includes a limited number of forms required for the creation of a basic written IAP while also being part of the initial COP for the incident. The development and production of the basic IAP requires the steps outlined earlier as part of the Initial Response Phase process to be conducted. The contents of the basic written IAP as part of the Initial Response Phase are the following forms:

- Current Situation (ICS 201-1)
  - This form is managed by the Intelligence Function and summarises the details of the incident including:
    - Incident Details (Name/Number, Type, Location)
    - Date/Time (when the incident started)
    - Incident Map/Diagram (drawing, map/chart, digital/GIS)
    - Situation Summary (details known about the incident)
- Summary Current Actions (ICS 201-2)
  - This form is managed by the Planning and Operations Function and summarises the incident objectives and required actions including:
    - Incident Level and Controlling Agency
    - Current and Planned Objectives (also if they have been achieved)

**Note:** These can be pre-drafted in some cases

    - Current and Planned Actions/Strategies/Tactics (including time and if they have been achieved)
- Current Organisation (ICS 201-3)
  - This form is managed by the Planning Function or Resources Unit and summarises the incident structure and key facilities/locations including:
    - Incident Commander
    - Liaison Officers
    - Incident Management Team Functions and Positions
    - Key Field Response Coordination Positions
    - Key Incident Management Locations (ICC)



- Resources Summary (ICS 201-4)
  - This form is managed by the Resources Unit and Logistics Function and summarises the resources allocated to the incident and their status including:
    - Resource Name/Identifier/Descriptor
    - Resource Supplier/Owner
    - Date/Time ordered and expected to arrive
    - If the resource has arrived
    - Resource Location/Area of Operation
- Site Safety and Control Analysis (201-5)
  - This form is managed by the Safety Unit and Operations Function and summarises the safety hazards and controls for the incident and their status including:
    - Hazard Assessment Details
    - Site Control and Location Details
    - Medical and Evacuation Details
    - General Safety, Sustainment and Welfare Details
- Contact List (ICS205A)
  - This form is managed by the Planning Function or Resources Unit and summarises the contact details of key personnel for the incident including:
    - Position
    - Name
    - Organisation
    - Contact Details
- Notifications Status Report (non ICS form)
  - This form is managed by the Control Function and Planning Function and summarises the notifications that have been made for the incident including:
    - Internal and External Notifications
    - Time of notification and who made the notification
    - Contact details of organisation/person notified
    - General Notes

**Note:** These can be pre-drafted in some cases
- Open Action Tracker (ICS 233)
  - This form is managed by the Planning Function and summarises the actions that are required to be completed that are not captured in a Field Task Assignment and their status throughout the incident including:
    - Action description
    - Responsible position/area (and if they are aware)
    - Start Date/Time and Target/Actual completion Date/Time
    - Status (planned, in-progress, complete)
    - General Notes

**Note:** These forms are available on the DoT Maritime Environmental Emergency Website

**Common Operating Picture:**

A Common Operational Picture (COP) is a single display of relevant information that is shared and common across all levels and for the facilitation of collaborative planning, effective decision making and good situational awareness. Every Incident Management team should develop and maintain a COP for the duration of an incident, including information such as:

- Maps/Charts/Imagery
- Models/Trajectories/Predictions
- Incident details/Situation Reports
- Incident Objectives
- Coordination/control arrangements
- Task/Action Tracking or Status
- Resource Tracking or Status
- Key locations and contact details

**Note:** When displayed centrally (either in hard copy or digitally) in an Incident Control Centre, the forms listed above serve as the central component of a Common Operating Picture in an Incident Control Centre and for use during Incident Briefings by the Incident Management Team.

## 4. OPERATIONAL TASK MANAGEMENT

### Operational Tasks:

Operational Tasks ensure the work and plans developed in the Incident Management Team actually results in the work required in the field response occurring. Operational Tasks should be linked to determined strategies and tactics that are linked to the incident objectives and details outlined in the IAP. Operational Tasks must be communicated to the teams that are required to carry them out, this is generally done through the provision of a written or verbal Field Task Assignment (FTA). Written FTAs are recommended as they provide a record of required response actions for monitoring by both the Incident Management Team and the response team to which the task was issued.

**Note:** A template of a Field Task Assignment (ICS 204A) utilised as part of the MEER IMS is also available on the DoT Maritime Environmental Emergency Website

### Operational Briefings:

Briefings are vital to ensuring operational response teams are aware of the Incident Action Plan and specific tasks or actions they are required to complete to resolve the incident, safely and as outlined in the plan and per incident objectives. The SMEACS format provides a structured approach for providing operational briefings to response teams and individual responders. The SMEACS briefing format includes:

- Situation (Incident and Weather)
- Mission (Objectives and Specific Tasks)
- Execution (Operational Details for the achievement of tasks)
- Administration and Logistics (resource/supply details and reporting/documentation requirement)
- Control/Communications (contacts, key personnel and response structure)
- Safety (hazards and risks, controls and mitigations, medical and muster points)
- Questions (clarify understanding and address concerns)

All operational briefs should be provided in conjunction with a copy of the IAP (where relevant) and written field task assignments (where feasible) to ensure all have a good situational awareness and record of the incident and required response actions.

**Note:** For further information relating to the use of SMEACS and the delivery of briefings for MEE Incidents, the MEER IMS applies the AMSA Aide Memoir for Marine Pollution Response (<https://www.amsa.gov.au/environment/maritime-environmental-emergencies/national-plan/>).

## 5. MARITIME CASUALTY MANAGEMENT

### Maritime Casualty Management Process:

The MEER IMS includes specific processes for the conduct of Maritime Casualty Management as a sub-function of the overall IMT. This process includes a meeting agenda and management documentation. Cross stakeholder communications and actions are the foundation for effective Maritime Casualty Management aligned to the principle that operational management of a Maritime Casualty, and ultimate responsibility, rests primarily with the ship owner/operator and, by extension, the commercial sector, i.e. towage and salvage contractors. The maritime casualty management process represents a template ensures a maritime casualty coordination unit can effectively oversee maritime casualty issues.

The maritime casualty management process runs in parallel to the broader ICS planning processes, regardless of if that is in the initial or proactive phase. Ultimately it seeks to achieve the initial assertion of the Maritime Casualty issue and then facilitate ongoing oversight of management actions.

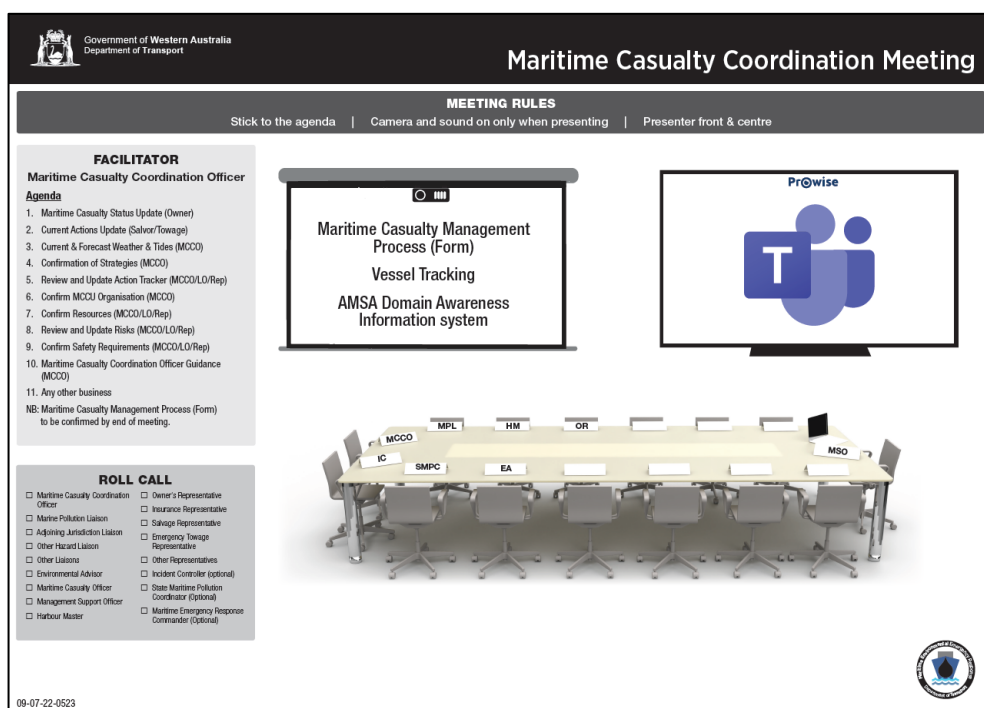
The steps of the maritime casualty management process are:

- First – Establish Maritime Casualty Coordination Unit (MCCU):
  - Initial Assessment (commence compiling Maritime Casualty Management documentation/displays)
  - Establish Unit (inform relevant stakeholders and arrange membership and structure of MCCU)
  - Appoint a dedicated Maritime Casualty Coordination Officer to lead the MCCU and the application of the Maritime Casualty Management Process.
- Second – A continuous cycle of:
  - Maritime Casualty Coordination Meeting (utilise Maritime Casualty Management form as part of a meeting of the MCCU to increase situational awareness and determine direction on required actions/outcomes)
  - Work Period (conduct required actions/outcomes and prepare for next meeting)

**Note:** Following the conduct of each Maritime Casualty Coordination Meeting the Maritime Casualty Coordination form is to be recorded and collated for dissemination, inclusive of the required actions/outcomes for the next work period.

The Maritime Casualty Coordination Process continues through the cycle of 'work-meet' at a frequency determined by the Maritime Casualty Officer based on incident need until either of the following:

- The maritime casualty returns to normal operations
- The maritime casualty departs the jurisdictions (State or Port Waters)



**Figure D – The MEER Maritime Casualty Coordination Meeting**

**Note:** This document is available on the DoT Maritime Environmental Emergency Website.

### Maritime Casualty Coordination Documentation:

The Maritime Casualty Coordination Process includes a specific form for the facilitation of Maritime Casualty Coordination Meetings and the documentation of Maritime Casualty Coordination Actions. This is in effect a sub-plan to the overarching IAP and is a tool used to define and communicate the maritime casualty status, control strategies, actions, stakeholders, and other information relevant to the Coordination of a maritime casualty. It is designed to ensure all personnel as part of the MCCU are working towards one set of strategies and coordination arrangements. The development and production of this form occurs as part of the Maritime Casualty Coordination Process and in particular during the Maritime Casualty Coordination Meetings. The contents of Maritime Casualty Coordination Forms are as follows:

- Maritime Casualty Details and Status
  - This form is managed by the Maritime Casualty Coordination Officer, in conjunction with Salvage, Towage, Owner and Insurance Representatives and summarises the details of the maritime casualty including:
    - Incident Details (Name/Number, Type, Location)
    - Date/Time (when the incident started)
    - Incident Map/Diagram (drawing, map/chart, digital/GIS)
    - Casualty Details (Ship characteristics)
    - Casualty Status (Ship state)

- Maritime Casualty Coordination Plan (based on ICS 201-2 and ICS 233)
  - This form is managed by the Maritime Casualty Coordination Officer, in conjunction with the Harbour Master and Salvage, Towage, Owner and Insurance Representatives and summarises the strategies and required actions including:
    - Current and Planned Strategies (also if they have been achieved)  
**Note:** These can be pre-drafted in some cases
    - Key Facilities/Locations - Including Place of Refuge or Safe Harbour (as required)
    - Current and Planned Actions/Outcomes (including Responsible position/area, Start Date/Time and Target/Actual completion Date/Time, Status as planned, in-progress, or complete, and General Notes)
- MCCU Structure and Key Stakeholders (ICS 201-3)
  - This form is managed by the Maritime Casualty Coordination Officer and summarises the incident structure and key stakeholders including:
    - MERCOM
    - SMPC
    - Controlling Agency
    - Incident Controller
    - Maritime Casualty Coordination Officer
    - Liaison Officers and other Representatives
    - Other Contacts**Note:** Should include for all, their Name, Organisation and Contact Details
- Maritime Casualty Safety and Control Analysis (201-5)
  - This form is managed by the Maritime Casualty Coordination Officer, in conjunction with the Harbour Master and summarises the safety hazards and controls for the Maritime Casualty and their status including:
    - Hazard Assessment and Impact Control Details
    - Medical and Evacuation Details
    - General Safety, Sustainment and Welfare Details

**Note:** This form is available on the DoT Maritime Environmental Emergency Website.