



**SEMC**  
STATE EMERGENCY  
MANAGEMENT COMMITTEE

# HAZMAT Annex B Space Re-entry Debris (SPRED)

## STATE HAZARD PLAN

RESPONSIBLE AGENCY

Western Australia Police Force

APPROVED BY

State Emergency Management Committee

RESOLUTION NUMBER

10/2026

VERSION NUMBER

4.00

DATE OF APPROVAL

12 MARCH 2026

DATE OF EFFECT

24 MARCH 2026

REVIEW DATE

MARCH 2031

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## Amendments Table

Date	Details	Amended by
Nov 2000	Complete re-issue	6416 (WA Police Force)
Dec 2001	Update Contacts / Terminologies	6416 (WA Police Force)
Mar 2010	Transfer to WESTPLAN Template Review and update	87406 (WA Police Force)
July 2014	Update of hazard history and titles of Australian Government agencies as advised by EMA	87406 (WA Police Force)
2015	Review and update	87406 (WA Police Force)
May 2016	Statement of fact amendments	SEMC Secretariat
August 2018	New format and attached to State Hazard Plan – Hazardous Materials (HAZMAT) as an annex, statement of fact changes, removal of duplication with the State Emergency Management (EM) Plan, inclusion of capability baseline and assurance activities, machinery of Government changes, other changes as relevant to the plan.	WA Police Force
December 2018	Version 01.01 - Amendments approved by SEMC (Resolution Number 90/2018) as per State Emergency Management documents amendments table v02.00.	SEMC Business Unit
May 2019	Version 01.02 – Minor amendments approved by SEMC (Resolution Number 41/2019) as per State Emergency Management documents amendments table v02.01.	SEMC Business Unit
October 2019	Version 01.03 – Minor amendments approved by SEMC (Resolution Number 91/2019) as per State Emergency Management documents amendments table v02.02.	SEMC Business Unit/ WA Police Force
August 2020	Version 2.0 – Complete review and update approved by SEMC (Resolution Number 57/2020).	WA Police Force

Date	Details	Amended by
December 2021	Version 3.00 - Accessibility redesign approved by SEMC (Resolution Number 32/2021). Statement of fact amendments and amendments to improve accessibility as per State emergency management documents <a href="#">amendments table December 2021</a> .	SEMC Business Unit
December 2022	Version 3.01 - Amendments approved by SEMC Executive Officer (Resolution Number 17/2021). Statement of fact changes and updated hyperlinks to new SEMC website as per <a href="#">amendments table December 2022</a> .	SEMC Business Unit
October 2023	Version 3.02 - Consequential amendments approved by SEMC to reflect change in terminology from 'welfare' to 'emergency relief and support' and related terms (resolution number 77/2023) and statement of fact and accessibility amendments approved by the SEMC Executive Officer (resolution number 17/2021) outlined in State EM documents <a href="#">amendments table October 2023</a> .	SEMC Business Unit
August 2025	Version 3.03 - Minor version approved to acknowledge SEMC approved comprehensive review extension to December 2025.	SEMC Business Unit
March 2026	Version 4.00 - Amendments approved by SEMC (resolution number 10/2026) following the 2025 Comprehensive Review.	WA Police Force

The SEMC acknowledges the Aboriginal peoples throughout the state of Western Australia as the Traditional Custodians of the lands where we live, work and volunteer. We recognise Aboriginal peoples' continued connection to land, waters and community, and pay our respects to Elders both past and present.

This document was designed to be viewed electronically and aims to meet the West Australian Government's accessibility and inclusivity standard, including meeting the World Wide Web Consortium's Web Content Accessibility Guidelines version 2.1 (WCAG 2.1) at level AA. If anything in this document is inaccessible to you, or you are experiencing problems accessing content for any reason, please contact the State Emergency Management Committee Business Unit at [semc.policylegislation@dfes.wa.gov.au](mailto:semc.policylegislation@dfes.wa.gov.au).

All of the State emergency management legislation and documents can be accessed via the [State Emergency Management Framework page of the State Emergency Management Committee website](#).

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**Part One:**  

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**Introduction**

The State Hazard Plan HAZMAT Annex B Space Re-entry Debris (annex) provides an overview of arrangements for the management of space re-entry debris (SPRED) emergencies in Western Australia, in accordance with the Australian Government Space Re-entry Debris Plan (AUSSPREDPLAN). It contains information on prevention, preparedness, response and initial recovery.

The annex refers to a range of existing plans and documents relating to SPRED but does not duplicate the information contained in these, instead it provides directions to websites or other sources where further information can be obtained if required.

## 1.1 Scope

SPRED presents a particular emergency management challenge for the State, as many of the specific resources and skills required for responding to an impact are limited or do not exist in Western Australia (WA). As such, the annex provides for significant Australian Government involvement in monitoring before impact, tracking/locating SPRED immediately after impact, and other Commonwealth assistance in support of the State response.

The objective of this annex is to outline the coordination activities between the State and Australian Government agencies and other relevant organisations for a SPRED emergency. This coordination framework is based on:

- The designation of the Commissioner of Police as the Hazard Management Agency (HMA) responsible for the management of a SPRED emergency in WA.
- The availability of a 24-hour state-level contact facility for receipt of initial incident reports by the HMA.
- The deployment of additional resources from State and Australian Government to support the WA Police Force.

## 1.2 Hazard Definition

A SPRED emergency is defined as the occurrence or imminent occurrence of the re-entry of human-made space objects through the Earth's atmosphere, that requires a significant and coordinated incident response.

Human-made space objects may include space vehicles and satellites (see Appendix B Glossary).

## 1.3 Organisational Roles and Responsibilities

The Commissioner of Police is the Hazard Management Agency (HMA) for SPRED emergencies.

The Fire and Emergency Services (FES) Commissioner is the HMA for the actual or impending spillage, release or escape of a chemical, radiological or other substance that is capable of causing loss of life, injury to a person or damage to the health of a person, property or the environment. As all SPRED impact sites should be treated as a potentially serious HAZMAT situation, with possible activation of State Hazard Plan – HAZMAT response arrangements until expert advice recommends otherwise, the responsibilities and arrangements under State Hazard Plan – HAZMAT also apply.

Information regarding the roles and responsibilities of relevant agencies under this annex for prevention, preparedness, response and recovery activities are detailed in Appendix C.

It is recommended that each agency with a role or responsibility under this annex has appropriate operational procedures detailing their response arrangements in accordance with, and complimentary to this annex.

### 1.3.1 National Coordination Mechanism (NCM)

The NCM, chaired by the National Emergency Management Agency (NEMA), is made up of representatives from relevant Australian Government agencies, jurisdictions and other organisations as required. Its role is to evaluate, forward plan and provide advice on any operational and technical issues related to AUSSPREDPLAN and COMDISPLAN activation and, if required, contribute to the development of a SPRED incident action plan.

## 1.4 Related Documents and Legislation

There are five core United Nations Treaties which assist in promoting transparency and provide information used in preventing and recovering from SPRED emergencies. These are:

- Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty)
- Convention on Registration of Objects Launched into Outer Space (Registration Convention)
- Convention on International Liability for Damage Caused by Space Objects (Space Liability Convention)
- Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (Rescue Agreement)
- Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Treaty).

This annex is to be read in conjunction with the State Hazard Plan – HAZMAT and the following documents:

- The Australian Contingency Plan for SPRED (AUSSPREDPLAN)
- The Australian Government Disaster Response Plan (COMDISPLAN)
- Plans from South Australia and the Northern Territory (as the footprint of SPRED could cross State borders).

Legislation relevant to this annex include but are not limited to:

- *Space (Launches and Returns) Act 2018*
- *Emergency Management Act 2005*
- *Emergency Management Regulations 2006.*



**Part Two:**

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**Prevention and  
Mitigation**

## 2.1 Responsibility for Prevention and Mitigation

As the HMA, the Commissioner of Police, has overall responsibility for risk reduction aspects of SPRED events, within the limitations of legislation, resource capabilities and capacity.

Due to the nature of this hazard, there are extremely limited prevention and mitigation activities that can be implemented from a state or HMA perspective, however there are strategies that can be implemented to manage the potential risk and impact to the community and environment.

No satellites containing radioactive fuel and meant for Earth's orbit have been launched since 1988; however, there remain a number of radio-isotopic thermoelectric generators, nuclear reactor fuel cores and nuclear reactors known to be in orbit. Most other satellites and space objects in orbit contain other toxic, non-nuclear hazardous materials such as Hydrazine and Beryllium, with a high probability of surviving re-entry and thus posing a risk on the ground.

Most re-entries, including booster rockets, shielding and returning payloads are scheduled and controlled by the launch agency.

Smaller objects tend to be destroyed during the re-entry process due to extremes of heat and dynamic forces but with larger objects, 10-40% of the structure will survive re-entry and impact on Earth.

For planning and preparedness purposes, a SPRED footprint may be approximately 1000 kilometres long and 40 kilometres wide.

## 2.2 Mitigation Strategies

The key strategy utilised to manage the potential risk and impact of a SPRED event is pre-established control and coordination arrangements

that facilitate an appropriate response. Below outlines some of these key arrangements.

- United Nations Treaties (listed in 14 of this annex) - the potential for SPRED incidents is closely monitored by organisations around the world
- Australian Government's Australian Space Agency (ASA)- where possible, the ASA will provide advice to NEMA's National Situation Room (NSR) regarding tracking and mapping SPRED and the nature of any risk to Australian interests
- AUSSPREDPLAN Phases and Activities:
  - STANDBY - AUSSPREDPLAN is maintained in standby phase as the default condition. Under STANDBY NEMA monitors potential situations, undertakes contingency planning for potential responses and training and exercises in the use of AUSSPREDPLAN.
  - ALERT - this phase is declared when a space debris re-entry event is likely to impact Australia and allows for jurisdictions and agencies to be brought to an enhanced level of preparedness.
  - ACTIVE - when an object has impacted Australia or its territories, and an Australian Government response is required. Post-impact activity is managed under relevant state and territory arrangements.



**Part Three:**  

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**Preparedness**

## 3.1 Responsibility for Preparedness

The Commissioner of Police, as HMA, has overall responsibility for State preparedness in relation to SPRED within WA. To ensure that this responsibility is met, the WA Police Force preparedness activities focus on maintaining essential emergency management capabilities.

This includes developing, maintaining, reviewing and exercising arrangements for the hazard of SPRED, as delegated by the State Emergency Management Committee (SEMC), and informing local government planning arrangements to enable an appropriate response at the local level.

The focus of this preparation is to enable any such incident to be responded to promptly and efficiently, to facilitate the use of all available resources and to ensure timely liaison with Australian Government agencies.

NEMA is responsible for the preparation and maintenance of the Australian contingency plan for SPRED (AUSSPREDPLAN). AUSSPREDPLAN outlines the Australian Government communication and information flow arrangements to manage the risk posed by SPRED which may impact Australia, and how Australian Government support to any SPRED impact will be provided and managed.

## 3.2 Preparedness Arrangements

Some general planning for response may occur before re-entry; however, the lack of precise information, particularly on timing and location of possible re-entry of an uncontrolled object over Australia, will mean detailed planning of response activities for specific locations will not normally be possible until after re-entry and impact occurs.

The location of the SPRED impact area (footprint), the availability of agencies, and the time required to reach the footprint complicate the manner in which most eventualities can be dealt with. For example, there could be multiple locations requiring activation of this plan for a single space vehicle. In other circumstances, a space vehicle may encounter difficulties during the initial

launch and subsequently not reach its planned orbit. In this case the space vehicle may re-enter within a relatively short period of time from hours to days.

WA Police Force, on behalf of the HMA, has established notification protocols with the Australian Government to warn of orbital decay that may traverse WA, refer to section 3.3.1 Australian Government assistance.

### 3.2.1 Local and district hazard emergency management plans

Due to the nature of this hazard requiring a state-level response, the arrangements contained in this document apply to any local area where a SPRED emergency occurs.

Each Local Emergency Management Committee (LEMC) should consider whether their local planning arrangements would enable an appropriate response to an emergency within their area of responsibility and identify resources which may be utilised at a higher level, ensuring, as far as practicable, that local contacts and resource lists are up to date. The HMA should lead discussion and planning for SPRED at the Local Emergency Management Committee (LEMC), if required.

A SPRED emergency within a local area is likely to require the implementation of arrangements to assist in search and rescue, a hazardous materials (HAZMAT) response, and an appropriate health response. These arrangements should be prepared by the relevant HMA/lead agency in consultation with the LEMC.

Areas without a permanent search and rescue facility should detail arrangements for the establishment of temporary facilities.

## 3.3 Inter-jurisdictional Support Arrangements

### 3.3.1 Australian Government assistance

Due to the international nature and notification processes of SPRED emergencies involving orbital decay, NEMA will coordinate Australian Government agency activities from the time that tracking data indicates a possibility that a SPRED impact will occur in Australian territory within seven days, including:

- maintenance of the flow of information to affected authorities within Australia
- maintenance of communications with relevant overseas authorities
- conduct of normal disaster operations support, as required.

Following initial impact, the Australian Government may, on request, carry out actions to search for, detect and retrieve space debris in support of the State. Requests for assistance from the state will be coordinated by NEMA.

The provision of Australian Government non-financial assistance for an emergency is dependent upon criteria established under the Australian Government Disaster Response Plan (COMDISPLAN). The State arrangements and process for requesting Australian Government assistance are detailed in State EM Policy section 5.10, State EM Plan section 5.6 and State EM Response Procedure section 4.20

### 3.3.2 Assistance from overseas

Through the Australia New Zealand Policing Advisory Agency Memorandum of Understanding for Police Assistance to Neighbouring States within Australia and New Zealand, WA Police Force may request inter-jurisdictional police assistance for a SPRED emergency that is beyond the normal capacity of WA Police Force to maintain a specialist response or support from its own resources.

Any other overseas assistance (and the process involved) will need to be determined at the time of the incident and will be coordinated by NEMA, via the Australian Government Reception of International Assistance Plan (AUSRIAPLAN).



**Part Four:**  

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**Response**

## 4.1 Responsibility for Response

The Commissioner of Police, as the HMA, is responsible for the response to SPRED incidents within WA. The HMA may initiate a multi-agency coordination from the Major Incident Control Centre (MICC).

Once notified by NEMA or notification from the public has been validated, the WA Police Force will appoint a Police Commander to assume incident control of the emergency.

The nature and possible consequences of a SPRED emergency will generally require a multi-agency response and coordination of Australian Government agencies for specialist support.

A SPRED emergency will be managed at the State-level with the possible assistance of NEMA's National Situation Room (NSR) to connect relevant Australian Government and state and territory agencies in accordance with the Australian Government's National Crisis Management Framework.

The Australian Government has an obligation to notify the launch authority and the Secretary-General of the United Nations of space debris return in Australia and recover (if practicable) and return such to the launching authority under international agreements.

Response at the incident site(s), once known, will follow the principle of a graduated approach as set out in State EM Policy part 5 and State EM Plan part 5.

### 4.1.1 Multiple hazards

The nature and possible consequences of a SPRED emergency will generally require a multi-agency response and coordination of Australian Government agencies for specialist support.

In accordance with State EM Plan section 5.1.2, 'where a subsequent hazard caused by the initiating hazards presents a significantly greater risk, management of the incident may be transferred to the relevant Controlling Agency for the subsequent hazard by agreement between the two agencies.'

The HMA requires a completed Change in Controlling Agency Form to be submitted by the incoming Incident Controller to DFES State Operations each time a transfer of control has taken place.

Controlling Agencies are responsible for providing appropriate notification of cessation of response operations to assist in the management of residual hazards.

## 4.2 Notification

### 4.2.1 Notification by the general public

Any reports of SPRED impact sightings are to be reported to NEMA's NSR (1800 123 4000).

Notification by members of the public will be coordinated through agencies standard operating procedures.

### 4.2.2 Notification by NEMA and NSR

Advice that SPRED impact has occurred or will possibly occur within WA will be received by, or directed to, the WA Police Force's SOCC Duty Inspector, who will notify the Assistant Commissioner Specialist and Support Services (AC SSS). Out of hours, notification will be provided to the On-call Assistant Commissioner.

The AC SSS and/or the On-call Assistant Commissioner will assess the situation, and if necessary, activate the response arrangements contained within this annex and direct key personnel of participating agencies to be notified (see Appendix C).

During the 'Alert' phase of AUSSPREDPLAN, NEMA, through the NSR will notify relevant states and territories and other Australian Government agencies through their agreed point of contact, of possible SPRED and associated risks (e.g. re-entry of a space vehicle containing Radio-Isotopic Thermoelectric Generator RTG/reactor or other hazardous materials likely to pose a risk to Australian interests).

During AUSSPREDPLAN's 'Active' phase, the NSR is responsible for the distribution of all information about known or suspected SPRED to the State.

NEMA will coordinate notifications in accordance with the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space regarding the return of crew and space objects.

## 4.3 Incident Management

The response arrangements of this annex are automatically activated on advice from NEMA to the SOCC of the possibility of SPRED (either directly or via DFES). They are designed to be initiated in incremental stages to allow sufficient time for agencies, both State and Australian Government, to mobilise resources, thereby permitting a rapid commencement of response activities once the SPRED footprint area has been determined.

The amount of warning received by the NSR will influence the rate at which the arrangements, consistent with AUSSPREDPLAN, will be implemented. Normally, several days warning of a possible SPRED impact would be received; however, in exceptional circumstances, the warning time may be reduced to only a period of hours. In this case, a rapid response may be required by specific State and Australian Government agencies.

State response activities for a SPRED event can be classified into the below three phases which align with AUSSPREDPLAN.

- Pre-impact – AUSSPREDPLAN Alert phase
- Post-impact – AUSSPREDPLAN Active phase
- Stand down – return to AUSSPREDPLAN Standby phase

### 4.3.1 Pre-impact of SPRED (Alert phase)

The AUSSPREDPLAN's 'Alert' phase is declared when an object is identified as a potential re-entry risk or is likely to re-enter and impact Australia or its territories. This phase enables timely notification for jurisdictions and agencies for preparedness. NEMA will receive information on related space re-entry through the Australian Space Agency to the NSR. Following an Alert phase declaration, information will be disseminated through the reporting mechanisms outlined in Appendix E.

The progress of the space object will be monitored by NEMA and the HMA, and policy and planning aspects considered.

On receipt of notification from NEMA of a possible SPRED emergency, WA Police Force will initiate pre-impact response activities as outlined in Appendix G, Sequence Guide. This includes identifying any potential requirement for Australian Government non-financial assistance in the event of an impact.

In circumstances where there is little or no opportunity for NEMA to proactively warn of a SPRED emergency, activities for the pre-impact phase will need to be condensed and may take place concurrently with post-impact activities.

### 4.3.2 Post- impact of SPRED (Active phase)

#### 4.3.2.1 Initial impact

All confirmed or suspected impact sites are to be reported to NEMA through the NSR. Following this, a NEMA delegate may authorise the 'Active' phase' of AUSSPREDPLAN and will notify relevant Australian Government agencies of the impact site(s), the situation, and coordinate likely requests for assistance under COMDISPLAN. Upon activation of the Active phase:

- The WA Police Force's Emergency Operations Unit's On-call Officer (0411 709 153) will be contacted to support the Incident Management Team (IMT).

## 4.0 | RESPONSE

- The WA Space Debris Emergency Response Team (WASDERT) will deploy as advised by the Police Commander with incident control if the area of impact is known.
- Upon notification of the SPRED impact, efforts will concentrate on:
  - determination of the footprint
  - cordoning and containment of the area to protect the public
  - search for and retrieval and/or storage of SPRED
  - decontamination of personnel and facilities contaminated by radioactive and/or other HAZMAT debris.

All debris impact sites should be treated as a potentially serious HAZMAT situation, with possible activation of response arrangements in the State Hazard Plan – HAZMAT until expert advice recommends otherwise. All confirmed or suspected impact sites are to be reported to NEMA through the NSR.

The HMA may initiate a request for Australian Government assistance under COMDISPLAN if the impact of space debris is significant. Details on accessing Australian Government Physical Assistance during an emergency response is detailed in State EM Policy section 5.10, the State EM Plan section 5.6.1 and State EM Response Procedure section 4.20.

### 4.3.2.2 Search

Based on information provided by the NSR, including the type of any radioactive hazard (e.g. Radio-Isotopic Thermoelectric Generator (RTG) or nuclear reactor), other likely hazardous materials, the estimated impact date and orbital track, arrangements will be made for the conduct of search operations to locate SPRED. On advice that SPRED has impacted WA, the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and the Australian Science and Technology Organisation (ANSTO), activated by NEMA, have the capability and expertise to conduct an aerial search using detection aircraft (sourced by the State or Commonwealth, and tasked by the Police Commander with incident control), to search the area located within the predicted footprint to confirm that impact has actually occurred.

Aircraft including rotary and remotely piloted aircraft, may be used to conduct the initial search to define the footprint and locate areas of high threat.

For search planning purposes, the footprint is assumed to be a corridor measuring 1,000 kilometres by 40 kilometres. Although it is reasonable to assume that this footprint will occur along (or at least near) the final orbit track, confirmed footprint data from the ASA may not be available until 72 hours after the impact.

The type of power generation will influence the method of search to be conducted. RTGs are difficult to detect using aerial ionising radiation detection methods; however, they do give off a degree of heat that may be identified by infra-red detection devices. Nuclear reactors can generally be detected by aerial methods using gamma spectrometer devices. Some space vehicles have on-board safety mechanisms designed to separate some of the component parts before re-entry. If this occurs, the behaviour of these component parts may differ from the forecast behaviour of the whole vehicle and multiple re-entry events could occur and be separated by days or even weeks.

As certain types of HAZMAT are difficult to detect by aerial survey, detailed ground search may also be required to determine their precise location and facilitate their removal. In the worst-case scenario of small particle contamination of a populated area, high-rise buildings and flying restrictions may seriously degrade aerial search performance and so ground search techniques may have to be conducted.

Concurrently, the Australian Government may, on request by and in consultation with the State, task and dispatch aircraft and conduct atmospheric air sampling using unmanned aerial vehicles and ground-based air sampling devices. Populated areas within the foot print area will be surveyed early to determine if they have been subjected to contamination.

### 4.3.2.3 Initial response activities

Areas that may have been contaminated will require detailed surveying to establish level of risk (e.g. to health and/or the environment) and possible decontamination. The impacts of a SPRED emergency could extend over a number of months.

Initial response activities will be to isolate, contain and manage the site due to potential HAZMAT. Radioactive and other HAZMAT debris found will need to be collected, removed safely and may need to be returned to the launch authority via the Australian Government.

Actions taken can be vitally important in determining the final outcome of the incident and may include such actions as:

- retrieval and storage of radioactive and/or other HAZMAT SPRED
- decontamination of personnel, facilities and equipment contaminated by SPRED
- declaration and evacuation of restricted areas
- checking and declaring 'safe' populated areas within the footprint to alleviate community and political concerns
- immediate welfare of uninjured survivors (including possible decontamination)
- triage, treatment (including possible decontamination) and evacuation of any casualties to hospital
- removal of any deceased people/animals
- preservation of evidence (in support of Australian Government's obligation under international agreement to return SPRED to the launching authority)
- provision of security to areas that have been evacuated
- notifying the Australian Government's NSR.

Recovery activities will commence and be undertaken at the same time as initial response activities and continue into the recovery phase. Initial recovery considerations include, but are not restricted to, such actions as:

- ongoing treatment and rehabilitation of injured people/animals
- emergency relief and support services for evacuees
- potential quarantine and health surveillance
- information on what is available to help people with their recovery
- registration and reunification of missing persons
- information on the emergency site (e.g. impact on homes, clean up/ decontamination requirements and environmental monitoring).

Refer to Part 5 of this annex for information regarding recovery activities.

An operational sequence guide detailing agencies responsibilities for each of the operational phases is detailed in Appendix G and may be used as an operational resource.

Where HAZMAT risk escalates or extends to become the primary hazard, DFES will, in consultation with the HMA, assume the role of Controlling Agency.

### 4.3.3 Stand-down

Once all incident management tasks are completed, the Police Commander with incident control, in consultation with NEMA, will issue authority to cancel activation of the response arrangements of this annex.

Upon confirmation that no further Australian Government non-financial assistance is needed, the Deputy Coordinator-General, Emergency Management and Response (or delegate) will inform their relevant stakeholders via the NSR and approve deactivation of AUSSPREDPLAN, returning it to its default Standby Phase.

Consideration should be given to conducting a debrief and review of this annex.

## 4.4 Activation at District and Local Level

As a SPRED emergency notification occurs at the state level, activation and ensuring duties at district and local levels will be informed by State direction. There may additionally be locally notified incidents through 000 calls and via a number of agencies attending incidents initially not linked to SPRED.

The multi-agency support groups such as an Incident Support Group (ISG), Operational Area Support group (OASG) or State Emergency Coordination Group (SECG) may be activated by WA Police Force, in accordance with the provisions of State Emergency Management Policy part 5 and State Emergency Management Plan part 5 as required. For Level 2 emergencies, establishment of an ISG must be considered. For Level 3 emergencies, an ISG and OASG must be established.

The HMA will consider initial recovery during the response phase in consultation with the Local Recovery Coordinator until a formal transition to recovery has occurred, aligned with the State Support Plan Emergency Relief and Support and State Recovery Framework.

The sequence guide at Appendix G provides guidance on activities to support the district and local response for those who potentially may be the first on scene.

## 4.5 Public Warnings/Information

WA Police Force, on behalf of the HMA, is responsible for the provision of media management and public information in relation to SPRED emergencies, in accordance with State Emergency Management Plan section 5.3.1 and State Support Plan – Emergency Public Information.

The WA Police Force, through the Police Media Section, will issue public information and public warnings, and will provide a copy of all releases being issued to NEMA. Media representatives should not be referred to the ASA or any other organisation for information.

WA Police Force may use a single or combination of technologies to inform the public, including:

- Emergency Alert - a warning system that uses web technology to send alerts to home phones and mobiles within a geographical area
- Emergency WA – a website providing messaging and information of current alerts within WA
- Standard Emergency Warning Signal - an alert signal played on public media such as radio, television, or public address systems to draw listeners' attention to the emergency warning that follows.

Participating organisations and support agencies must coordinate their information with WA Police Force and should only release information which specifically relates to the functions of their organisation.

WA Police Force at all times retains the responsibility for the control of the release of information regarding impacted persons identities.

## 4.6 Shelter-in-Place or Evacuation Arrangements during Response

The decision to evacuate residents from certain areas impacted by a SPRED emergency shall be the responsibility of the Police Commander with incident control.

WA Police Force on behalf of the HMA will determine the need for either shelter-in-place or evacuation through consultation and consideration of advice provided from the WAsDERT to determine the area where this action will be required.

The WA Police Force will undertake operational evacuation planning as practicable to the circumstances and initiate actions necessary for an evacuation of the community in accordance with State Emergency Management Policy section 5.7 and State Emergency Management Plan section 5.3.2 as appropriate for a SPRED emergency.

WA Police Force will advise other agencies and support organisations, of the need to shelter-in-place or evacuate where their assistance is required, in accordance with State emergency management arrangements.

If evacuation is required, WA Police Force will consider activating the Department of Communities as a support organisation to provide emergency relief and support assistance in accordance with State Support Plan – Emergency Relief and Support sections 4.6 & 4.7.

Directed evacuation under the Emergency Management Act 2005 would normally require a declaration of an Emergency Situation by the Commissioner of Police as the HMA or the State Emergency Coordinator, or a State of Emergency by the Minister, unless other legislative provisions are applicable.

## 4.7 Telecommunications

Provision of communications for emergency response measures under this annex is based on the use of normal communication facilities required for the day-to-day activities of participating organisations.

Telephone, email and online meetings are the normal means of communication between State, Australian Government and Liaison Officers. All online meeting requests are to be confirmed by email as soon as practicable.

Messages from NEMA initiating their AUSSPREDPLAN or altering their phases will commence with the codeword AUSSPREDPLAN indicating the phase in effect.

## 4.8 Funding Arrangements for Response

Generally, to ensure accountability for expenditure incurred, the organisation with operational control of any resource is responsible for payment of all related expenses associated with its operation during emergencies unless other arrangements are established. Detailed information in relation to the

financial responsibilities of participating organisations is outlined in State EM Policy section 5.12, State EM Plan sections 5.4 and 6.10, and COMDISPLAN section 4.1.2.

Assistance provided under this annex is funded from agency/departmental budgets. Where these resources are inadequate, either because of insufficient funds or a lack of a suitable/appropriate item on which to call, no financial commitments can be entered into or expenditure incurred unless authorised by the AC SSS (or the On-call Assistant Commissioner for 'out of hours', short notice incidents).

Agencies and departments are requested to maintain a record of all costs incurred in providing assistance.

Agencies should not presume they will be provided with net budget supplementation, however, the State through the Australian Government can seek reimbursement from the launching authority.

The Australian Government does not normally seek reimbursement from the State for the cost of assistance provided under AUSSPREDPLAN or the COMDISPLAN. The exception to this may be for tasks not directly related to the safety of life or property or that could be handled by jurisdiction resources, such as clean up teams.



**Part Five:**  

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**Recovery**

Recovery involves restoring or improving livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities of a disaster-affected community or society, aligning with the principles of sustainable development and 'build back' better', to avoid or reduce future disaster risk (Australian Disaster Recovery Framework (2022)).

In WA, recovery activities are underpinned by State Strategic Recovery Priorities:

- Community-centred and place-based
- Timely, responsive and accessible
- Restore and build back better
- Value First Nations Voice.

Recovery begins at the onset of an emergency and runs concurrently with response, often continuing beyond the response phase. The extent of recovery activity will, however, depend on the nature and magnitude of the emergency.

## 5.1 Responsibilities for Recovery

The Commissioner of Police, as the HMA is responsible for commencing recovery as soon as practicable during an emergency (State EM Policy section 6.2). Under this Plan, the WA Police Force is assigned to carry out the following recovery responsibilities on behalf of the HMA:

- initiating recovery activities
- preparing an Impact Statement for Level 2 and 3 incidents unless an exemption has been granted by the State Recovery Coordinator
- transitioning responsibility of any ongoing coordination of recovery activities to the relevant local government, unless otherwise advised by the State Recovery Coordinator.
- in emergencies where response and recovery occur concurrently, establishing arrangements to coordinate response and recovery

operations with relevant local and state-level recovery coordinators / controller.

Less complex recoveries will be managed by local government with support by State Government through existing services and agency support, as required. Where recovery needs exceed the capacity of local government, the State will have an increased involvement which may include appointing a state-level recovery coordinator or controller, convening a State Recovery Coordination Group and State Recovery Domains and deploying personnel and resources to plan and deliver recovery programs and activities.

Waste, debris management and disposal of hazardous material will be conducted with consideration of State Hazard Plan – HAZMAT.

The Department of Communities may also provide emergency relief and support services as part of any recovery effort as a prescribed support organisation under the *Emergency Management Regulations 2006*.

Further information regarding recovery coordination arrangements in WA are set out in part 6 of the State EM Plan and State EM Policy, and part 5 of the State EM Procedure.

## 5.2 Recovery Characteristics and Considerations

Due to the composition of space vehicles, space re-entry debris which survives atmospheric re-entry may cause impact damage and contaminate surrounding areas with hazardous materials.

Distinguishing characteristics of a recovery from a SPRED emergency may include:

- Impacts from response measures:
  - Response control and management measures, such as population movement controls and isolation from possible contaminated areas.

- Coordination of ongoing operations:
  - Response operations may be prolonged, requiring effective coordination with concurrent recovery activities and alignment with international treaties.
- Economic and service disruptions:
  - Services may be disrupted as a result of movement controls which may lead to possible business closures and economic loss.
- Support for higher risk populations:
  - Recovery efforts must address unique needs of culturally and linguistically diverse communities, Aboriginal and Torres Strait Islander peoples, and other groups at higher risk.
- Legal, ethical, and environmental considerations:
  - Address legal, regulatory, and ethical challenges related to extended emergency measures and manage possible environmental issues (such as contaminated land and water sources).
- Mental health support:
  - Provide mental health and psychosocial services to address long-term emotional and psychosocial impacts on individuals and communities which may occur for a protracted SPRED emergency.
- Financial support mechanisms:
  - Implement financial aid programs to support affected individuals and businesses and foster economic recovery.
- Community engagement and communication:
  - Maintain communication with the public regarding recovery efforts, timelines, and progress to build trust and encourage participation.
- Evaluation and lessons management:
  - Conduct evaluations to capture lessons identified during the emergency and integrate them into future preparedness and response strategies.

## 5.3 Commencing Recovery

WA Police Force will commence the early recovery activities at the onset of a SPRED emergency during the response operations. These activities may extend after the response phase has finished.

### 5.3.1 Initiating Recovery

Initial recovery efforts will focus on reducing the risk of harm through detection, identification, containment, and deployment of appropriate personnel to reduce identified affects as outlined in 4.3.2 Post Impact of SPRED (Active phase).

The WA Police Force will:

- Notify the State Recovery Coordinator where incidents are Level 2 and above (and request assistance with recovery coordination if required)
- Ensure timely notification of the emergency, liaison and appropriate inclusion of those with recovery responsibilities in the incident management arrangements
- Activate State Support Plans as required
- Ensure that in combating the effects of the emergency, activities have regard for the need to facilitate recovery
- Identify if there are impacts requiring recovery activities and notify the relevant recovery coordinator
- Provide known recovery actions to the Local Recovery Coordinator and State Recovery Coordinator for consideration
- Identify a treatment plan to provide safe access to the affected area, determined by the SPRED footprint
- Consider the inclusion of the Department of Communities for the purposes of assisting planning the transition from response to recovery when the State Support Plan Emergency Relief and Support is activated.

- Make arrangements to meet the intent of the Rescue Agreement to return objects launched into outer space as requested.
- Other responsibilities described in State EM Plan and State EM Policy sections 64.

### 5.3.2 Public Information

The WA Police Force on behalf of the HMA will engage the relevant local governments, including their recovery communications team or staff early during the response phase as part of the provision of public information about recovery.

The WA Police Force may also request the State Recovery Coordinator or Controller to assist with coordination of state-level recovery information if required.

The WA Police Force and the relevant local government will communicate with the public in a coordinated manner until the HMA transition responsibility for providing public information about recovery to the relevant local government.

The WA Police Force on behalf of the HMA will assist with information about ongoing response activities and public safety as appropriate.

### 5.3.3 Concurrent Recovery and Response Operations

In circumstances where a SPRED emergency requires an extended response and there is a need for coordination with concurrent recovery operations, unless a Local Recovery Coordination Group or a State Recovery Coordination Group is established, the HMA's incident management team will request the relevant recovery coordinator/s consider a position within the incident management team or participation as a member in the OASG.

Where a Local and/or State Recovery Coordination Group is established, recovery liaison officer/s will be implemented in the OASG to facilitate communication and assist coordination of concurrent response and recovery activities.

### 5.3.4 Impact Statement

Unless an exemption has been provided by the State Recovery Coordinator, the WA Police Force will coordinate completion of the Impact Statement relating to the four recovery domains; social, built, economic and environment in accordance with State Emergency Management Recovery Procedure 5.3.

The Impact Statement will be developed in consultation with the Incident Support Group, all affected local governments, the State Recovery Coordinator and the WAsDERT if activated and must be approved by the Police Commander with incident control and the local government and endorsed by the State Recovery Coordinator.

Where an Impact Statement has been compiled, the Police Commander with incident control, the relevant emergency management district/s District Emergency Coordinator/s, or the State Emergency Coordinator, may approve the Impact Statement for dissemination to the appropriate recovery coordinator.

## 5.4 Transition of Recovery Coordination

The WA Police Force, on behalf of the HMA, will plan and manage the transition of ongoing recovery activities to local government(s) or an appointed state-level [Event] Recovery Coordinator or Controller (State EM Plan section 6.2.1.3).

The timing of transition will depend on the stage of response operations and whether recovery providers can safely attend the impacted area to engage with community members and commence recovery support, including conducting a needs assessment.

As part of the transition process, WA Police Force will provide a briefing to the local government or relevant recovery coordinator or controller through existing incident management processes such as ISG, OASG, SECG and

incident reporting as established. The impact statement should be provided and discussed at this briefing.

In the event multiple local governments are affected by a SPRED emergency, the State Recovery Coordinator can assist with establishing district or regional recovery arrangements.

Where established, the SECG is responsible for State-level recovery coordination following an emergency, unless or until a State Recovery Coordination Group (SRCG) is convened.

## 5.5 Recovery Operations

To assist with an understanding of the emergency context, impacts, risks following the transition of recovery coordination, the WA Police Force will attend initial meetings of the State and/or Local Recovery Coordination Groups, where invited.

### 5.5.1 Transition to Business-as-Usual Arrangements

Recovery arrangements led by local and State governments may be de-escalated or stood down when recovery coordination and delivery can be effectively delivered through standard business-as-usual arrangements (State EM Policy section 6.13 and Plan section 6.3.3).

## 5.6 Recovery Funding

The Convention on International Liability for Damage Caused by Space Objects also known as the 'Space Liability Convention' specifies that the launch State (country) is responsible for providing compensation to parties affected by space activities.

Article II of the Space Liability Convention provides "a launching State shall be absolutely liable to pay compensation for damage caused by its space object on the surface of the earth or to aircraft flight."

A claim for compensation for damage shall be presented to a launching State through diplomatic channels. Advice regarding the use of international conventions will be coordinated by NEMA under AUSSPREDPLAN arrangements.

Recovery from SPRED emergencies is not eligible for funding under the joint WA and Commonwealth Disaster Recovery Funding Arrangements.

The State Recovery Coordinator will liaise with local governments affected by the emergency to consider recovery funding needs and identify appropriate funding strategies.



# Appendices

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## Appendix A: Distribution List

This Annex B - SPRED is available on the [SEMC website](#). The agencies below will be notified by the State Emergency Management Committee's Business Unit (unless otherwise specified) when an updated version is published on this website.

- All agencies and organisations with responsibilities under this plan, including:
  - Department of Water and Environmental Regulation
  - Department of Fire and Emergency Services
  - Department of Health
  - Department of Communities
  - Local Governments (SEMC Business Unit to notify via WALGA)
- National Emergency Management Agency (SEMC Business Unit to notify)
- Minister for Emergency Services (SEMC Business Unit to notify)
- Minister for Police
- National Library of Australia, Legal Deposits Unit (SEMC Business Unit to notify)
- State Emergency Management Committee (SEMC), SEMC subcommittee and SEMC reference group members (SEMC Business Unit to notify)
- State Library of Western Australia (SEMC Business Unit to notify).

## Appendix B: Glossary of Terms/Acronyms

Terminology used throughout this document has the meaning prescribed in section 3 of the *Emergency Management Act 2005* or as defined in the State Emergency Management Glossary. In addition, the following hazard-specific definitions apply.

### B1 Glossary of Terms

Term	Definition
<b>Beryllium</b>	A metal used as an aerospace material for space vehicles and satellites which, if inhaled as a dust can cause a chronic, life-threatening disease in some people.
<b>Footprint</b>	Geographical area for an emergency response.
<b>Hydrazine</b>	A highly toxic inorganic compound which can be dangerously unstable unless handled in solution, used in various rocket fuels.
<b>Launch Agency</b>	An entity that conducts the launch, this could be a government agency or private company.
<b>Launching Authority</b>	An organisation or agency responsible for regulating, managing, or facilitating space launches.
<b>Satellites</b>	In the context of this annex, an artificial object which has intentionally been placed in orbit, for military and civilian purposes including communications, navigation, weather and research.
<b>Space Debris</b>	Also known as orbital debris, space junk and space waste, refers to defunct objects in Earth's orbit or re-entering the Earth's atmosphere, including spent rocket stages, old satellites and fragments from disintegration, erosion and collision.
<b>Space Vehicle</b>	A rocket powered vehicle used to transport unmanned satellites or humans between the Earth's surface and outer space.

## B2 Acronyms

Acronym	Meaning
<b>AC SSS</b>	Assistant Commissioner Specialist and Support Services
<b>ANSTO</b>	Australian Nuclear Science and Technology Organisation
<b>ARPANSA</b>	Australian Radiation Protection and Nuclear Safety Agency
<b>ASA</b>	Australian Space Agency
<b>AUSRIAPLAN</b>	Australian Government Reception of International Assistance Plan
<b>AUSSPREDPLAN</b>	Australian Government Space Re-entry Debris Plan
<b>COMDISPLAN</b>	Australian Government Disaster Response Plan
<b>DFES</b>	Department of Fire and Emergency Services
<b>DWER</b>	Department of Water Environmental Regulation
<b>EOU</b>	Emergency Operations Unit (WA Police Force)
<b>HAZMAT</b>	Hazardous materials
<b>HEAT</b>	Hazmat Emergency Advisory Team
<b>HMA</b>	Hazard Management Agency
<b>IMT</b>	Incident Management Team

Acronym	Meaning
<b>ISG</b>	Incident Support Group
<b>LEMC</b>	Local Emergency Management Committee
<b>MICC</b>	Major Incident Command Centre
<b>NCM</b>	National Coordination Mechanism
<b>NEMA</b>	National Emergency Management Agency (Department of Home Affairs)
<b>NSR</b>	Australian Government's National Situation Room (NEMA)
<b>OASG</b>	Operational Area Support Group
<b>RHA</b>	Radiation Health Advisor (Department of Health)
<b>RTG</b>	Radio-Isotopic Thermoelectric Generator
<b>SECG</b>	State Emergency Coordination Group
<b>SEMC</b>	State Emergency Management Committee
<b>SOA</b>	Special Operations Advisor (DFES)
<b>SOCC</b>	State Operations Command Centre (WA Police Force)
<b>WASDERT</b>	Western Australia Space Debris Emergency Response Team

## Appendix C: Roles and Responsibilities

The WA Police Force has the primary role of coordinating the response to SPRED emergencies.

The following table summarises the emergency management roles and responsibilities for a SPRED emergency that takes place in WA. Australian Government agencies roles and responsibilities are detailed in AUSSPREDPLAN.

All agencies should maintain appropriate internal plans and procedures in relation to their specific responsibilities.

Brief all-hazards information is also provided for agencies who may have a role under this annex, full details of these roles and responsibilities can be found in the State EM Plan, Appendix E and State EM Policy Appendix F.

### Prevention and Mitigation Responsibilities

Organisation	Prevention and Mitigation Responsibilities
<b>Australian Space Agency (ASA)</b>	<ul style="list-style-type: none"> <li>a. Liaise with international monitoring agencies regarding likely SPRED re-entry paths and risks to Australian interests.</li> <li>b. Monitor re-entry paths and risks associated to Australia interest.</li> <li>c. Communicate with NEMA via the Australian Government National Situation Room (NSR).</li> </ul>

### Preparedness Responsibilities

Organisation	Preparedness Responsibilities
<b>Department of Health</b>	<ul style="list-style-type: none"> <li>a. Provide a Liaison Officer on call from initiation of AUSPSREDPLAN's 'Alert phase'.</li> </ul>
<b>Department of Fire and Emergency Services (DFES)</b>	<ul style="list-style-type: none"> <li>a. Provide a DFES Commander and/or Liaison Officer on call from initiation of AUSSPREDPLAN's 'Alert phase'.</li> </ul>
<b>National Emergency Management Agency (NEMA)</b>	<ul style="list-style-type: none"> <li>a. Prepare and maintain the AUSSPREDPLAN which outlines the Australian Government communication and information flow arrangements to manage the risk posed by SPRED.</li> <li>b. Centralise communication between relevant Australian Government agencies (including the Australian Space Agency), states and territories.</li> </ul>

Organisation	Preparedness Responsibilities
WA Police Force	<ul style="list-style-type: none"> <li>a. Maintain a proactive role in the preparedness arrangements for the management of SPRED emergency in the state of WA.</li> <li>b. Should lead discussion and planning for SPRED at the Local Emergency Management Committee (LEMC), if required.</li> </ul>

## Response Responsibilities

Organisation	Response Responsibilities
Department of Communities	<ul style="list-style-type: none"> <li>a. Coordinate emergency relief and support services for those impacted by the incident as required including: <ul style="list-style-type: none"> <li>i. emergency accommodation</li> <li>ii. emergency food</li> <li>iii. emergency clothing and personal requisites</li> <li>iv. personal support services</li> <li>v. registration and reunification</li> <li>vi. financial assistance.</li> </ul> </li> </ul>
Department of Health	<ul style="list-style-type: none"> <li>a. Provide a Liaison Officer on call from initiation of AUSSPREDPLAN's 'Alert phase' .</li> <li>b. To coordinate the overall health response to a radioactive or other health-related contamination in a SPRED (e.g. Hydrazine), or mass casualty situation.</li> <li>c. Monitor public health aspects of the emergency response.</li> <li>d. Coordinate the public health response to minimise ongoing environmental and public health risks.</li> <li>e. Assist partner agencies in crisis counselling and critical stress management.</li> </ul>

Organisation	Response Responsibilities
<p><b>Department of Health</b> (continued)</p>	<p><b>Examples of Specific Health Agency Functions:</b></p> <p><b>Radiation Health:</b></p> <ul style="list-style-type: none"> <li>a. Provide expert advice and radiation monitoring services in relation to radiation hazards (including Radiation Health Advisors to the WAsDERT).</li> <li>b. Provision of decontamination procedures of public areas where appropriate.</li> </ul> <p><b>Public Health Officers/Environmental Health Officers:</b></p> <ul style="list-style-type: none"> <li>a. Food and water safety.</li> <li>b. Sanitation and refuse disposal.</li> </ul> <p>Note: It should be noted that while the <i>Public Health Act 2016</i> provides the enabling powers for Environmental Health Officers, most are employed by their respective local government, and not by the Department of Health.</p>
<p><b>Department of Fire and Emergency Services</b></p>	<ul style="list-style-type: none"> <li>a. Provide Special Operations Advisor (SOA) to the WAsDERT when activated.</li> <li>b. Provide rescue and fire-fighting suppression response capabilities.</li> <li>c. Assist with the rescue of trapped victims, including the provision of an Urban Search and Rescue capability as required.</li> <li>d. Provide HAZMAT response (in accordance with State Hazard Plan – Hazardous Materials (HAZMAT)).</li> <li>e. Provide specialist support and resources.</li> </ul>
<p><b>Department of the Premier and Cabinet</b></p>	<ul style="list-style-type: none"> <li>a. Provide advice to the Premier of WA and establish the Security and Emergency Committee of Cabinet as required.</li> </ul>
<p><b>Department of Water and Environmental Regulation (DWER)</b></p>	<ul style="list-style-type: none"> <li>a. Provide Environmental Protection Advisor to the WAsDERT when activated.</li> <li>b. Provide a mobile response for the detection and monitoring of chemicals and particulates escaping into the environment during a SPRED emergency.</li> <li>c. Provide environmental monitoring for off-site impacts in air and water and advice on impacts to the Police Commander with incident control.</li> <li>d. Provide advice on minimisation of impacts on the environment, including containment, confinement and clean up, decontamination, minimisation of wastes, and waste disposal.</li> </ul>

Organisation	Response Responsibilities
<b>National Emergency Management Agency (NEMA)</b>	<ul style="list-style-type: none"> <li>a. Coordinate Australian Government actions in accordance with COMDISPLAN, AUSSPREDPLAN and the Australian Government Crisis Management Framework.</li> <li>b. Activate the assistance of Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) to conduct an aerial search using detection aircraft.</li> <li>c. Activate the assistance of Australian Science and Technology Organisation (ANSTO) to conduct an aerial search using detection aircraft.</li> <li>d. Provide a central point of communication between relevant Australian Government agencies (including the Australian Space Agency), states and territories.</li> </ul>
<b>Royal Flying Doctor Service</b>	<ul style="list-style-type: none"> <li>a. Provide and coordinate air ambulance responses to emergencies.</li> </ul>
<b>St John Ambulance</b>	<ul style="list-style-type: none"> <li>a. Provide a Liaison Officer on call from initiation of AUSSPREDPLAN's 'Alert phase'.</li> <li>b. Provide and coordinate road ambulance responses to emergencies.</li> <li>c. Coordinate the triage of injured persons and the medical evacuation of severely injured persons.</li> </ul>
<b>WA Police Force</b>	<ul style="list-style-type: none"> <li>a. Assume overall control of the emergency.</li> <li>b. Deploy WASDERT with incident control, if the area of impact is known.</li> <li>c. Cordon and contain the area of impact.</li> <li>d. Declaration and evacuation of restricted areas.</li> <li>e. Immediate welfare of uninjured survivors.</li> <li>f. Initiate the search for and retrieval and/or storage of SPRED.</li> <li>g. Undertake operational evacuation planning as practicable to the circumstances and initiate actions necessary for an evacuation of the community.</li> <li>h. Provide public information on the emergency site (e.g. impact to homes, clean up/decontamination requirements and environmental monitoring).</li> </ul> <p>Note: COMDISPLAN may be activated if the impact of space debris is significant enough to warrant an official request for Australian Government assistance.</p>

## Recovery Responsibilities

Additional State agencies and entities listed within State EM Policy Appendix F can provide assistance within relevant recovery functional areas, when requested by the relevant State Recovery Coordinator or Controller (State EM Policy section 6.7).

Organisation	Recovery Responsibilities
<b>Department of Communities</b>	<ul style="list-style-type: none"> <li>a. Where activated, coordinate the emergency relief and support components of recovery for people affected by the emergency.</li> <li>b. Contribute to the planned transition of recovery coordination.</li> </ul>
<b>Department of Water and Environmental Regulation (DWER)</b>	<ul style="list-style-type: none"> <li>a. Provide advice on clean up, decontamination, minimisation of wastes, and waste disposal.</li> <li>b. Coordinate post-incident environmental sampling and provide interpretation of environmental monitoring data and results where required.</li> </ul>
<b>Relevant Recovery Coordinator</b>	<ul style="list-style-type: none"> <li>a. Provide public information on recovery activities (e.g. clean up/decontamination requirements and social services).</li> </ul>
<b>WA Police Force</b>	<ul style="list-style-type: none"> <li>a. Initiating recovery activities.</li> <li>b. Preparing an Impact Statement for Level 2 and 3 incidents unless an exemption has been granted by the State Recovery Coordinator.</li> <li>c. Transitioning responsibility of any ongoing coordination of recovery activities to the relevant local government, unless otherwise advised by the State Recovery Coordinator.</li> <li>d. In emergencies where response and recovery occur concurrently, establishing arrangements to coordinate response and recovery operations with relevant local and state-level recovery coordinators / controller.</li> </ul>

## Appendix D: WA Space Debris Emergency Response Team (WASDERT)

### Team Structure

Minimum personnel requirements for the WASDERT are:

- **WA Police Force:** 2 Emergency Operations Unit (EOU) Officers
- **Department of Health:** 2 Radiation Health Advisors (RHAs)
- **DFES:** 1 Special Operations Advisor (SOA)
- **DWER:** 1 Environmental Protection Advisor

Depending on the deployment location, the composition of the WASDERT may be adjusted by the Police Commander with incident control. Additional advisors may be included according to the nature of the SPRED, e.g. via the Department of Health's Disaster Preparedness and Management Unit.

### Role

The WASDERT may be deployed to the impact site or other locations by the Police Commander with incident control on receipt of positive information of the footprint area location. IMT personnel are to be identified and in readiness to move from the time AUSSPREDPLAN's 'Alert phase' is notified from NEMA.

The involvement of the HAZMAT Emergency Advisory Team (HEAT) and activation of response arrangements of State Hazard Plan – HAZMAT will be considered, where appropriate, at the request of the Police Commander with incident control.

## Appendix E: Notification (Pre-impact phase)

The AUSSPREDPLAN's 'Alert phase' is declared when the likely event of space re-entry debris is probable. This phase allows timely notification for jurisdictions and agencies for preparedness. NEMA will receive information on related space re-entry through the Australian Space Agency to the NSR. Following this notification, information will be disseminated through the below reporting mechanisms:

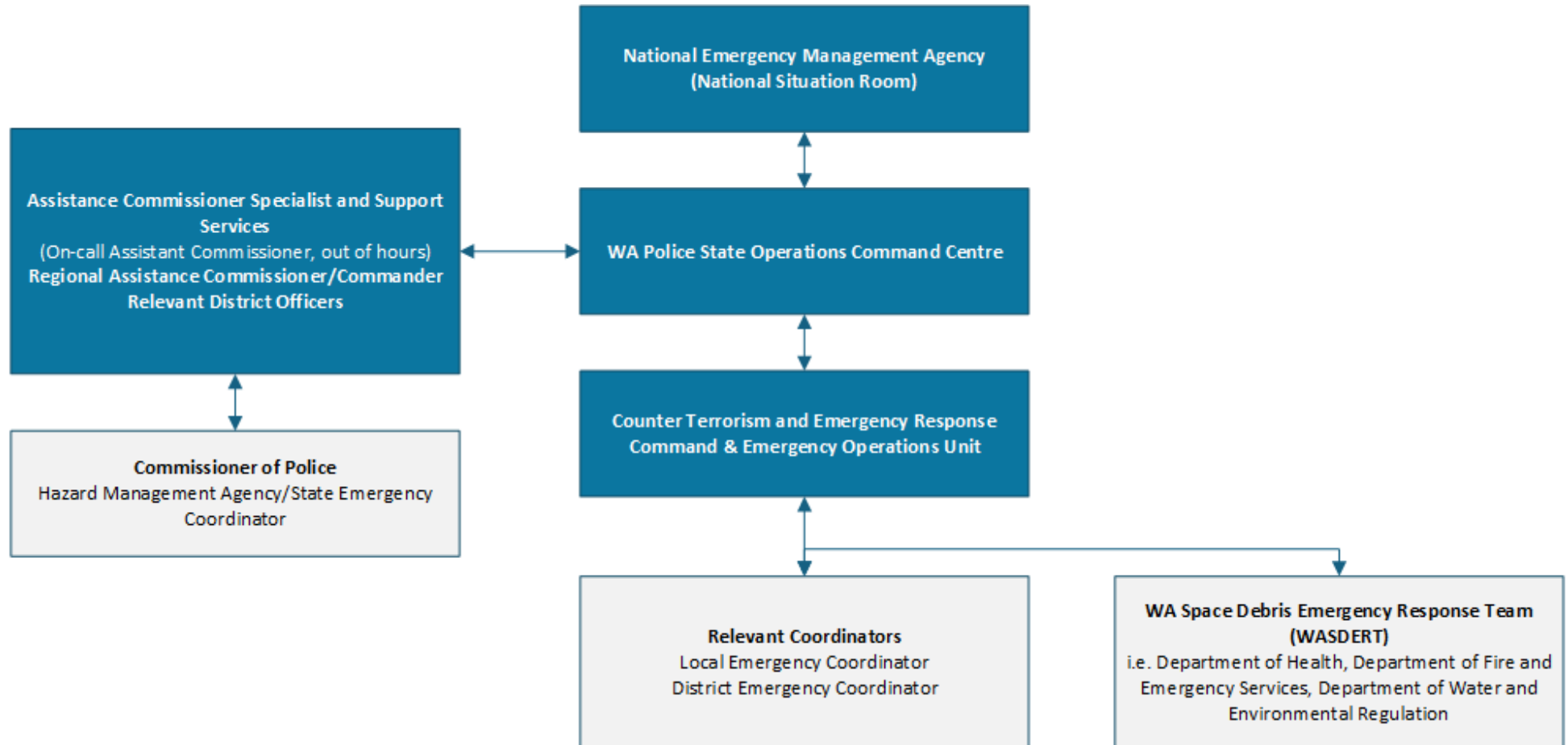


Figure 1: Notification of SPRED potential impact (AUSSPREDPLAN's 'Alert phase')

## Appendix F: Notification (Post-impact phase)

AUSSPREDPLAN's 'Active phase' results once confirmed or suspected impact sites are identified and reported to NEMA through the NSR. Following this notification, information will be disseminated through the following mechanism:

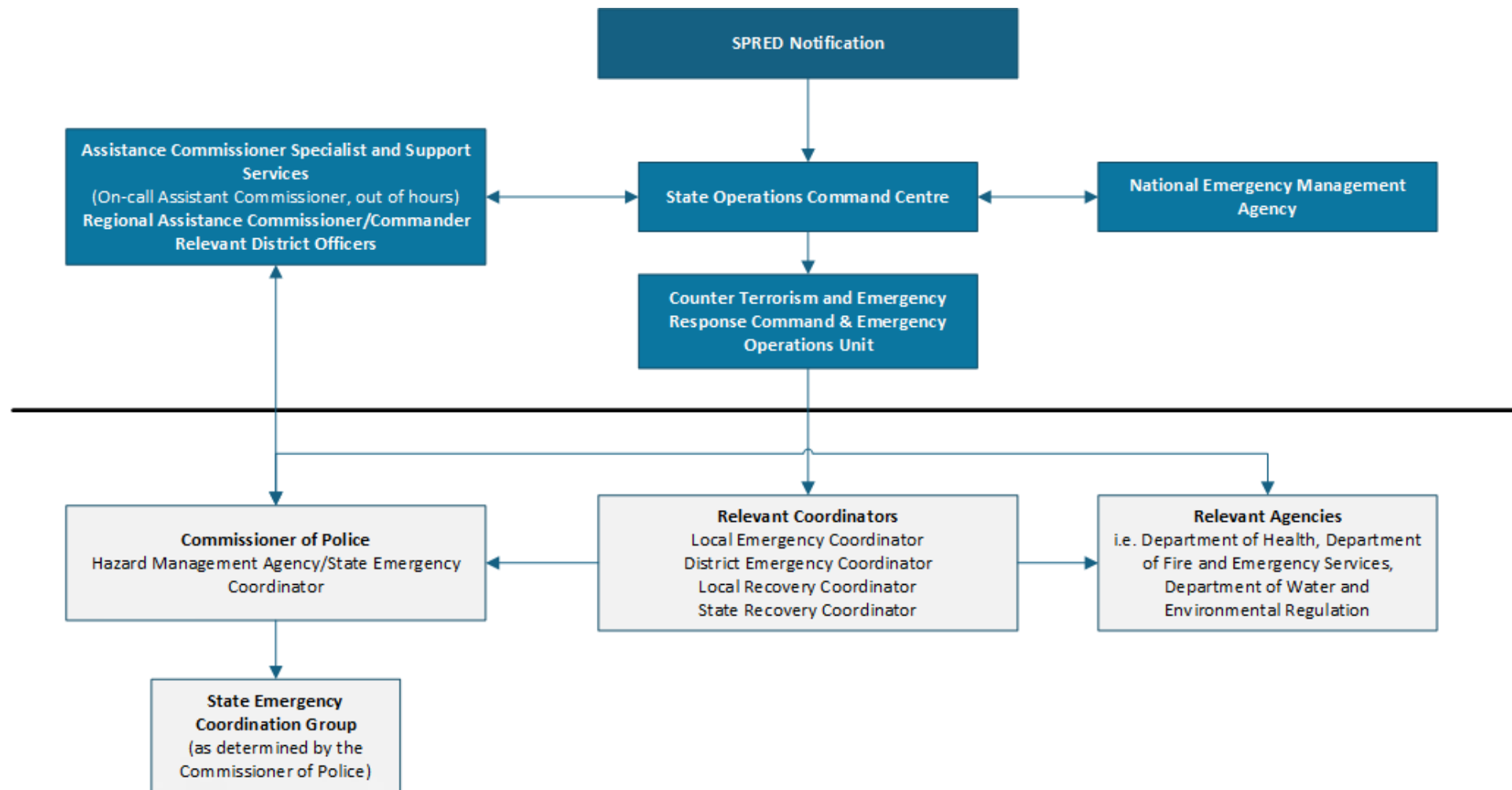


Figure 2: Notification of SPRED post-impact (AUSSPREDPLAN's 'Active phase' or members of the public)

## Appendix G: Sequence Guide

Agency actions taken on receipt of a notification from NEMA of a possible SPRED emergency are consistent with AUSPREDPLAN. Due to the circumstances when there is little or no opportunity for NEMA to proactively warn of a SPRED emergency, pre-impact activities will need to be condensed and may take place concurrently with post impact activities. This appendix may be used as an operational tool to guide the anticipated sequence of events in the pre and post impact phases of a SPRED emergency.

Responsible Authority	Pre-impact	Post impact
<p><b>Western Australia Police Force (WA Police Force)</b></p> <p><i>Role</i></p> <p>Hazard Management Agency</p> <p><i>Responsibilities</i></p> <p>Provide Police Commander with incident control</p> <p>Provide personnel for WAsDERT and Incident Management Team</p> <p>Control/Coordination of any emergency response</p> <p>Dissemination of warnings, public announcements and advice to the public</p>	<ul style="list-style-type: none"> <li>Activate to the necessary level of readiness and alert all involved agencies.</li> <li>Maintain close liaison with appropriate agencies (including NEMA).</li> <li>Confirm arrangements for the coordination of Australian Government agencies that will be operating in support should the State be affected.</li> <li>Ensure twenty-four (24) hours contact arrangements are established with NEMA.</li> <li>Implement a public information process through Police Media.</li> <li>Nominate staff for WAsDERT and IMT.</li> <li>Collect/pass reports to NEMA from emergency services and the public on re-entry sightings and suspicious objects.</li> <li>When necessary establish liaison with appropriate Australian Government agencies providing assistance to the State.</li> <li>Staff and equip the MICC during normal hours (0700 to 1800 hours WST Monday to Friday if practicable).</li> <li>Assemble and brief WAsDERT and IMT as practicable.</li> <li>Confirm Assistant Commissioner Specialist and Support Services or On-call Assistance Commissioner is available for Major Incident Command Centre (MICC) attendance as required via the SOCC.</li> <li>Request stand-by for agency Liaison Officer to attend the MICC.</li> </ul>	<ul style="list-style-type: none"> <li>Control and coordinate operations.</li> <li>Notify Emergency Operations Unit's On-call Officer (0411 709 153) to support the Incident Management Team.</li> <li>Staff and equip the MICC (if not already in place).</li> <li>Cause suspicious objects reported by emergency services and the public to be checked for radioactivity and cordon/isolate those which are radioactive where practicable.</li> <li>Immediately cause decontamination procedures of public areas where radioactivity or other contaminants are confirmed.</li> <li>Provide personnel to assist in the supervision and security of decontamination centre(s).</li> <li>Collect and pass reports to NEMA from emergency services and the public on re-entry sightings and suspicious objects.</li> <li>Declare restricted (e.g. potentially radioactive) areas if required.</li> <li>Evacuate restricted areas if required.</li> <li>Registration of personal details of evacuees.</li> <li>Determine the requirement for Australian Government assistance in consultation with NEMA.</li> <li>Request Australian Government assistance if required, and provide and maintain liaison with Australian Government supporting agencies.</li> <li>Cause surveys of those locations where radioactive debris may have fallen on inhabited areas.</li> <li>Provide temporary radioactive material storage facility and security as necessary.</li> <li>Deploy WAsDERT and IMT as required.</li> <li>Crowd and traffic control.</li> <li>Coordinate public information, including the dissemination of recovery related information until a suitable recovery coordinator is established.</li> </ul>

Responsible Authority	Pre-impact	Post impact
<p><b>Department of Health (Radiation Health and/or others as required)</b> <i>Role</i></p> <p>To provide advice and radiation and/or other health monitoring services</p> <p><i>Responsibilities</i></p> <p>Provision of advice on public health matters, and emergency medical services as required</p> <p>Distribution of prophylactic tablets and dosage</p> <p>Implementation of controls and restrictions of food stuffs</p> <p>Provide a monitoring team (normally 2 persons) to IMT</p>	<ul style="list-style-type: none"> <li>• Receive and distribute internally operational information on the situation.</li> <li>• Check the availability of relevant equipment.</li> <li>• Nominate staff for pre-positioning at selected population centres.</li> <li>• Nominate staff for WAsDERT and possibly ISG/OASG.</li> <li>• Place Liaison Officer on-call at the MICC as appropriate.</li> <li>• Locate monitoring personnel at threatened populated centres.</li> <li>• Check suspicious objects reported by emergency services and the public for radioactivity.</li> <li>• Assemble Radiation Health Section representatives (or other specialists as required) to WAsDERT at MICC for briefing.</li> <li>• Locate monitoring personnel at threatened populated centres.</li> <li>• Check suspicious objects reported by emergency services and the public for radioactivity.</li> </ul>	<ul style="list-style-type: none"> <li>• Check suspicious objects reported by emergency services and the public for radioactivity.</li> <li>• Conduct surveys of those locations where radioactive debris may have fallen on inhabited areas.</li> <li>• As an immediate response measure, commence decontamination procedures of public areas where radioactivity is confirmed.</li> <li>• Provide advice to the Police Commander with incident control and Assistant Commissioner Specialist and Support Services or delegate regarding radiological risks and protective countermeasures</li> <li>• Establish appropriate health surveillance measures.</li> </ul>
<p><b>WAsDERT</b> <i>Role</i></p> <p>To provide a Forward Control Point at the impact area.</p> <p><i>Responsibilities</i></p> <p>Establishment of security projected footprint area</p> <p>Provide advice to Police Commander with incident control on all matters relating to the space debris operation</p>	<ul style="list-style-type: none"> <li>• Maintain an awareness of the situation.</li> <li>• Ensure personnel preparation.</li> <li>• Assemble at MICC for briefing as appropriate.</li> <li>• Remain at 2 hours notice for deployment as appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>• Deploy as instructed.</li> <li>• Provide specialist advice to the Police Commander to assist the Incident Management Team considerations.</li> <li>• Arrange with MICC for security of projected footprint.</li> <li>• Assist Police Commander as required.</li> </ul>

**Table Notes: Sequence Guide Key**

Pre-impact: Representative of the alert phase of AUSSPREDPLAN.

Post-impact: Lead by HMA upon notification of impact of SPRED.

