

# Island Incursion Readiness and Response SOP

#### About this document

Disclaimer	This document has been written for Department of Conservation (DOC) staff and contractors. As a result, it includes DOC-specific terms and refers to internal documents that are only accessible to DOC staff and contractors. It is being made available to external groups and organisations to demonstrate departmental best practice. As these procedures have been prepared for the use of DOC staff and contractors, other users may require authorisation or caveats may apply. Any use by members of the public is at their own risk and DOC disclaims all liability for any risk.
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## 1. Background

## 1.1 Purpose and scope

The purpose of this SOP is to define the steps for Department of Conservation (DOC) District Operations teams to take to be prepared for, and respond effectively to, animal pest incursions on pest-free islands. Rapid and well-planned responses are essential to protecting the priceless conservation values of these islands.

The <u>Island Biosecurity Best Practice</u> guideline covers the other important aspects of island biosecurity: quarantine and surveillance.

#### This SOP applies to:

• All islands where DOC is responsible for maintaining animal pest-free status.

This SOP does not apply to (but can be used as a guide for):

- Plant pests and unwanted pathogens arriving on islands.
- Mainland Islands.
- Islands where DOC is not responsible for maintaining animal pest-free status.

#### 1.2 Introduction

Pest-free islands are a defining feature of New Zealand conservation, representing some of our least modified ecosystems, and providing sanctuaries for some of our most critically threatened species.

Biosecurity is fundamental to the management of pest-free islands. Preventing pests from reaching the islands through quarantine measures is by far the most effective management method that can be deployed in most cases. Having effective surveillance on the islands, enabling rapid detection of invading pests, is also vital for keeping biodiversity losses and costs to a minimum. However, even top-quality quarantine and surveillance cannot guarantee against pest invasions. Therefore DOC staff protecting pest-free islands must be ready to respond swiftly and effectively in the event of an incursion.

This SOP has been created to assist Operations staff to be able to respond rapidly, confidently, and using limited resources as efficiently as possible, thereby reducing biodiversity and financial risks, and to improve consistency in DOC's incursion responses.

## 1.3 Principles

- Incursion readiness and response are biosecurity's final line of defence for pest-free islands.
- Incursion response is inherently reactive. It should not be considered a substitute for high quality quarantine and surveillance.
- Incursion readiness is critical to response success.
- Every incursion is a crisis in the making, capable of escalating rapidly in the event of a hesitant response.

- Incursion responses aim to eliminate invaders before they can breed.
- Island incursions are the responsibility of the DOC Region, not the District alone.

## 1.4 Compliance

Managers, or higher levels of management, are authorised to approve variation from the SOP requirements and are accountable for those decisions. They are required to use their professional judgement and to seek advice, or to escalate when in doubt. All decisions should be documented.

It is expected that variations from requirements in this SOP will be the exception rather than the norm, and that legal and health and safety requirements are compulsory. Common sense should prevail in the case of exceptional or emergency field situations.

Please note: the consequences of non-compliance with, and unapproved variations from, the SOP requirements are that costs will not be reimbursed from the Incursion Response Fund (DOC-5922459).

## 1.5 Prerequisites

There are no obligatory prerequisites for staff to follow this SOP. However, it is highly recommended that at least the Incident Controller of an incursion response has completed DOC's *Island Biosecurity* training course (in development) and a *CIMS 4* training course. Responses will benefit greatly from all involved staff also having completed this training.

Some pesticides (e.g. PAPP, 1080) that could be used in an incursion response have a legal requirement that those handling the pesticide hold, or are under direct supervision of a person who holds, a Controlled Substances Licence (CSL) for that pesticide.

For all pesticides, including those that do not require a CSL, it is recommended that those handling pesticides complete DOC's *Animal Pest Control Methods* training course.

The above DOC courses are available through DOCLearn.

#### 1.6 Terms and definitions

Term	Definition
Approving manager	Manager with delegated authority to approve actions, resources and/or permissions. Usually a tier 4 Operations Manager.
Coordinated Incident Management System (CIMS)	The primary framework used for incident management in New Zealand. It establishes common structures, functions and terminology, facilitating effective coordination within and between agencies responding to an incident.
Eradication	Pest control designed to remove every individual from a colonising, or established, pest population.

Term	Definition
Incident Management Team (IMT)	The team managing the response, typically consisting of the Incident Controller and the managers of the established CIMS functions.
Incident Controller (IC)	The person formally assigned the task of leading the incursion response.
Incursion	Where a pest is found in the wild on an island. Implies: a breach; having got past the only or last barrier.
Governance	The group of people with executive oversight of an island's management. It influences the strategic direction of an incursion response but does not manage the response.
Pest	An organism which is not wanted on the island. Includes animals, plants, fungi and pathogens, however this SOP only applies to animal pests.

## 1.7 Standards and specifications

This SOP contains standards and specifications within the phases of section 3 *Incursion Readiness* and Response Procedure.

#### **Standards**

Standards are stated within all phases. They are presented in a table with the rows alternately shaded, as demonstrated below.

Compliance with these standards is compulsory for DOC's responses to animal pest incursions. Audit teams and reviewers will use the standards as key performance measures.

- 1 Standards are presented like this.
- 2 Standards are presented like this.

Standards/requirements of other related SOPs and systems are not repeated in this SOP.

#### **Specifications**

Specifications are stated within some phases only, and are presented as a list of bullet-points.

Specifications are best practice for the associated step within a phase. Unless there are compelling reasons to do otherwise, operators are expected to follow best practice.

## 1.8 Roles and responsibilities

Where there is a specific role that is accountable for a step within the Incursion Readiness and Response Procedure, the role is stated in bold italics preceding the actions they are accountable for, as demonstrated below.

Step number	Step title			
	This is the role that is accountable for the following actions: This is the action they are accountable for.			
	They are also accountable for this action.			
	A second role is accountable for the following actions: This is the action the second role is accountable for.			

An explanation of the roles involved in an incursion response is provided in section 2: *CIMS for incursion responses*. Section 2 should be read and understood before the processes in section 3: *Incursion Readiness and Response Procedure* are embarked on.

## 2. CIMS for incursion responses

#### 2.1 Introduction to CIMS

DOC uses New Zealand's Coordinated Incident Management System (CIMS) to operate effectively and efficiently when responding to an incident or emergency, including island incursions.

CIMS is modular and scalable, allowing for a consistent response at any level, from a small local incident to a large multi-agency response. CIMS establishes common structures, functions and terminology.

A successful response relies on DOC staff understanding and applying CIMS concepts, roles and responsibilities.

Using CIMS effectively for island incursions will:

- Reduce delays in responding to an invasion.
- Increase the likelihood of eliminating invading pests.
- Reduce the duration of an incursion response.
- Ensure efficient use of DOC, and other agency, resources.
- Effectively record and track resources used, decisions made, actions undertaken, and money spent.
- Improve incursion reporting and the ability to learn from incidents.

For a complete description of CIMS refer to <u>The New Zealand Coordinated Incident Management System (CIMS)</u>, <u>3rd edition</u> (New Zealand Government 2019).

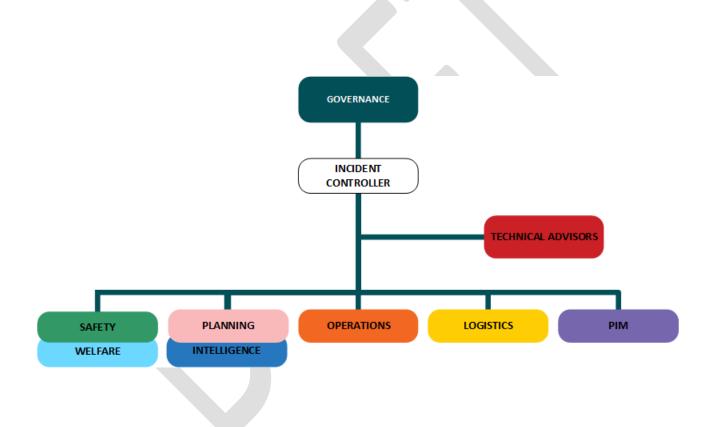
## 2.2 CIMS roles and responsibilities

#### 2.2.1 Incursion response CIMS structure overview

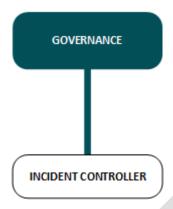
A CIMS structure must always be applied in an incursion response. In the initial stages of the response not all CIMS functions might need to be activated, and/or a single person might be able to manage multiple CIMS functions. The structure is then scaled up or down as necessary, as the response progresses.

People suitable to fill the Incident Management Team (IMT) roles should be identified in advance, to expedite the filling of roles in the event of an incursion.

The diagram below shows the IMT functions that support the Incident Controller by providing specialist advice and handling detailed work. Detailed descriptions of the functions and their responsibilities are given in the following pages.



#### 2.2.2 Governance

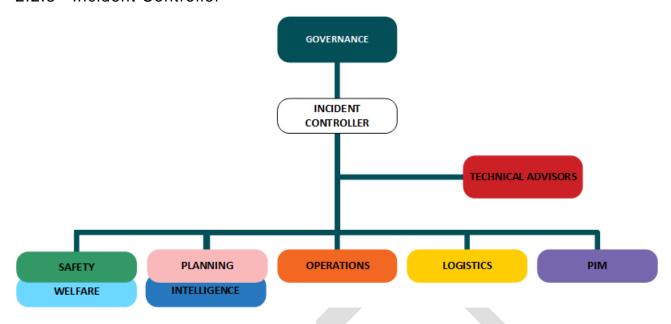


Governance has executive oversight of an island's management, influencing its strategic direction. It might therefore influence the objectives of an incursion response and impose constraints on actions and resources, but does not manage the response. Governance is usually accountable for the response outcomes.

The individuals that comprise Governance will vary for any given island and incursion situation. Likely members include:

- The Incident Controller's immediate superiors
- DOC managers from regional Operations Director level (e.g. if a relatively low-risk incursion response) up to Director-General or ministerial level (e.g. if a relatively high-risk incursion response on an island with critical biodiversity values and high public/political interest)
- Iwi representation where iwi own/have a strong interest in the island
- Members of an island's governing committee where such an entity exists

#### 2.2.3 Incident Controller



The Incident Controller (IC) has delegated authority over island biosecurity management during an incursion response. They have overall responsibility for the response; they set the response objectives, and co-ordinate and control the response. The IC requires managerial approvals for response resourcing demands, but does not require managerial approval for tactical decisions.

The person filling the IC role should have familiarity with CIMS, island incursion response experience and considerable knowledge of the site; this role should not be filled by the district's Operations Manager by default.

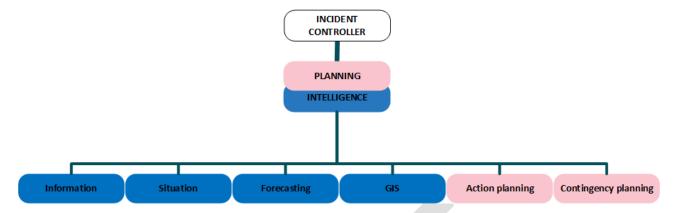
#### The IC is responsible for:

- Establishing the response structure and briefing other functions within the IMT.
- Setting objectives and overseeing the production of an Incident Action Plan (IAP) that describes how the objectives will be achieved.
- Directing the response by obtaining advice and intelligence regarding the incursion, and making decisions on tactics and resource allocation and management.
- Ensuring the safety of people involved in the response, including the public.
- Briefing Governance.
- Establishing and maintaining communications with other agencies, stakeholders and the community.
- Ensuring the response stays within the prescribed resource and budget limits.
- Acting as a spokesperson unless a dedicated spokesperson has been appointed.
- Ensuring that debrief and cost reports are written and submitted

#### In fulfilling these responsibilities, the IC must:

- Balance the need for accurate advice and information against the need for timely decisions.
- Document key decisions, and their rationale, as they are made.
- Consult with Governance on desired outcomes.
- Be aware of the decisions made in other incursions or events that will impact the response.
- Hand back control of island biosecurity management to the approving manager at the end of the response.

#### 2.2.4 Planning and Intelligence



For island incursions the Planning and Intelligence functions are most often combined rather than separate. Intelligence is the function that collects and analyses response information; the Planning function is responsible for overseeing the development of Incident Action Plans (IAPs).

Note that the Technical Advisory Group (TAG) is a group of technical specialists reporting separately to the IC, not part of the Planning and Intelligence team.

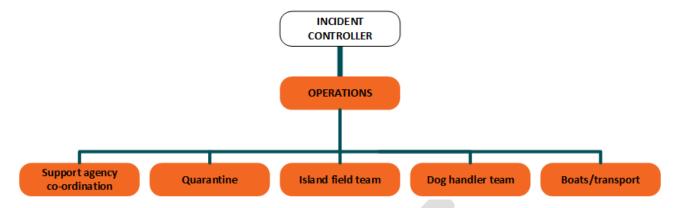
The Planning and Intelligence person or team should have:

- The ability to collect, collate, analyse and digitise information and to write clear and concise Situation Reports (SitReps) and plans. Note that the writing of these documents can be time-consuming; assigning a person with writing/typing skills to the team to specifically cover this task can be beneficial.
- A strong connection with the operational teams in order to gather incident information.
- GIS capabilities, or access to them.

Planning and Intelligence responsibilities are to:

- Gather, collate, and analyse response information related to context, impact and consequences. Context for the incident includes: existing plans, hazards, species at risk, cultural factors, terrain, infrastructure, climate and weather.
- Develop and distribute processed intelligence as SitReps, situation maps and other material (e.g. photos or video).
- Gain, develop and distribute intelligence as to how the incident might develop.
- Establish a planning process and planning cycle.
- Obtain input from other IMT functions towards the development of plans.
- Convene and conduct planning meetings.
- Create and distribute IAPs on behalf of the IC.
- Maintain a log of all planning and intelligence functions, actions taken, and decisions made.
- Create contingency plans for things that haven't yet occurred but might do so.
- Provide input to the response debrief.

#### 2.2.5 Operations

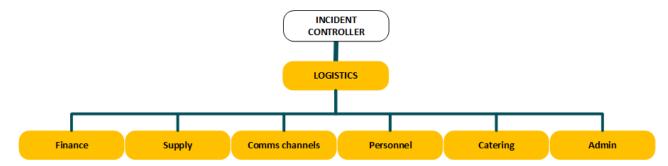


Operations is the function responsible for the direction, co-ordination and supervision of field operations, and the implementation of the IAP. For incursion responses Operations often includes functions for overseeing quarantine, island field teams, conservation dog and handler teams and boating.

Operations responsibilities are to:

- Plan in detail and co-ordinate the day-to-day response actions on behalf of the IC, as specified by the IC or in the IAP.
- Where two or more agencies are involved in the response, a liaison officer is to maintain interagency communication and coordination between lead and support agencies.
- Apply strict quarantine procedures so that no further incursions occur due to response actions.
- Contribute to the development of the IAP.
- Advise the IC on operational resources.
- Keep the IC and other IMT functions informed about progress with response actions, including conservation dog team coverage, indications, and other pertinent information.
- Provide spatial (GPS) information to the IMT for control and detection devices, hazards and other pertinent information.
- Maintain a log of tasks received, operational actions undertaken, decisions made and safety considerations.
- Provide input to the response debrief.

#### 2.2.6 Logistics



Logistics is responsible for providing and tracking resources (personnel, equipment, catering, supplies, facilities and services) to support the response, and providing logistics advice to the other IMT functions. Logistics actions generally precede those of other functions, so must be completed promptly to allow other functions to operate effectively.

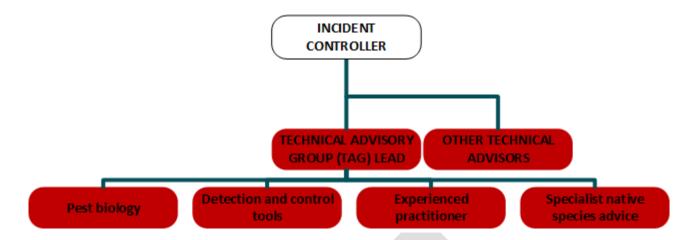
An effective Logistics unit comprises people that have good awareness of what incursion response resources are available and the DOC processes to acquire resource and track finance.

In multi-agency responses, it is useful to have logistics staff from each agency involved.

#### Logistics responsibilities are to:

- Acquire a copy of relevant existing Incursion Response Plans and/or Biosecurity Plans indicating resources available, pre-identified personnel and suppliers.
- Receive and respond to resource requests. Procure, store, maintain and distribute resources, tracking their use.
- Provide and maintain information on internal communication channels.
- Work with the Operations Quarantine function to ensure no supplies pose a risk of further incursions.
- Contribute to the development of the IAP.
- Track financial expenditure.
- Provide record keeping and administration support.
- Collate and match offers of assistance.
- Advise the IC and other IMT functions of logistical issues and resource levels.
- Maintain a log of logistics requests received, decisions made, and requests actioned.
- Provide input to the response debrief.

#### 2.2.7 Technical Advisors



The Technical Advisory Group (TAG) is a team of people providing expert technical advice directly to the IC. The TAG is separate to the Planning and Intelligence team, although the TAG will provide information relevant for the SitReps and IAPs that team produces.

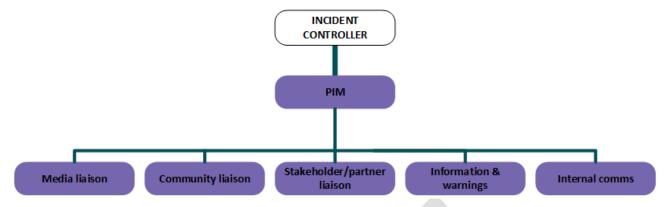
For incursion responses the TAG should comprise biological expertise of the invading pest, sound technical knowledge of detection and control tools, an experienced eradication or incursion response practitioner, and, if required, specialist native species knowledge. A TAG is normally made up of 3-4 people.

#### The role of the TAG is to:

- Provide specialist advice to the IC for the response. The TAG does not make response decisions; it is the IC's responsibility to make decisions that take into account TAG advice.
- Review data and situational information.
- Contribute to the development of the IAP.
- Recommend detection and control tactics.
- Access and interpret specific specialist information if required (e.g. DNA analysis).
- Maintain a log of advice given and decisions made for the response.
- Recommend if, when and what pesticides should be used.
- Prepare the application form for fast-tracking permission to use select rodenticides, if necessary.
- Provide input to the response debrief.

Other Technical Advisors that are not TAG members can also provide technical advice as required. These advisors report directly to the IC but will keep the TAG lead informed. Such advisors include people with expertise in autopsy or the identification of pest sign, and Island Biosecurity Technical Advisors providing advice on how to apply this SOP.

#### 2.2.8 Public Information Management (PIM)

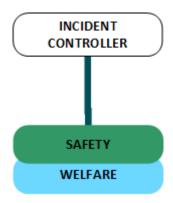


The Public Information Management function is responsible for developing and delivering messages to the public and stakeholders about the incursion and the response, and for media and community liaison. At the IC's direction, this function will also issue warnings and advisories.

Public Information Management responsibilities are to:

- Acquire situational information for the Planning and Intelligence and other IMT functions.
- Develop a communication plan for the public and/or stakeholders.
- Liaise with DOC's national Media and Communications team, if the incursion is likely to be of interest to national media.
- Prepare and deliver information to the public or stakeholders.
- Monitor public and media reactions.
- Liaise with media and prepare spokespeople for interviews.
- Carry out two-way liaison with the affected community, if applicable. This liaison may include acquiring landowner consents for e.g. pest detection dog surveys.
- Produce information materials such as newsletters or pamphlets.
- Ensure the other IMT functions and all personnel have current public information key messages.
- Contribute to the development of the IAP.
- Advise the IC on information issues.
- Maintain a PIM log of all requests for information, decisions made, and the information provided.
- Provide input to the response debrief.

#### 2.2.9 Safety and Welfare



The Safety and Welfare function is responsible for advising the IC on measures to minimise safety and welfare risks to response personnel and damage risks to resources (e.g. boats), and assesses and anticipates unsafe or unhealthy situations.

Unsafe or unhealthy acts or conditions will be corrected through the regular line of authority, but the function manager also has the authority to stop or prevent unsafe acts directly when immediate action is required.

Safety and Welfare responsibilities are to:

- Monitor conditions, evaluate operating procedures, analyse risks, and develop and implement measures to maintain safety and welfare for all personnel.
- Identify known hazards and welfare risks associated with the incursion (often working with the Planning and Intelligence function).
- Ensure Job Safety Analyses and Toolbox talks are completed by incursion response field teams.
- Notify the IC of any potential safety or welfare issues.
- Develop safety, welfare, medical and emergency plans and provide these to the IC and IMT.
- Review the IAP for safety and welfare implications.
- Investigate and report any safety and welfare incidents that occur that are related to the response.
- Participate in planning meetings.
- Present safety and welfare briefings and communicate known hazards/risks.
- Maintain a log of safety and welfare decisions, actions and other activities.
- Provide input to the response debrief.

## 2.3 Other roles and responsibilities

#### 2.3.1 Approving manager

The approving manager is the manager with delegated authority to approve actions, resources and/or permissions. Usually it is the Operations Manager for the district responsible for managing the island.

During the incursion response they hand over control of island biosecurity management to the IC that they have appointed to lead the response, giving the IC freedom of action in terms of tactics.

They retain the responsibility of approving and enabling resource demands made by the IC. If rodenticides are used during the response, they are also responsible under legal delegation for approving the DOC permission for rodenticide use.

### 2.3.2 National and regional support staff

National Island Biosecurity Technical Advisors, regional Island Biosecurity Senior Rangers and other advisors from the Biodiversity group can also provide assistance to District staff during an incursion.

Tasks that national and regional support staff can assist with include:

- Providing initial advice and recommending whether a response is required.
- Providing an initial assessment of data and information.
- Providing advice or recommendations to an approving manager or Governance group
- Suggesting resources that might be available to the Logistics function
- Assisting in establishing a TAG by identifying potential TAG members and brokering with them and their managers on their involvement.
- Providing relevant material or examples to the Planning and Intelligence function or the TAG.

Island Biosecurity Technical Advisors are sent information from the incursion and the debrief, to collate in the national Island Invasions Incident Database. If deemed necessary, they may call for a review of the incursion response once the debrief has been completed.

See the *Who's Who in Island Biosecurity* document (<u>DOC-5491394</u>) for current national and regional support staff.

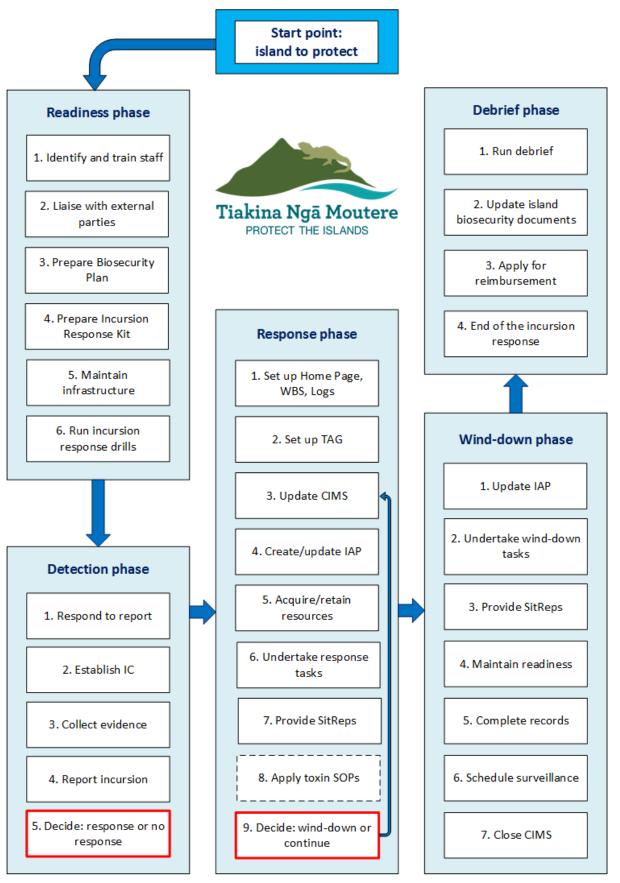
#### 2.3.3 Island Eradication Advisory Group

The Island Eradication Advisory Group (IEAG) advises on eradication design, planning, operations and monitoring. This group does not have a role in incursion responses. However, individual IEAG members can be in an incursion TAG as technical experts independent of the IEAG.

The IEAG itself becomes involved only when it is decided that the incursion response has failed to stop a breeding population of the pest establishing, and it is necessary to plan for an eradication.

See the **IEAG** intranet page for current IEAG members.

## 3. Incursion Readiness and Response Procedure



## 3.1 Readiness phase

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To be prepared for an incursion in advance, thereby allowing a rapid and effective response in the event of an incursion.

#### **Process:**

#### Step 1

#### Identify and train staff

Pre-emptively identify which staff within the DOC District or Region are suitable for filling each incursion response CIMS role (see section 2.2 CIMS roles and responsibilities) and record this in the Incursion Response section of the island's/island group's Biosecurity Plan.

Ensure that at least the staff that are likely to hold key roles in an incursion response attend a CIMS 4 or Using CIMS in the DOC Environment training course and DOC's Island Biosecurity training course. Responses will benefit greatly from the staff involved having received such training.

Train likely field staff in how to use the detection/control tools on the island and in the Incursion Response Kit (see step 4).

#### Step 2

#### Liaise with external parties

Pre-emptively liaise with external parties that govern/are stakeholders in the island's management, or that could be involved in an incursion response.

Ensure that there is mutual agreement on: likely incursion response actions (including use of pesticides), which agency leads if DOC shares responsibility for the island's management, and which party is to fill each CIMS role.

Obtain long-term consents for likely incursion response actions as far as is feasible, e.g. landowner access consent. See *Resources* for a guide to the consents required for different pest control methods.

External parties to liaise with, where applicable, include:

- Iwi
- Landowners
- Communities living on the island
- Community groups involved in island management
- Territorial authorities
- Transport operators used to access the island
- Concessionaires

#### Step 3

#### **Prepare Biosecurity Plan**

Prepare the Incursion Response section of the island's/island group's Biosecurity Plan, to include:

- Pre-approved indicative budget and staff resources for incursion response actions. Do not under-estimate the staff time consumed by all phases of a response; identify how 'business as usual' work will be managed for the duration of the response.
- The local tools and resources (including the contents of any Incursion Response Kits; see step 4) available for a response, and their location.
- Any island-specific actions to take immediately in the event of an incursion, including:
  - Actions to protect any critically important threatened species on the island, based on advice from native species specialists.
  - Actions to detect/respond to likely pest invaders, to provide a basic starting point to work from. Link to best practice initial response actions (see *Resources*) unless there are valid reasons to do things differently on the island in question.

#### Step 4 Prepare Incursion Response Kit

Ensure that each island/island group has an Incursion Response Kit immediately available and accessible. This contains detection and control tools appropriate to identified risk pest species, in sufficient quantities to last until resupply is possible.

While it is practical for a mainland biosecurity facility to hold the bulk of District/island group incursion response equipment, all high-value islands must hold at least the key equipment on-island, and remote islands must hold a full incursion response kit.

Check Incursion Response Kits at regular intervals to ensure the contents are in a fit state for use. At a minimum, annually clean and lubricate trap mechanisms and check condition of lures/baits, replacing as necessary.

See *Resources* for a link to a list of recommended Incursion Response Kit contents.

#### Step 5 Maintain infrastructure

Maintain all island track and trapline infrastructure, including contingency infrastructure only used in an incursion response, at a frequency that ensures it is in a useable state in the event of an incursion.

#### Step 6 Run incursion response drills

Regularly run scenario-based incursion response drills to ensure that people likely to be involved understand the incursion response procedures and where incursion response equipment is stored.

Involve all local staff and any other island stakeholders (e.g. island restoration trust members) that are likely to be involved in the event of a real incursion. Consider inviting staff working in island biosecurity in other DOC districts to participate, to support information-sharing.

#### Standards:

- 1 At least two staff in each District have completed a CIMS 4/Using CIMS in the DOC Environment training course and DOC's Island Biosecurity training course.
- 2 Suitable District/Region Operations staff to fill each of the CIMS roles described in section 2.2 CIMS roles and responsibilities are pre-emptively identified.
- 3 The island or island group has a completed Incursion Response section in its Biosecurity Plan.
- The island has a well-maintained Incursion Response Kit immediately available, that contains tools appropriate to the identified risk pest species.
- 5 Track and trap line infrastructure on the island is in a useable state.
- 6 An incursion response drill is carried out annually for at least one island per District.

#### Resources:

- Best Practice pest-specific initial response actions:
  - o Rat: <u>DOC-6164038</u>
  - o Mouse: <u>DOC-6164054</u>
  - o Stoat: DOC-6166318
  - o Weasel: DOC-6245078
  - o Cat: DOC-6244448
  - o Ant: DOC-6166601
  - o Skink: DOC-6196009
  - o Bird:
- Incursion Response Kit recommended contents list: <u>DOC-6100556</u>
- Working out which consents you need for animal pest operations: <u>DOC-1475279</u>

The Island Biosecurity intranet page has links to these documents.

## 3.2 Detection phase

Objective:	To assess the need to initiate an incursion response, and, if required, formally
	launch it.

#### **Process:**

#### Step 1 Respond to report

**Ranger/Senior Ranger:** Respond swiftly if the presence of a pest is found, reported, suspected or presumed (e.g. a shipwreck occurs).

Set this *Detection* phase in train within 24 hours and report the situation to the approving manager.

#### Step 2 Establish IC

**Approving manager**: Formally appoint an Incident Controller (IC), thereby handing over control of the island's biosecurity management until the CIMS is closed and the IC is stood down. Declare the operational parameters, i.e. any budget/resource limits and any reporting requirements for Governance.

*IC*: Accept role of IC. Activate other Incident Management Team (IMT; see section 2.2 CIMS roles and responsibilities for details) functions if necessary; usually more IMT functions are not required until the Response phase.

#### Step 3 Collect evidence

*IC*: Immediately collect evidence and conduct interviews (see *Resources* for an interview template and information sources on pest sign identification) to confirm pest presence and/or to acquire further information.

A written record of interviews is particularly important where is no evidence other than an observation. Contact the Conservation Dog team (see Resources) for advice and availability of dogs for evidence collection.

Physical evidence (scats, fur, feathers, carcasses etc) must be held securely until deemed no longer required by the incursion Technical Advisory Group (TAG), or an Island Biosecurity Technical Advisor.

Evidence collection and interviewing must be meticulous, clearly separating fact from speculation/assumption, to be able to confidently confirm or disprove pest presence. Correct sign identification is crucial to response decisions.

See *Specifications* for detail on how to collect and protect different types of evidence, and how to effectively interview a person who reports an incursion.

#### Step 4 Report incursion

*IC*: Report the suspected incursion to:

- The region's Island Biosecurity Senior Ranger, if applicable.
- An Island Biosecurity Technical Advisor.

Initially this can be verbal or by email, then send a *Pest Invasion Incident form* (see *Resources*) to the Island Biosecurity Technical Advisor, to inform the national Island Invasion Incidents Database.

If the pest is a new-to-NZ or new-to-NZ-wild organism, it is a legal requirement to report it to the Ministry for Primary Industries (via hotline: 0800 80 99 66) and DOC's Mainland Biosecurity team (see *Who's who* in *Resources*). In this situation the rest of this SOP procedure is suspended, pending further advice from the Mainland Biosecurity team.

### Step 5 Decide: response or no response

*IC*: Assess the incursion evidence with assistance from an Island Biosecurity Senior Ranger and/or Technical Advisor if needed, and decide whether:

- a response should be initiated (move into the Response phase); or
- a response should not be initiated (close CIMS, IC hands back control of the island's biosecurity management to the approving manager).

**Approving manager:** Formally approve or disapprove the response, based on the IC's recommendation.

Record the decision and reasoning behind it in a recoverable document saved to docCM.

Not initiating a response doesn't necessarily mean do nothing. For example, surveillance frequency or intensity could be increased for a defined period.

#### Standards:

- 1 This Detection phase process is in action within 24 hours of a pest being found, reported, suspected or presumed to be on the island.
- A Pest Invasion Incident form is completed and sent to an Island Biosecurity Technical Advisor.

#### **Specifications:**

#### Interviewing on reported sightings

- 1. Interview the person who made the sighting as soon as possible. See Resources for template.
- 2. Take account of their experience but do not judge a sighting on their experience alone. Record at least: date and time of interview, their contact details, date and time of sighting, the exact location of sighting (if necessary, take them back to the site), what they thought they saw, how close they were, how long they observed it for, and what the level of visibility was.
- 3. Record the interview in writing and also in an audio recording if permitted.
- 4. Ask open questions, e.g. "What did you see? How long did you observe it? What did it look like?" DO NOT ask leading questions, e.g. "was it light brown with a black tip on the tail?"
- 5. Consider recent messaging or media reports about pests on islands, as these can lead to a higher level of confidence in pest observations than might otherwise have been the case.

6. Ask an Island Biosecurity Technical Advisor to check the national Island Invasion Incidents Database for previous incident records on this island. One vague sighting on its own may be dismissed, but a number of similar sightings over time could lead to a different conclusion.

#### Collecting evidence

- 1. Pre-inspect the ground when collecting evidence before treading there, to avoid denaturing sign.
- 2. Take time to look around very carefully for all kinds of evidence/sign, including footprints, scratches, scats, hairs, chew marks, prey carcasses or herbivory sign.
- 3. Look for evidence of the suspected species as well as evidence which could support an alternative explanation.
- 4. Photograph evidence *in situ* before disturbing it. Use high resolution settings for at least some photos. Take photos from different angles, some close-up and some with a wider view of the scene to give context, and some with natural light, some with flash. Photos should include something (e.g. a ruler) to provide a reference scale for size.
- Record detailed notes for each piece of evidence in a waterproof notebook, including the observer, location (GPS co-ordinates ideally), date, time, what was seen, and which photos correspond to which locations.
- 6. When retrieving evidence to take to base, physically mark the location and collect everything. I.e. if there are 24 suspected rat droppings, collect all 24, not just a couple. Keep evidence from different locations and different evidence types separate. Keep it in sealed bags/containers, labelled clearly both inside and outside of the bag/container (ideally pencil on waterproof paper inside and indelible ink on the outside) with the date, type, location and collector.
- 7. Be careful not to contaminate samples for DNA analysis. See <u>EcoGene's website</u> for more details on how to collect samples, and for <u>instructional videos</u>. See <u>Resources</u> for a guide to scene examination of suspicious predations.
- 8. If sending evidence to an expert, ensure they are prepared for its arrival, then use a secure courier or other traceable system to transport it. Do not risk losing it by sending it by regular post.
- 9. If the evidence is difficult to identify, have at least two different experts look at it independently to give their opinion and explain why they came to the conclusion they did.

#### Resources:

- Conservation Dog Programme key contacts are listed at the bottom of the CDP intranet page
- Guide to scene examination of suspicious predations: <a href="DOC-5382910">DOC-5382910</a>
- Information to assist in identifying sign can be found on <a href="https://www.pestdetective.org.nz">www.pestdetective.org.nz</a>
- Interview template: <u>DOC-6195073</u>
- Pest Invasion Incident form: DOCDM-53216
- Who's who in island biosecurity: <u>DOC-5491394</u>

The Island Biosecurity intranet page has links to these documents.

#### 3.3 Response phase

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To continue to collect information on the situation (e.g. pest species, number present, duration of pest presence on the island), while setting up systems and deploying tools to eliminate the pest swiftly.

To detect and eliminate all targeted individual pests.

#### Note:

This process must be carried out swiftly. Due to the unpredictability of incursions the order of steps within this phase is flexible; two or more steps might need to take place at the same time, or steps might take place in a different order, as events dictate.

While the order in which steps are taken is flexible, no steps are to be omitted.

## **Process:** Step 1 Set up Incursion Home Page, WBS code and Incursion Log(s) IC: Save a copy of the Incursion Home Page template (see Resources). Record docCM links to all incursion-related documents in this document. Arrange to have a new WBS code set up for all incursion-related costs. Save a copy of the Incursion Log template (see Resources) and record all actions taken until the incursion response ends. In more complex responses it might be necessary to have individual logs for specific IMT functions. Step 2 Set up TAG IC: Set up a TAG and identify the TAG leader. Island Biosecurity Senior Rangers or Technical Advisors can assist with identifying and recruiting suitable TAG members. Arrange regular TAG meetings, in particular when the situation changes and new advice is necessary. Provide all information available on the situation to TAG members in advance of the meeting, including maps, details of evidence, actions undertaken so far, and resources available. Step 3 **Update CIMS** IC: Update the incursion CIMS structure to expand the IMT as necessary (see Resources for a template). The CIMS structure needs only be as complex as the response requires; a single person can cover more than one IMT function if this is manageable. Scale the structure up or down as necessary as the response progresses. Step 4 Create/update action plan

*IC*: Set incident objectives, with input from IMT, Technical Advisors and Senior Management/Governance as appropriate (see *Specifications* for details on incident objectives).

**Planning & Intelligence**: Create/update an Incident Action Plan (IAP) with input from the Incursion Response section of the island/island group's Biosecurity Plan, IMT and Technical Advisors. Apply best practice for initial response actions and incursion response tools (see *Resources*) until incursion-specific TAG advice is available.

See *Specifications* for points to consider when creating an IAP, and *Resources* for an IAP template.

Every IAP lasts for a defined period (generally 5-10 days) and must be revised either when that period ends or earlier, as events dictate.

#### Step 5 Acquire/retain resources

IC: Use IAP to brief approving manager and IMT, and allocate response tasks.

**Logistics**: Acquire/retain response resources. Island Biosecurity Senior Rangers or Technical Advisors can assist with the sourcing of resources and negotiating for staff time.

Approving manager: reprioritise work where necessary.

#### Step 6 Undertake response tasks

*IMT function leads*: Carry out response tasks as per IAP, maintaining quarantine and other island surveillance throughout. Record all actions in logs, where applicable, and record links to documents in the Incursion Home Page. Keep the IC informed on progress.

#### Step 7 Provide SitReps

**Planning & Intelligence**: Write regular SitReps (see *Resources* for a template) and distribute to the TAG, an Island Biosecurity Technical Advisor, the approving manager and the IMT.

IC: Keep iwi, Governance and stakeholders informed on the situation.

#### Step 8 Apply pesticide SOPs

*IC*: If pesticide use is not recommended by the TAG, skip this step and move ahead to step 9.

If the TAG recommends pesticide use (this is usually a last resort) and the IC accepts that recommendation, apply the required pesticide SOPs as per standard 6 below, while continuing all tasks that are not pesticide related. See *Resources* for links to pesticide SOPs.

#### Step 9 Decide: wind-down or continue

*IC*: Each time the IAP is revised, or earlier if events dictate, take into account TAG advice to decide whether:

- the incursion has been managed or it has been proven there was no incursion (move into the *Wind-down phase*); or
- the incursion is ongoing but remains manageable through further work and/or alternative tactics (return to step 3 in this Response phase); or
- the incursion is beyond incursion response management and it is now
  a case of eradication planning or accepting pest presence (move into
  the Wind-down phase and seek advice from the Island Eradication
  Advisory Group).

Record the decision and reasoning behind it in a SitRep for each iteration.

#### Standards:

- 1 The CIMS structure is updated with IMT functions activated and de-activated as required, as the response progresses.
- An Incursion Home Page, Incursion Log and incursion-specific WBS code are used to record documents, actions and costs.
- **3** The IC is supported by a TAG.
- 4 One or more IAPs guide the IMT in their actions.
- 5 SitReps are provided regularly to the IMT, the TAG, an Island Biosecurity Technical Advisor, and the approving manager.
- 6 If pesticides are used in the response, the following SOPs are applied:
  - In all cases apply the Safe Handling of Pesticides SOP
  - For brodifacoum or diphacinone, used in accordance with one of the pesticide uses in the *Island Incursion Toolkit*, apply the *Obtaining DOC permission for rodenticide use in island incursions SOP*.
  - Any other pesticide and application method used must be an approved pesticide use on the Status list. In this case, apply the following steps in the Operational planning for animal pest operations SOP to meet legal requirements, using incursion IAP in lieu of Operational Plan where the latter is referenced.
    - Preparing phase steps: 7, 8, 9
    - Planning phase steps 1 (step 1 is only compulsory for islands where members of the public normally have access), 3, 5, 6
    - Pre-operational phase steps 2, 3, 4, 6
    - Operational phase steps 1, 3, 4
    - Post-operational phase steps 1, 2, 3
    - Reporting phase step 1

#### Specifications:

#### Incident objectives

Incident objectives make clear the ultimate goals of an incursion response.

Every incursion has one self-evident objective: to remove the pest invader(s) from the island.

In some incursions there will also be other specific objectives to achieve during the response. Examples include:

- Maintaining relationships (e.g. with island community, iwi and/or other partners)
- Protecting habitat (e.g. protecting petrel burrows from trampling during response)
- Protecting native species at risk from pest control tools
- Ensuring field team safety (e.g. on islands with difficult or unsafe terrain)

#### Points to consider when assessing the response and developing an IAP

- Is confirmation of anything still required do you *know* what you are dealing with? If confirmation is still required, what actions are necessary to provide this?
- What are the pest's likely impacts on the island's conservation values in the short term, including on vulnerable native species? Is an intensive protection operation necessary to protect the most vulnerable species, and if so, who can do this?
- What is the sex, age and breeding status of pest individuals that have been caught or observed?
- How long could the pest have been present how long ago can you confidently say that this
  pest had not arrived on the island?
- What pest species were already present on the island at the time of invasion?
- Have there been previous incursions of this species on this island? If so, how were these
  dealt with and should the same techniques be used again or not?
- Are there restrictions on possible control methods due to non-target species present, stakeholder agreements and/or logistical constraints? Can these be mitigated?
- Is the existing infrastructure (e.g. tracks and accommodation) adequate to undertake the required work? If not, what needs to be done to improve it?
- What permits/approvals are required to enable the chosen course of action?
- What quarantine resources will be required to ensure the response itself does not introduce further pest organisms?
- Is the invader a pest with official status under the Biosecurity Act, or a declared pest under the local RPMP/RPMS? If so, seek guidance from the local Territorial Authority and/or an Island Biosecurity Technical Advisor. Additional powers might be available to authorised staff, for example to search private property and to detain boat traffic.

#### Resources:

- Best Practice for incursion response tools:
- Best Practice pest-specific initial response actions:

o Rat: <u>DOC-6164038</u>

o Mouse: <u>DOC-6164054</u>

- o Stoat: <u>DOC-6166318</u>
- o Weasel: <u>DOC-6245078</u>
- o Cat: <u>DOC-6244448</u>
- o Ant: <u>DOC-6166601</u>
- o Skink: <u>DOC-6196009</u>
- o Bird:
- CIMS structure template: page 3 of <a href="DOC-6236915">DOC-6236915</a>
- Conservation Dog Programme key contacts are listed at the bottom of this intranet page: <a href="http://intranet/natural-heritage/threats-to-biodiversity/animal-pests/conservation-dogs-programme/">http://intranet/natural-heritage/threats-to-biodiversity/animal-pests/conservation-dogs-programme/</a>
- Costings report example of completed report: <u>DOC-5415571</u>
- Costings report template: <u>DOCDM-1560956</u>
- DOC permission application form for *Island Incursion Toolkit* rodenticides: DOC-2774962
- DOC permission application form for Island Incursion Toolkit rodenticides example of completed form: <u>DOC-2779507</u>
- IAP template: page 2 of DOC-6236915
- Incursion Home Page template: <u>DOC-6198827</u>
- Incursion Log template: page 4 of DOC-6236915
- Island Incursion Toolkit: <u>DOC-2752511</u>
- Pest detection dog request form: DOC-342112
- Response options analysis template and example of completed template: DOC-2608774
- SitRep template: page 1 of DOC-6236915
- SOP Obtaining DOC permission for rodenticide use in island incursions: DOC-2751605
- SOP Operational planning for animal pest operations: <u>DOCDM-1488532</u>
- SOP Safe handling of pesticides SOP: DOCDM-22730
- Status list: <u>DOCDM-22655</u>
- The IEAG intranet page lists current IEAG members.
- Who's who in island biosecurity: DOC-5491394

The <u>Island Biosecurity intranet page</u> has links to these documents.

#### Wind-down phase 3.4

## **Objectives:** To wind down incursion response activities while ensuring that equipment and staff are ready for future incursions. If the incursion has been managed: To provide confidence that no individual pests have escaped detection whilst operationally moving from response to regular surveillance. If moving into eradication planning or accepting pest presence: To ensure that

likelihood of success of a future eradication.

actions taken while winding down the incursion response don't compromise the

Process:			
Step 1	Update IAP		
	<i>IC</i> : Set wind-down objectives, with input from IMT, Technical Advisors, Senior Management/Governance, and IEAG (if moving into eradication planning) as appropriate.		
	<b>Planning &amp; Intelligence</b> : Update IAP with input from IMT, TAG, and IEAG (the latter only if moving into eradication planning).		
Step 2	Undertake wind-down tasks		
	IC: Use updated IAP to brief approving manager and IMT and to allocate wind-down tasks, including decommissioning tools and removing remaining pesticides.		
	Approving manager: reprioritise work where necessary.		
	IMT function leads: Carry out wind-down tasks as per IAP, maintaining quarantine and other island surveillance throughout. Record all related information securely in the incursion logs and the Incursion Home Page. Keep the IC informed on progress.		
Step 3	Provide SitReps		
	<b>Planning &amp; Intelligence</b> : Write regular SitReps and distribute to the TAG, an Island Biosecurity Technical Advisor, the approving manager, and the IMT.		
	IC: Keep iwi, Governance and stakeholders informed on the situation.		
Step 4	Maintain readiness		
	<i>IC</i> : Ensure wind-down tasks leave the island infrastructure and team in a state of readiness for possible future incursions.		
	<b>Operations</b> : Ensure the Incursion Response Kit is re-stocked and stored to be ready for future incursions.		
Step 5	Schedule surveillance		

	IC: Ensure that ongoing island surveillance has been re-scheduled						
	appropriately. Seek advice from the TAG on whether the post-incursion						
	surveillance schedule should be any different to the pre-incursion schedule.						
Step 6	Complete records						
IC: Check that all logs, reports and other records being kept are consaved to docCM and communicated to an Island Biosecurity Technical for inclusion in the national Island Invasion Incidents Database.							
	Create a Pestlink report for the pest control operation (see <i>Resources</i> for links to Pestlink database and user manual)						
	Close the incursion WBS.						
	<b>Planning &amp; Intelligence:</b> Send a final SitRep to the TAG, an Island Biosecurity Technical Advisor, the approving manager, and the IMT.						
Step 7	Close CIMS						
	IC: Formally close the CIMS structure once satisfied that all the above steps are completed. Hand back control to the approving manager.						
	Approving manager: Formally accept control of the island's biosecurity						

#### Standards:

1	One or more IAPs, updated with wind-down objectives and tasks, guide the IMT.
2	A final SitRep is provided to the IMT, the TAG, an Island Biosecurity Technical Advisor and the approving manager before the CIMS structure is closed.
3	Island infrastructure, the Incursion Response Kit and the island team are left in a state of readiness for possible future incursions.
4	All logs, reports and other records are completed and communicated to an Island Biosecurity Technical Advisor.
5	Ongoing island surveillance is scheduled.

management and move into Debrief phase.

#### Resources:

- Best Practice for incursion response tools:
- CIMS structure template: page 3 of <a href="DOC-6236915">DOC-6236915</a>
- IAP template: page 2 of <u>DOC-6236915</u>
- Incursion Home Page template: DOC-6198827
- Incursion Log template: page 4 of <u>DOC-6236915</u>
- Pestlink: <a href="http://docintranet/Bioweb/pestlink/pestlink.aspx">http://docintranet/Bioweb/pestlink/pestlink.aspx</a>
- Pestlink manual: DOCDM-321840
- SitRep template: page 1 of DOC-6236915

• Who's who in island biosecurity: <u>DOC-5491394</u>

The <u>Island Biosecurity intranet page</u> has links to these documents.



## 3.5 Debrief phase

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To evaluate readiness and the incursion response, to document the incident, and to communicate any lessons learned.

#### **Process:**

#### Step 1

#### Run debrief

**Approving manager**: Task someone to arrange a debrief meeting within 2 weeks of the end of the wind-down phase, and to write and distribute debrief and costings reports within 1 month of the debrief taking place. See *Resources* for debrief and costings templates. Costings can alternatively be provided as a print-out from the incursion-specific WBS in SAP if this captures all costs.

The debrief should include the IC, all IMT function leads and the TAG. Consider including an Island Biosecurity Senior Ranger or a Bio Planner as an impartial third party.

Distribute the debrief report to: the approving manager, IMT, TAG, Island Biosecurity Senior Ranger if applicable, an Island Biosecurity Technical Advisor, other district staff involved in the incursion, and conservation dog handlers if applicable.

Distribute the costings report to: the approving manager, IMT and an Island Biosecurity Technical Advisor.

#### Step 2

#### Update island biosecurity documents

**Approving manager**: Task someone to update the Incursion Response section of the island's/island group's Biosecurity Plan based on debrief lessons, and to implement any changes.

**Island Biosecurity Technical Advisor**: Update the national Island Invasions Incident Database, relay lessons learned to the wider biosecurity network and update Island Biosecurity Best Practice if applicable. Arrange a review of the response if warranted.

### Step 3

#### Apply for reimbursement

**Approving manager**: Assign the task of applying to the Incursion Response Fund for reimbursement of costs incurred.

This step is optional but is strongly recommended. See the *Incursion Response Fund Factsheet* (see *Resources*) for details.

If the standards in this SOP have been met during the response, and evidence of expenditure is supplied, the criteria for applying for reimbursement will have been fulfilled.

Reimbursement may only be partial in the event that the combined claims from all applications exceed the funds available. Contact an Island Biosecurity Technical Advisor for information on current available funds.

#### Step 4

#### End of the incursion response

#### Standards:

1	A debrief is run within 2 weeks of the end of the wind-down phase.
2	A debrief report and costings report are distributed to the approving manager, IMT and an Island Biosecurity Technical Advisor within 1 month of the debrief.
3	Island biosecurity documents and processes are updated as necessary, based on lessons from the debrief.

#### Resources:

- Costings report example of completed report: <u>DOC-5415571</u>
- Costings report template: <u>DOCDM-1560956</u>
- Debrief report example of completed report: <u>DOC-2808849</u>
- Debrief report template: <u>DOC-2619461</u>
- Incursion Response Fund Factsheet: DOC-5922459
- Who's who in island biosecurity: <u>DOC-5491394</u>

The <u>Island Biosecurity intranet page</u> has links to these documents.

## About this document

## 4.1 Complete list of resources

- Best practice pest-specific initial response actions:
  - o Rat: <u>DOC-6164038</u>
  - o Mouse: <u>DOC-6164054</u>
  - o Stoat: DOC-6166318
  - o Weasel: <u>DOC-6245078</u>
  - o Cat: <u>DOC-6244448</u>
  - o Ant: DOC-6166601
  - o Skink: <u>DOC-6196009</u>
  - o Bird:
- CIMS structure template: page 3 of DOC-6236915
- Costings report example of completed report: <u>DOC-5415571</u>
- Costings report template: <u>DOCDM-1560956</u>
- Debrief report example of completed report: DOC-2808849
- Debrief report template: <u>DOC-2619461</u>
- DOC permission application form for *Island Incursion Toolkit* rodenticides: DOC-2774962
- DOC permission application form for Island Incursion Toolkit rodenticides example of completed form: <u>DOC-2779507</u>
- IAP template: page 2 of DOC-6236915
- Incursion Home Page template: <u>DOC-6198827</u>
- Incursion Log template: page 4 of DOC-6236915
- Incursion Response Fund Factsheet: DOC-5922459
- Incursion Response Kit recommended contents list: DOC-6100556
- Interview template: <u>DOC-6195073</u>
- Island Biosecurity Best Practice guidelines: DOC-5967257
- Island Biosecurity Best Practice for incursion response tools:
- Island Incursion Toolkit: DOC-2752511
- Island Invasions Incident Database: <a href="DOCDM-53231">DOCDM-53231</a>
- Guide to scene examination of suspicious predations: <u>DOC-5382910</u>
- Pest detection dog request form: DOC-342112
- Pest Invasion Incident form: <u>DOCDM-53216</u>
- Pestlink: <a href="http://docintranet/Bioweb/pestlink/pestlink.aspx">http://docintranet/Bioweb/pestlink/pestlink.aspx</a>
- Pestlink manual: <u>DOCDM-321840</u>
- Response options analysis template and example: <u>DOC-2608774</u>
- SitRep template: page 1 of <u>DOC-6236915</u>

- SOP Obtaining DOC permission for rodenticide use in island incursions: DOC-2751605
- SOP Operational planning for animal pest operations: <u>DOCDM-1488532</u>
- SOP Safe handling of pesticides SOP: <u>DOCDM-22730</u>
- Status list: <u>DOCDM-22655</u>
- Who's who in island biosecurity: DOC-5491394
- Working out which consents you need for animal pest operations: DOC-1475279

## 4.2 Document history

Date	Details	Document ID and version	Amended by
DD/MM/20YY	e.g. first version of document published	doc-xxxxxx revision #	
DD/MM/20YY	e.g. annual check – minor amendments		
DD/MM/20YY			
DD/MM/20YY			

## 4.3 Documents replaced

This SOP replaces the following documents which have been revoked:

- DOC-5388157 CIMS roles and responsibilities
- Swim lane diagrams, since now so radically different??