



INTERPOL

# DISASTER VICTIM IDENTIFICATION GUIDE



**INTERPOL DVI GUIDE REVIEW SCHEDULE**

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# INTERPOL - Disaster Victim Identification Guide

## Part 'A'

Contents (Guide)	Page
1. Foreword	6
2. Purpose of the INTERPOL DVI Guide.....	6
2.1. Guiding Principles.....	7
2.2. Good DVI Governance.....	7
2.3. The Phases of the DVI Process .....	8
2.4. Disaster Classifications.....	8
2.4.1. Open Disaster .....	8
2.4.2. Closed Disaster .....	9
3. A Cooperative Approach to Disaster Management.....	9
3.1. General.....	9
3.2. Coordinating a DVI Response with Other Disciplines .....	9
3.3. Initial Response by the Lead Authority .....	10
3.3.1. Initial Scene Control Measures by the Lead Authority.....	11
3.3.2. Initial Risk and Hazard Assessments by the Lead Authority.....	11
3.3.3. Initial Scene Evaluation .....	11
3.3.4. Preliminary Planning for Scene Management.....	12
4. DVI Command Structure and Responsibilities .....	12
4.1. DVI Command Structure .....	13
4.1.1. Identification of Key Roles.....	14
4.2. DVI Management Responsibilities .....	14
4.2.1. DVI Commander .....	14
4.2.2. Phase Coordinators .....	14
4.2.3. DVI Specialist Coordinators/Managers .....	15
5. Summary of DVI Phases .....	15
5.1. Phase 1: Scene.....	15
5.1.1. Scene Coordination Responsibilities .....	15
5.2. Phase 2: PM.....	16
5.2.1. PM Coordination .....	16
5.3. Phase 3: AM .....	16
5.3.1. AM Coordination.....	17
5.4. Phase 4: Reconciliation .....	17
5.4.1. Reconciliation Coordination.....	17
5.5. Phase 5: Review of Actions and Preparation .....	18
6. Methods of Identification (Primary and Secondary) .....	18
7. Priority Considerations for DVI Operations .....	18
7.1. Legal and Jurisdictional Requirements.....	19
7.2. Unconscious Living Victims .....	19
7.3. Religious and Cultural Considerations .....	19
7.4. Family/Relative Liaison and Support Arrangements.....	19
7.5. Planning a DVI Response.....	20
7.6. Coordinating and Organising DVI Teams .....	20
7.7. Safety Audits and Risk Assessments .....	21
7.8. Logistical Support for DVI Operations.....	21
7.9. DVI Liaison Officers .....	21
7.10. Staffing and Rostering for DVI Teams .....	22

7.11. Communication Arrangements.....	22
7.12. Information Technology Services and Support Staff .....	22
7.13. Security Measures (Including Information Security Arrangements).....	23
7.14. Human Remains Management.....	23
7.15. Mortuary and Storage Facilities.....	24
7.16. Property Management.....	24
7.17. Information and Records Management.....	24
7.18. Media Management.....	25
7.19. Quality Assurance Controls.....	25
7.20. Repatriation Arrangements .....	26
7.21. Contracts with Private Companies.....	27
7.22. Reference Materials.....	27
8. Occupational Health, Welfare and Safety.....	27
8.1. General.....	27
8.1.1. Medical.....	28
8.1.2. Psychological .....	28
9. Support Services for Families and Relatives .....	29
10. Training and Equipment.....	29
10.1. Training .....	29
10.2. Equipment.....	30
10.2.1. Personal Protection Equipment (PPE) .....	30
10.2.2. Specialised Equipment .....	31

# INTERPOL - Disaster Victim Identification Guide

## Part 'B'

### Contents (Annexures)

Annexure 1: Principles of Good DVI Governance.....

Annexure 2: Summary of Emergency Responders.....

Annexure 3: Phase 1 > Scene.....

Annexure 4: Phase 2 > PM.....

Annexure 5: Phase 3 > AM.....

Annexure 6: Phase 4 > Reconciliation.....

Annexure 7: DVI Management Roles.....

Annexure 8: Methods of Identification.....

Annexure 9: INTERPOL Guidance: Numbering in Disaster Victim Identification Operations.....

Annexure 10: Guidance and Information for Families.....

Annexure 11: Guidelines for Dead Body Management and Victim Identification in CBRN Disasters...

Annexure 12: Occupational Trauma Exposure in Disaster Victim Identification .....

Annexure 13: Recommendations for DVI operations with a large number of fragmentary remains...

The first INTERPOL Disaster Victim Identification (DVI) Guide was published in 1984 and subsequently revised over several years. The experience gained by the past and present international community of DVI disciplines and administrators over that time, in various operations, has been taken into account in this current version.

As far as INTERPOL is concerned, one of the most important requirements for victim identification is the application of international standards, which aims to promote a consistent and widely understood approach, especially in multinational DVI operations.

This philosophy was reinforced by the INTERPOL Secretary General at an international conference in The Hague, Netherlands, where he said; *“experience had shown that field deployments are complex and require a uniform response when providing onsite support following a disaster, whether natural or man-made...”* (INTERPOL Media Release, 2013).

To establish, maintain and review standards as well as promote effective international cooperation and uniformity, INTERPOL calls upon each Member Country to plan and prepare for DVI operations. However, if a disaster occurs in a country that does not have its own DVI capacity, support by DVI teams from other countries can be requested through INTERPOL and its networks.

This Guide has been endorsed by the INTERPOL DVI Standing Committee and INTERPOL DVI Steering Group and is promoted as the international standard for conducting DVI operations as of the date of official publication.

## 2. Purpose of the INTERPOL DVI Guide

The DVI Guide provides guidelines for use by INTERPOL Member Countries in the identification of disaster victims. It can also be used to assist in establishing DVI Teams and in the management of DVI operations by those countries that either do not currently have a DVI capacity or have never been involved with such operational situations.

The guide has been designed to inform two separate audiences, namely strategic managers and planners and operational practitioners. The guide should be of use to personnel from both law enforcement and forensic backgrounds. It should also be of use to national and local authorities, as well as to organisations that have responsibility for emergency contingency planning.

The Guide is a document that can be utilised as an easy reference tool that can be widely applied internationally to develop baseline standards for conducting a DVI operation. The document provides broad-based standards and recommendations that can be interpreted and understood by all levels of planners and practitioners. The document also provides sufficiently flexible guidelines and structures that will accommodate differences and variations in jurisdictional legal systems, policies and practices.

**Part A** of this Guide contains high level reference material in respect to the conduct of DVI operations, although there is further extensive detailed information that can be accessed through linked annexures in **Part B** of the Guide. These linked annexures outline operational and procedural information designed to inform the main technical aspects of conducting a DVI operation. They can also provide standardised approaches for practitioners, although the content remains sufficiently broad enough to allow for varying international practices or circumstances.

Additionally, this guide provides assistance regarding the use of the standardised INTERPOL DVI forms. These INTERPOL forms should be used to document victim identification Ante Mortem (AM) and Post Mortem (PM) data. It is also possible that these forms can be used in single cases to assist practitioners to enhance familiarity. They can be used as either hard copy, PDF files downloaded from the homepage, or in electronic form in a software system.

Whilst this document has utilised certain terminology, particularly in respect to designated positions or entities, this has been done to highlight key roles, responsibilities and functions that exist in large scale disaster events. It is therefore acknowledged that the descriptors and designations relevant to each nation or jurisdiction may vary, although it is considered that regardless of the terminology used, it is important that the functions and roles are adequately catered for in any response plan.

Finally, to enable the Guide to remain contemporary, each annexure at **Part B** can be updated independently, thereby eliminating the need for a complete revision of the Guide at regular intervals.

## 2.1. Guiding Principles

[Return to Contents](#)

DVI teams work in an interdisciplinary manner, engaging the services of experts in various disciplines, as required, to work collaboratively towards the identification of victims. As a fundamental principle, the highest possible quality standards should be applied and victims are to be treated with dignity and respect. It is also essential to respond to relatives' needs with compassion, respect, and honesty, to provide answers and certainty as soon as reasonably possible.

Experience has shown that cooperation with other national DVI teams is advantageous when disaster victims of different nationalities are likely to be involved. Generally, if there are victims from other nations, the nation in charge should do its utmost to secure participation from those other nations, at least as liaison officers. This is especially important in respect to medical and dental specialists as well as police, with the latter providing access to police systems to facilitate the exchange of information, especially AM information AM.

The application of open communication, respect and honesty are all hallmarks of the principles that should underpin DVI operations and these principles are supported and strongly promoted by INTERPOL.

## 2.2. Good DVI Governance

[Return to Contents](#)

In our global society, disasters rarely have a singular national impact. Frequently, the victims are citizens from several countries. Consequently, the authorities of countries whose citizens have become victims of a disaster have a joint responsibility for the ethical, transparent and humane treatment of all victims. Nevertheless, it is the authorities of the country where the disaster has occurred that has chief responsibility in dealing with the victims. The independence and the applicable legal system of the disaster-stricken country are internationally accepted and respected.

This basic principle also applies to the process of disaster victim identification. To support and assist with the identification of the deceased, DVI teams from countries which have citizens believed to be victims of the disaster are often sent to assist the country in which the disaster has occurred. In recent years there has, at times been confusion for both the country of authority and those providing assistance regarding mutual roles and responsibilities.

Having clearly outlined principles of engagement and interoperability help synchronize political, diplomatic, law enforcement and other institutionalized components of a DVI response strategy and allow leaders of a country to understand the aim and purpose of the DVI support offered to a country immediately after a disaster.

Coordination of the following activities is therefore important for an effective disaster response. Coordination starts immediately after a disaster has occurred and the need for a DVI process needs to be identified with consideration being given to:

- Legislation, jurisdiction and National Conventions.
- INTERPOL DVI Standards.
- Command and Control arrangements.
- Information Management and Status Analysis.

- Identification of Required Personnel and Material Resources.
- Communication and Information.

Further detailed information on these critical principles can be found in Part B of this Guide at [annexures 1](#).

### 2.3. The Phases of the DVI Process

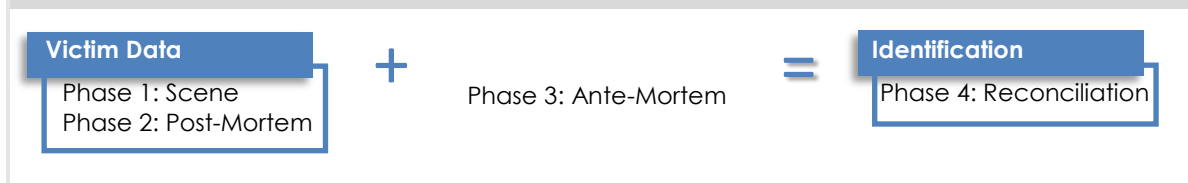
[Return to Contents](#)

The DVI process is an internationally recognised sequence of activities that has been developed over several years. It has been tested in large scale disasters in many regions across the world and has proven to be a reliable method by which victim data in the form of PM material can be matched against missing person data. The aim of this matching process is to positively identify human remains.

Whilst technology in the form of evolving software products has enhanced efficiency levels during DVI operations, it should be remembered that these developments cannot replace specialist skills that are critical when dealing with victim’s families and friends, or when arriving at conclusions of identity through the close analysis of relevant data. These skills should be incorporated into coordinated and cohesive teams to ensure that the following phases of the DVI process are performed effectively and efficiently:

- Phase 1: Scene (processing human remains and property at the disaster site).
- Phase 2: PM (detailed examination of human remains in mortuary).
- Phase 3: AM (collection of missing person data from various sources).
- Phase 4: Reconciliation (matching PM and AM data).
- Phase 5: Review of Actions and Preparation.

#### > *The DVI Process*



Further explanation regarding the specifics of these DVI phases will be provided later in this Guide.

### 2.4. Disaster Classifications

[Return to Contents](#)

In the context of DVI a disaster is an unexpected event causing the death of many people. Many kinds of events can lead to disasters which may require the use of the DVI process. For example, DVI processes may be required following traffic accidents, natural disasters, technical accidents (fires, explosions), terrorist attacks or events occurring within the context of wars. It is important to distinguish between open and closed forms of disasters as the classification of such events can significantly influence the DVI response approach.

#### 2.4.1. Open Disaster

[Return to Contents](#)

An open disaster is a major catastrophic event resulting in the death of several unknown individuals for whom no prior records or descriptive data are available. It is difficult to obtain information about the actual number of victims following such events, as there is usually no early reference point to commence a missing persons list. Therefore, thorough investigation is required to obtain an accurate potential victim list to commence DVI procedures. A practical example of an open disaster is found in public gatherings where there is no formal list available that would highlight potential victims.



A closed disaster is a major catastrophic event resulting in the death of several individuals belonging to a fixed, identifiable group (e.g. aircraft crash with passenger list). As a rule, comparative AM data can be obtained more quickly in the case of closed disasters because there is a reference point such as a passenger manifest or a log of attendees at an event.

Combinations of closed and open disasters are also conceivable (e.g. aircraft crash in a public area). Although an initial assessment of a scene may result in a classification being made, it is important that an open mind is applied in case early reports and information is flawed or incomplete.

## 3. A Cooperative Approach to Disaster Management

### 3.1. General

There are many specialist agencies involved in a disaster response therefore it is important to acknowledge and appreciate that each has a very important function and area of responsibility. DVI is one part of the overall response and it is critical to the success of the operation that appropriate plans and structures are implemented, with DVI management having a senior role in the emergency coordination command structure.

Due to uncertainty regarding the extent of damage, disruption and lack of reliable information, there is often difficulty establishing an immediate emergency response following a disaster. However, coordination at all levels (local, regional, national and/or international) is imperative. Although disaster response plans often provide for corresponding coordination mechanisms, these may not exist immediately following a disaster. In any case, these plans are usually generic and are not ordinarily designed for the specific aspects of each incident.

Effective coordination of a disaster response operation can only be assured if a properly functioning command and organisational structure is implemented. This is especially the case in DVI, where multiple agencies and organizations, with diverse and competing functions and responsibilities are required to work together. The implementation of clearly defined command structures and channels of communication can avoid confusion and dysfunctionality. As the DVI response forms part of the overall disaster response, the various elements of the DVI command need to be effectively incorporated into the lead authority's organisational structure. Most importantly, a mind-set of flexibility should prevail when integrating DVI operations into multidiscipline emergency responses so that confusion can be minimised and common objectives can be pursued.

### 3.2. Coordinating a DVI Response with Other Disciplines

Once an initial overview and appraisal of the situation has been obtained from the site of the disaster, distinct operational units should be formed to carry out disaster response activities. These units should be clearly identifiable and assigned to specific duties and responsibilities.

The lead authority should also establish structures to promote effective communication between operational units to ensure that critical information is conveyed to and from appropriate recipients. During multi-national responses, early decisions on the procedures, language and structure of the response mission are critically important to enhance co-ordination.

In terms of the specialist response agencies that are likely to attend the disaster site, they are initially confined to police, fire and ambulance. However, as additional resources are engaged, the following specialist services are likely to attend and operate in conjunction with DVI teams:

- Emergency response specialists (e.g.: Police, Fire (including HAZMAT), Ambulance).

- Rescue Units (e.g.: Search and Rescue).
- Investigation units (e.g.: Crime and Fire investigators).
- Forensic Services (e.g.: Scene, Canine assistance, and Post Blast examiners).
- Disaster Investigation Unit (e.g.: Air Safety).
- Intelligence Unit.
- Public Information Unit (e.g.: Media).

The following diagram is a basic example of a multidiscipline response structure to a disaster incident. Depending on the nature of the response, local procedures and the contributing agencies, the structure and reporting channels may be significantly different. However, this example highlights the need to recognise that mass casualty events may involve a broad range of agencies and authorities that DVI disciplines should recognise and work with.

To gain an appreciation of these specialist services, further information can be located in Part B of this Guide at [annexure 2](#) .

### 3.3. Initial Response by the Lead Authority

[Return to Contents](#)

The lead authority should assume command of the operation, to ensure effective coordination of personnel and resources. In most cases, the police assume command responsibility for the operation, but this may vary depending on the region and jurisdiction.

Upon relevant assets arriving at the disaster site, one of the main priorities is to obtain an overview of the scope of the incident so that a determination can be made about the resources required and the processes necessary to be implemented.

The first priority during the response activity involves rescuing survivors and minimising loss of life. There is a broad range of significant issues that the lead authority needs to consider. Gaining a full appreciation of the scale of the disaster should be undertaken through the acquisition of confirmed facts. Once sufficient information becomes available, the lead authority that assumes command responsibility for the disaster response operation should aim to satisfy the following considerations at the earliest opportunity:

- Nature of the disaster whether natural, man-made or criminal.
- Classification, whether open or closed disaster or a combination of both.
- Scope and quantitative estimate of infrastructure damage.
- Number of casualties.
- Requirement for transportation of injured/deceased persons.
- Information about the number of missing persons.
- Extent of property damage.
- Determine the disaster response services (e.g. fire brigades, emergency rescue services, police personnel) currently at the site.
- Determine what further response services are required.
- Clarification of agency functions at the scene and how they will be contacted, controlled and directed towards common goals.
- If rescue and/or recovery measures have already been initiated, likely duration of such measures.
- Description of current and likely changes at the disaster site.
- Clarification about timings for receiving briefings from the incident site.
- Clarification on which officials need to be briefed and when.
- Clarifying communication structures to ensure all contributing parties remain informed and coordinated.
- Maintenance of a contemporaneous record of all command decisions and response plans.

### 3.3.1. Initial Scene Control Measures by the Lead Authority

[Return to Contents](#)

Management decisions relevant to the scene can often influence how other phases of the DVI process are conducted. For example, if processes associated with the handling of human remains or property is compromised, this can create difficulties with identification and repatriation processes. To minimise the risk of this occurring, it is important for the DVI command to reinforce on the lead authority to employ scene control measures at the earliest opportunity. To contain the disaster site and restrict access by unauthorised personnel, the following site security activities should be performed:

- Requirement for type and scope of external barriers/cordons.
- Restriction of view of the site to unauthorized persons.
- Establishment and maintenance of a controlled common approach path to the scene of the incident with a timed record kept of everyone entering and leaving the scene.
- Maintain record of all individuals present at the site to determine purpose and authorization; recording corresponding data and removal of unauthorized persons from the secured area.
- Establishment of assembly and collection points within the secured area for coordination purposes.

### 3.3.2. Initial Risk and Hazard Assessments by the Lead Authority

[Return to Contents](#)

Although initial responders, including DVI personnel may require early access to the incident site, occupational health, welfare and safety issues should be addressed or mitigated by the lead authority before personnel are deployed. The following activities should therefore be performed:

- Collection of information on building/structural related dangers.
- Consideration of hazardous substance detection measures.
- Preparation of a comprehensive Risk Assessment.
- Consideration of a permanent site safety manager

NB: This important consideration will be discussed in more detail later in this Guide.

### 3.3.3. Initial Scene Evaluation

[Return to Contents](#)

Once the immediate urgency of the emergency response has subsided, it is critical that a co-ordinated scene evaluation is undertaken. This is likely to involve numerous disciplines and their scene evaluation should be overseen and coordinated by the lead authority.

As far as the DVI responsibility is concerned, an advance team (usually comprising a senior DVI team member, a forensic pathologist, police, and other specialists such as forensic anthropologists or forensic archaeologists if required) should attend the scene in the first instance, to evaluate the situation and to formulate an initial scene management plan. Factors that need consideration in this plan include:

- Extent of the scene (size, evaluation of hazards and any other factors that will need to be considered).
- Condition and potential number of human remains.
- Estimation of the amount of property to be processed.
- Estimation of the likely duration of the process.
- What other Medico-legal institute or personnel are needed to respond (e.g. need for special equipment or expertise at the scene).
- Developing a methodology to record the scene
- Methodology to remove the human remains (composition and number of teams) considered.
- Transportation of the deceased.
- Storage of the deceased and property.

- Risk assessment of the scene to allow proper & safe entrance of the DVI members.
- Level of Personal Protective Equipment (PPE) required for safe extraction of human remains in the environment the event occurred in.

### 3.3.4. Preliminary Planning for Scene Management

[Return to Contents](#)

Once sufficient information is acquired by the advance DVI team, planning should occur to facilitate a logical, organised and coordinated approach to processing the scene. To enhance the quality of the scene management plan, a pre-operation meeting should be convened to:

- Explain and plan the DVI objectives, general methodologies and particularly the requirements and processes involved in the recording and removal of human remains and property.
- Evaluate the likely duration of the process and the resources required to complete all tasks.
- Identification of key participants external to DVI specialists that will need to be engaged.

Planning is a crucial part of ensuring the scene is managed correctly and sufficient time should be taken to conduct it thoroughly. Furthermore, the plan needs to be communicated to all participating agencies and services to reduce confusion at the disaster site. Importantly, the lead authority must be briefed on the final scene management plan. Further advice on scene management and planning from a DVI perspective will be discussed later in this Guide.

## 4. DVI Command Structure and Responsibilities

[Return to Contents](#)

The structural command arrangements for DVI need to be established so that all phases of the process can remain coordinated, controlled and monitored. This structure requires defined reporting channels to ensure that information and directions are accurately communicated and interpreted by key positions. The structure also needs to ensure that effective liaison occurs with key members of the overall disaster response command and other participating parties such as other agencies, countries and embassies.

The DVI Command structure is capable of being expanded, depending on the size and nature of the disaster, but it is essential that the following key areas of the DVI process should be competently managed and staffed by appropriately trained and experienced staff:

### **Management**

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- DVI Commander role
- Phase 1: Scene Coordination
- Phase 2: Post-Mortem Coordination
- Phase 3: Ante-Mortem Coordination
- Phase 4: Reconciliation Coordination
- Phase 5: Review of Actions and Preparation.

### **Specialists**

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Critical to the DVI process is the engagement of trained and experienced specialists. The following are recognized as the main disciplines engaged in the technical aspects of the DVI process:

- Forensic Pathologists
- Forensic Odontologists
- Fingerprint Experts – (Friction Ridge Experts)
- Forensic Biologists / Geneticists
- Forensic Anthropologists
- Safety Specialists (ie. to evaluate proper PPE requirements)

In addition to these key disciplines, there is a range of other services that are likely to be engaged to

support the DVI process and they are:

- Photographers
- Radiologists
- Interview Teams
- Property managers
- Scene and PM recorders
- Quality Assurance Teams – (quality control information and data)
- Evidence collection and management Teams
- Mortuary managers
- Investigators
- Logistics Officers
- Liaison Officers
- Missing Persons Officers
- Information Technology Specialists – NMPVS Managers (if using NMPVS - National Missing Persons & Victims System)

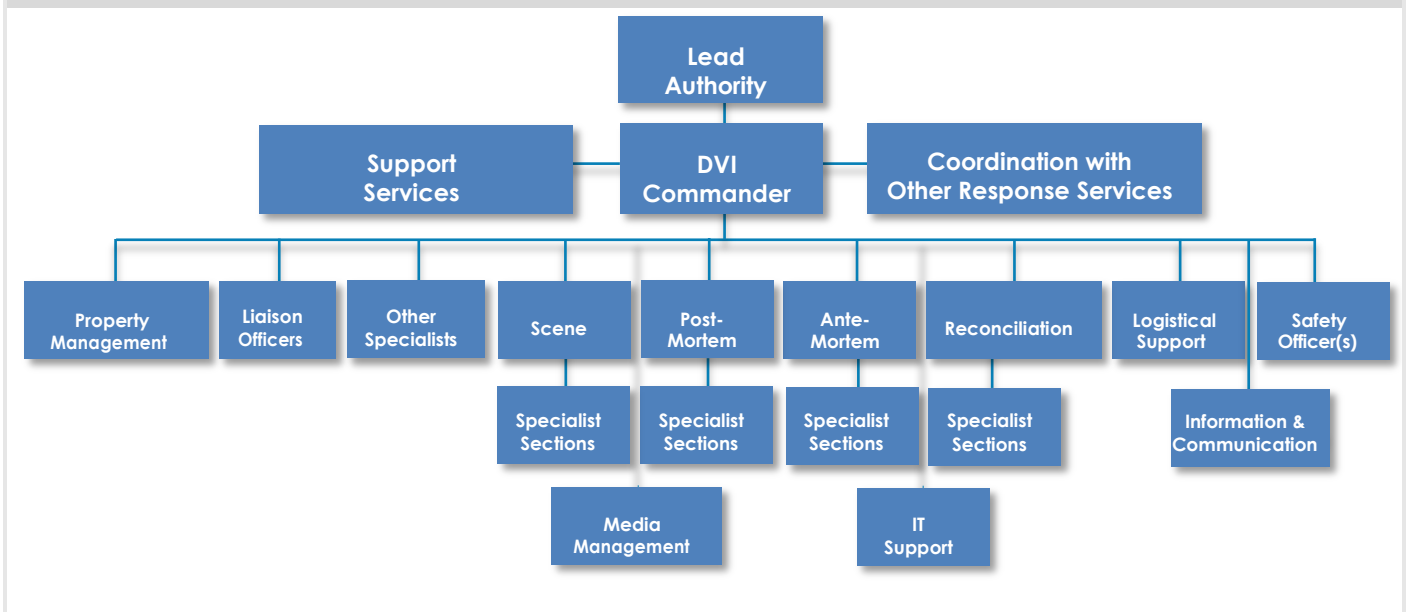
Further information on the roles associated with these disciplines can be located in Part B of this Guide at annexures 3, 4, 5 and 6

#### 4.1. DVI Command Structure

[Return to Contents](#)

The basic organisational chart for the DVI Command Structure is shown in the following diagram. This model forms the basis upon which the DVI process operates, but can be expanded to include additional linkages, support areas and liaison roles. Any expansion or modification is usually dictated by the nature and/or complexity of the event, or the structural, legal or procedural framework that is applied in the relevant jurisdiction or country.

##### > Standard DVI Command Structure



##### 4.1.1. Identification of Key Roles

[Return to Contents](#)

Personnel assigned to duties, especially at the disaster site should wear appropriate markings such as tabards, armbands, or other markings to clearly identify the role they are performing and to signify that access to the site is authorised (e.g. commander, scene coordinator, pathologist, odontologist or crime

scene examiner). This is particularly important when multiple agencies, whether local, national or international agencies or services are involved.

## 4.2. DVI Management Responsibilities

[Return to Contents](#)

There are a broad range of issues that must be considered by the authorities to ensure that jurisdictional requirements are met. The following is a summary of the main key management positions within the DVI process. They should not only be exercised during the response phase to a mass casualty event, as pre-planning and training is important to enhance the effectiveness of the response and the overall quality of the management team and DVI outcomes.

### 4.2.1. DVI Commander

[Return to Contents](#)

As the DVI Commander is required to assume overall responsibility for the operational response to a DVI event, the following are some of the essential functions to be performed in that role.

- Establish an appropriate DVI command and control structure to ensure all DVI activities are organised and coordinated.
- Initiate the DVI response in accordance with agreed operational plans and/or jurisdictional arrangements.
- Appoint the DVI Phase Coordinators and other key positions as required.
- Implement clear communication channels and reporting mechanisms to facilitate the coordination and flow of information.
- Ensure that adequate capacity and capabilities, both specialist and logistical are maintained to effectively respond to the incident.
- Brief the Coroner or equivalent authority and the relevant lead authority.
- Ensure adherence to occupational health, safety and welfare requirements.

Further detailed information regarding this position and the associated responsibilities can be located in Part B of this Guide at annexure 7.

### 4.2.2. Phase Coordinators

[Return to Contents](#)

It is important that personnel allocated to coordination roles possess a high level of knowledge and skills commensurate with the demands and responsibilities placed on those positions. Whilst it is imperative that these Coordinators have the technical skills to manage the DVI phases competently, it is also advisable for these individuals to have skills and experience in the management of staff.

As a Coordinator, there is an expectation that the occupant can manage staff effectively through maximising their abilities to collectively achieve DVI objectives. There is also a need for Coordinators to be able to monitor all aspects of their work area, to ensure that procedures are being applied correctly, that issues are proactively addressed and that the DVI Commander is accurately briefed on key issues. Most importantly, there is a need for Coordinators to closely monitor occupational health, welfare and safety issues and mitigate such issues when they arise.

Providing training opportunities for Coordinators in management and supervision in each jurisdiction is therefore advisable, to develop and enhance skills before deployments occur. Further information on the roles of the DVI Phase Coordinators can be located in Part B of this Guide at [annexure 7](#).

### 4.2.3. DVI Specialist Coordinators/Managers

[Return to Contents](#)

The appointment of key members to coordinate and supervise specialist disciplines is an important requirement for DVI operations. Although managers of these specialist personnel must be qualified in their respective disciplines, they should also possess the ability to coordinate the production of outputs

with other disciplines, or other areas of the DVI process.

As with the DVI Phase Coordinators, managers of specialist work areas need to remain situationally aware of all developments within their work area and be aware of occupational health, welfare and safety issues.

## 5. Summary of DVI Phases

[Return to Contents](#)

The following information defines the function of each of the DVI phases and the main considerations and responses that need to be applied to each of those phases. The summaries provide a brief overview of the process and further detailed information relative to each phase can be located in Part B of this Guide at annexures 3, 4, 5 and 6.

### 5.1. Phase 1: Scene

[Return to Contents](#)

As a general principle, the scene should be treated as a crime scene and all human remains, exhibits and property left in situ until the arrival of Crime Scene Examiners and DVI Specialist Teams, in accordance with jurisdictional policies and procedures.

Because the nature of a disaster may vary, the way in which scenes are processed and the order in which this is undertaken may vary. For example, in a case of a terrorist bombing occurs, it is imperative that the scene is made safe before scene examiners can perform their tasks. Furthermore, depending on the priorities that the lead authority sets, the acquisition of evidential material may need to be considered before any DVI activities commence. DVI practitioners may therefore need to modify their approach to satisfy the priorities of a criminal investigation.

Once a scene management plan is developed and agreed upon with all relevant areas and DVI activities can be commenced, the processes of photographing, recording and labelling can occur with PM information recorded the Using DVI Recovery forms (refer to forms guide annexure 9). This processing activity needs to be coordinated with other functions carried out at the scene, such as those associated with the recovery, storage and transportation of human remains and property, as well as tasks involving evidence preservation and storage.

#### 5.1.1. Scene Coordination Responsibilities

[Return to Contents](#)

The DVI Scene Coordinator is responsible for the management of activities during the scene phase of the DVI operation. Some of the main considerations and responsibilities include:

- Implement the scene phase of the DVI response in accordance with agreed operational plans and/or jurisdictional arrangements.
- Clearly establish the system for the search, recording and recovery of human remains.
- Implement clear communication channels to facilitate the coordination of activities at the disaster site.
- Appoint a Human Remains Holding Area Controller and confirm the location of the Human Remains Holding Area.
- Appoint property teams to manage property.
- Ensure adherence to occupational health, safety and welfare requirements.

Further detailed information regarding this role can be located in Part B of this Guide at annexure 7.

### 5.2. Phase 2: Post-Mortem

[Return to Contents](#)

All human remains recovered from the scene are to be processed, examined and stored at a mortuary which has been selected for the operation, pending formal identification and release by the Coroner or legal authority. This mortuary may be an established mortuary or one which has been constructed temporarily for the operation.



The examination processes and methods applied during this phase include photography, ridgeology (fingerprinting), medical imaging, odontology, DNA sampling and PM procedures. In addition to the examination of the human remains, property is to be thoroughly examined, cleaned and stored. These property items may include jewelry, personal effects and clothing. Again, all relevant PM information obtained during this phase is recorded on the pink INTERPOL DVI PM forms.

On completion of the examination process, the human remains are returned to storage, pending the final formal identification to the satisfaction of the Coroner or legal authority and the subsequent release of the remains for burial or cremation.

### 5.2.1. Post-Mortem Coordination

[Return to Contents](#)

The DVI PM Coordinator is responsible, in consultation with specialists, for the management and outcomes of activities during the PM phase of the DVI operation. Some of the main considerations and responsibilities include:

- Implement the PM phase of the DVI response in accordance with agreed operational plans and/or jurisdictional arrangements.
- Appoint the DVI PM Human Remains Team Leader.
- Appoint property teams to manage property.
- Ensure any direction from the Coroner or equivalent authority in relation to the examination of the human remains is implemented.
- Implement clear communication channels to facilitate the coordination of activities at the mortuary.
- Ensure adherence to occupational health, safety and welfare requirements.

Further detailed information regarding this role can be located in Part B of this Guide at annexure 7.

## 5.3. Phase 3: Ante-Mortem

[Return to Contents](#)

To collect missing person data to match against victim data, an AM collection process needs to be established. This process can involve many complex dimensions as the task involves interviewing families, relatives, or friends to obtain sufficient facts on a potentially deceased loved one. In addition to this difficult and confronting task, representatives from this phase may need to closely coordinate their activities with other agencies, jurisdictions, or nations, to secure AM data from remote locations.

Initially, the AM phase will focus its activities on developing a missing person list that will be created from reports of concerns communicated by families and relatives or through other mechanisms such as a passenger manifest. Following the receipt and categorisation of those missing person reports, interview and/or investigation teams will be formed. Their function will involve collecting the detailed descriptions of each missing person/potential victim, including specific details such as jewellery, clothing, or other property items as well as dental and medical records, medical images, photographs, recent social media posts, DNA, fingerprint and other identifying particulars including tattoos and piercings. This information is recorded on the yellow INTERPOL DVI AM forms (refer to forms and completion guide [annexures 5 and 10](#)).

Once there is sufficient and reliable AM data on a particular missing person, the relevant file will be quality assured and if the threshold required for matching against PM data is met, the file is transferred to the Reconciliation Centre to progress the identification process

### 5.3.1. AM Coordination

[Return to Contents](#)

The DVI AM Coordinator is responsible for the management of activities during the ante-mortem phase of the DVI operation. Some of the main considerations and responsibilities include:

- Implement the AM phase of the DVI response in accordance with agreed operational plans and/or jurisdictional arrangements.
- Establish an AM Coordination Centre (AMCC).



- Establish interview teams and coordinate their activities to complete missing person enquiries.
- Obtain passenger manifests and other information to compile missing person lists.
- Liaise with local and international police services, INTERPOL, consulates, embassies, other law enforcement agencies as well as Government and non-government agencies (nga's) in relation to the collection of dental/odontological/fingerprint and medical records, and the completion of yellow INTERPOL DVI AM Forms.
- Ensure adherence to occupational health, safety, and welfare requirements.

Further detailed information regarding this function can be located in Part B of this Guide at annexure 7.

## 5.4. Phase 4: Reconciliation

[Return to Contents](#)

The function of the Reconciliation Centre is to match PM data with AM data with the view to identifying the deceased. In cases where there are reliable primary identifiers available, such as dental, Ridgeology (fingerprints) or DNA and those identifiers meet the required standards, these cases can be prepared for presentation to an identification board for determination. However, there may also be cases where a combination of identifiers may be used to support one another to produce a positive identification. For example, this type of circumstantial identification case may include a combination of a description, medical evidence, clothing, jewelry, tattoos and documentation. It must be highlighted that such identifications will need to be assessed on a case- by- case basis. It is also important to stress that visual identification can be very unreliable and therefore this form of identification should not be considered alone.

Once the reconciliation files are assessed and the content is considered reliable and safe to conclude positive identity, an Identification Board (IB) is convened. The results of the comparisons between the PM and AM information are presented to the IB, which is convened by the local authority and presided over by a Coroner or an equivalent authority. The Coroner or equivalent, who has overall responsibility for the identification of the deceased, is informed of the results supporting the identification conclusions and provided with a comparison report and certificate of Identification for each identified human remain, including each fragmented human remain.

If the local authority accepts the identification conclusions relating to a specific case, a death certificate confirming the cause of death and the identity of the deceased is issued. Once that process has concluded and an authority for the release of the deceased has been granted, arrangements are then made for the return of the deceased to the respective family.

### 5.4.1. Reconciliation Coordination

[Return to Contents](#)

The DVI Reconciliation Coordinator is responsible for the management and outcomes of activities undertaken during the reconciliation phase of the DVI operation. Some of the main considerations and responsibilities include:

- Implement the Reconciliation phase of the DVI response in accordance with agreed operational plans and/or jurisdictional arrangements.
- Establish and manage the operations of the DVI Reconciliation Centre.
- Appoint key Team Leaders within the various units of the Reconciliation Centre.
- Establish a section to receive, log, record and file AM and PM information.
- Prepare formal identification reports for approval by the DVI Commander. Convene the DVI Identification Board.
- Ensure adherence to occupational health, safety and welfare requirements.

## 5.5. Phase 5: Review of Actions and Preparation

[Return to Contents](#)

There is always an opportunity to learn and improve on our operational approach to future DVI deployments by reviewing previous operations. The aim of this review process is to focus upon what has been done well, what could have been done better and what could be effectively applied for future operations.

There are two debriefs that are recommended for all DVI activities. The first debrief involves reviewing daily performance during live operations. This should involve a meeting with key members within the DVI process, to review current activities and assess performance against set objectives and this should be convened by the DVI Commander. This regular review process enables all aspects of the DVI process to be kept briefed on past, current and future developments. Furthermore, if new issues that may affect DVI plans arise, alterations can be made in a consultative, coordinated and informed environment.

The second type of debrief involves an overall debrief of the entire DVI operation. This encompasses a far broader range of operational and jurisdictional issues that may extend beyond the scope of the short-term activities of the DVI operation.

The objectives of this debrief should again be about what has been done well, what could have been done better and what could be effectively applied for future operations.

To apply a degree of objectivity to this debrief process, an adequately qualified and impartial member should be engaged to conduct this debrief.

Preparations should include restocking supplies, evaluating the debrief of the operation to see if new equipment is required to be purchased and the maintenance of constantly used equipment.

## 6. Methods of Identification (Primary and Secondary)

[Return to Contents](#)

In mass fatality incidents, confirmation of the identity of human remains should only be made by the Identification Board or local authority after close assessment and evaluation of relevant and reliable data is undertaken.

Victims of a large-scale disaster are identified based on an assessment of multiple factors. The degree to which human remains are damaged, the time human remains have been left exposed and the associated changes in the condition of human remains will influence the nature and quality of PM data. It will also influence and determine what specific methods of identification may be undertaken and are most appropriate under the circumstances.

Methods of identification used in cases of disasters should be scientifically sound, reliable, applicable under field conditions and capable of being implemented within a reasonable period of time. The PRIMARY and most reliable means of identification are friction ridge analysis, comparative dental analysis and DNA analysis. Unique serial numbers from medical implants may also be reliable identifiers in terms of proving identity.

SECONDARY means of identification are any feature, not being a primary identifier that characterises the individual, within the context of the disaster. Such features may include personal description, medical findings as well as evidence and clothing found on the body. These means of identification typically serve to support identification by primary means but depending on the context, may be sufficient as a sole means of identification.

Identification based on photographs can be notoriously unreliable and should be avoided as the sole means of identification. Use of social media can assist in new and updated changes in a person's life when family contact has been distant. Visual identification by a witness may provide an indication of

identity but is not sufficient for positive identification of victims of a large-scale disaster, as victims can be disfigured, resulting in the visual comparison being unreliable. The psychological stress frequently involved in confrontation with the deceased, by relatives, also makes this form of identification unreliable.

All PM data obtained from bodies is evaluated with reference to information obtained about missing persons. As it is impossible to know in advance what data can be obtained from bodies and what information can be obtained for comparison purposes at the victim's place of residence, all available information (both AM and PM) should be collected and documented. The quality of both AM and PM data should be of the highest standard possible, with quality assurance processes established from the start of the operation.

Detailed information on Primary and Secondary methods of identification is located in Part B of this Guide at annexure 8.

## 7. Priority Considerations for DVI Operations

[Return to Contents](#)

Whilst specific procedures and plans may be developed for unique events, it is generally considered that the usual approach to emergency management fundamentally remains the same but modified depending on the circumstances and unique issues presented.

However, there are many unique issues that need to be addressed during a DVI response to a multi-fatality event. Although many can be mitigated at the time of the response, others are far more complex requiring the need to proactively provide solutions well in advance of a disaster occurring. Conversely, after an operation, a debrief should be conducted with responders to highlight practices or procedures that operated well or were problematic during the DVI process.

The following considerations are likely to be the main areas of concern that DVI management should be acutely aware of prior to, during and post deployment. They are not exhaustive as each DVI operation is different and is likely to reveal issues and problems, depending on the nature, scale and environment.

### 7.1. Legal and Jurisdictional Requirements

[Return to Contents](#)

Every DVI operation should be subject to the laws and rules of the country in which the disaster occurs. This premise is fundamental to ensuring that the legal framework in which the Lead Authority operates within is supported both legally and constitutionally.

Furthermore, adherence to the laws of the nation where the DVI response occurs enables national, regional and local authorities to activate their rules and procedures in accordance with approved and agreed arrangements. A departure from this well-established principle could not only undermine the legal processes operating in a particular region but hinder the overall operation of the DVI process.

Agreements regarding the integration of international DVI teams operating in foreign countries are therefore highly beneficial, as points of legal and procedural conflict can be resolved before teams are deployed. To progress such agreements, it is desirable for nominated representatives to develop protocols with their counterparts from other nations.

### 7.2. Unconscious Living Victims

[Return to Contents](#)

When addressing unconscious living casualties, there are legal ramifications in most jurisdictions that must be addressed prior to including them as part of a DVI operation. While it is important to attempt to identify these persons to assist with reconciling a missing persons list, there are legal protocols that must be followed that do not apply to deceased persons. This process is not in line with the traditional DVI legalities and therefore the local hospital and local jurisdictional laws should be consulted and followed to ensure that the victims are accounted for, but their legal and medical rights are respected.

### 7.3. Religious and Cultural Considerations

[Return to Contents](#)

Religious and cultural considerations, while important, this cannot be allowed to compromise the legal processes, as local authorities and investigating agencies remain bound by relevant legislation. However, during the immediate AM response, an attempt to determine the number and type of religious and cultural groups should be made. It may then be possible to ascertain the type of assistance required for both investigators (e.g. translators, cultural liaison officers) and for the families of possible victims.

Religious and cultural customs differ considerably throughout the world and should be considered when planning responses to incidents involving multiple fatalities. Such planning needs to take into account the type of social group that is likely to be engaged and what specific political, social and individual issues that need to be considered. For example, some cultural practices may involve human remains being treated in a specific way, which may not fully align with the legal requirements of the jurisdiction where the death occurred. DVI personnel should therefore ensure that whilst the legal requirements of a jurisdiction must be observed, dignity and respect must always prevail when interacting with the deceased's relatives. A failure to recognise these needs and cater for cultural differences can have a negative impact on how officials interact with families, which can ultimately undermine the quality of DVI services and outcomes.

It is therefore important that members of the DVI community remain individually aware of the various groups that may be encountered when dealing with a mass fatality event. As relatives and friends are likely to already be grief stricken from their loss, compounding this situation with a lack of cultural and religious understanding may add another layer of grief, which could be avoided through education, training and the appointment of appropriately skilled liaison officers.

### 7.4. Family/Relative Liaison and Support Arrangements

[Return to Contents](#)

Although the legal requirements regarding mass fatalities must always be observed, it is critical that DVI operations include specific structures and arrangements that facilitate support and on-going liaison with families and relatives of victims.

Apart from ensuring that the emotional welfare needs of families and relatives are met, there is also a requirement to acknowledge that the central feature of the DVI process is about identifying victims for the family. It can therefore be viewed that although the legal system that governs the rules regarding the identification process must be observed, the desired outcome is about repatriating victims to their homes. The practical application of this key principle involves forging cooperative relationships with grieving relatives and affording them the highest level of respect and support possible.

To enhance this approach, family assistance and public relations functions should also be integrated into the operational DVI structure from the outset, as there will be multiple parties that have an interest in developments for the life of the response.

Further information on the importance of the family liaison and assistance function will be discussed later in this document.

### 7.5. Planning a DVI Response

[Return to Contents](#)

Planning both prior to and during incidents is crucial to ensure that intended responses are focused towards meeting common objectives. From a proactive perspective, it is recommended that jurisdictions and relevant agency plans are established so that responses can be practiced and modified prior to real-life deployments. These strategic plans may include the establishment of protocols for the activation of specialists and supporting resources. There may also be agreements established between a range of government and non-government entities that can be activated when necessary. Furthermore, as disaster events evoke different types of responses, partnerships with various service providers may be useful so that specific skills and resources can be sourced without delay.

The types of plans that should be readily available for implementation include:

- Jurisdictional activation plans that cater for local agencies to come together with a degree of interoperability to deal with incidents specific to a region or event.
- National activation plans that enable agencies across nations to work collaboratively on incidents of national significance.
- International plans that enable the deployment of specialists to another country to work on international incidents.
- Plans specific to each of the DVI phases.

Whilst established plans often address many of the demands that disasters place on authorities, on-going planning is unavoidable, as prescriptive protocols and established procedures do not always meet the unique circumstances of an event. It is for this reason that decision makers should consider engaging specialist advice throughout the duration of an operation, so that all courses of action likely to impact on the outcome of DVI activities is supported by logic and sound decision making.

## 7.6. Coordinating and Organising DVI Teams

[Return to Contents](#)

The DVI process comprises a broad range of individuals who are allocated specialist tasks within the various phases. Their roles and skills are diverse and to maximise their services effectively and efficiently, a coordinated approach needs to be adopted. This initially involves the development of an effective organisational structure that establishes clear communication lines and reporting arrangements for all individuals and groups participating in the DVI operation. These coordination and organisational arrangements should also clarify the tasks that are being performed and identifying what area is responsible for completing those tasks.

The arrangements should also show how each area intends to interact with other work units so that all activities are aligned and focused on the same objectives. To reinforce these arrangements, regular meetings with key decision makers is appropriate so that progress can be monitored and reviewed, instructions can be reinforced and ambiguity removed.

A failure to recognise the need to coordinate and organise DVI operations appropriately is likely to result in activities being duplicated, communication being fragmented and tasks being delayed, resulting in operational outcomes potentially being impacted upon.

## 7.7. Safety Audits and Risk Assessments - Workplace Health and Safety

[Return to Contents](#)

The protection of life has priority over all other priorities and this principle not only applies to victims directly associated with the incident, but also to personnel assigned to disaster response operations. A proper and thorough assessment of the risks associated with all aspects of the operation should therefore be undertaken.

From a DVI perspective, a risk assessment that identifies all potential hazards is important. These hazards can vary from one environment to another and may also be unique to the various phases of the DVI process.

Such assessment should take into account the type of disaster, whether it is a natural, industrial or a criminal act, as each may expose victims and responders to different hazards such as fire, blast fragments, asbestos, chemical, biological, radiological or nuclear contaminants. Furthermore, unstable buildings and structures or volatile environmental conditions such as earthquakes and tsunamis should be considered and assessed and mitigated before deploying personnel.

In many parts of the world, stringent occupational health, welfare and safety legislation exists, which can impose strict legal obligations on jurisdictions to maintain safe working conditions. In a DVI context, many of the hazards may not be able to be eliminated, however accurately identifying the hazards and then mitigating the effects on responders is a priority and an organisational responsibility.

To competently undertake risk assessments and safety audits, consideration should be given to appointing a 'Safety Officer' during an operation. The role of this officer is to conduct audits of work areas and to then recommend proactive measures to address specific hazards. Depending on the nature of the disaster, several Safety Officers may need to be appointed. Furthermore, all safety audits and risk assessments should be undertaken with informed advice from specialists who can recommend measures that eliminate or mitigate dangers to responders. These safety audits should also be evaluated constantly for changes within the scene or environment and adjusted accordingly.

## 7.8. Logistical Support for DVI Operations

[Return to Contents](#)

The scope and nature of a DVI response usually dictates the type and level of logistics that needs to be engaged to support the operation. The role of the logistics area is therefore an important feature of a large and/or complex DVI response and establishing this unit at the earliest opportunity can set a firm foundation upon which the entire operation can be launched. The key roles that the logistics support area performs are twofold. Firstly, there is a need to establish facilities to conduct the various components of the operation. This involves acquiring centers to conduct operations and the sourcing of materials, including consumables and specialist equipment and to also assist in sourcing personnel. Secondly, the logistics area should maintain a comprehensive record of financial costs, including the equipment and personnel utilised during the response.

In addition to establishing the physical infrastructure and arranging the material resources for the operation, the logistics function also involves monitoring activities across all areas of the DVI process to ensure that adequate support is provisioned throughout the entirety of the operation. This requires the logistics area to forecast both long and short-term requirements and predicting potential issues that need to be resolved quickly.

Areas to be considered are effective ongoing rostering of personnel and fatigue management of staff within the scene.

## 7.9. DVI Liaison Officers

[Return to Contents](#)

With all multi-faceted responses to emergency situations, coordination of activities and information sharing should be promoted. Apart from the establishment of workable structures to facilitate the free flow of information to different units of the emergency response, there is a need to consider the appointment of liaison officers. These appointments can provide a valuable flow of information between the different phases of the DVI process. They can also be useful in establishing crucial links between the DVI operation and other entities. Generally, the size and complexity of the disaster response usually dictates how many liaison officers are required. Examples of liaison officers include liaison officers for families, embassies, coronial services, contributing agencies, investigators and other specialists.

Because victims of disasters may originate from many different countries, it is considered, from a proactive perspective, for countries to forge cooperative relationships with key government and non-government agencies of corresponding countries, so that rules of interoperability can be developed in advance of events.

Whilst liaison officers are important to be appointed during DVI operations, the investment in building healthy relationships prior to disasters can be measured by the degree of cooperation and coordination that occurs when operating in foreign regions. The benefits derived from developing the relationships and operating arrangements are many including:

- Clarity surrounding the legal framework in which all countries need to operate.
- Clarity regarding the processes to be followed to access DVI related information and data.
- Facilitating collection of AM information from vast and remote sources.
- Ensuring that the same version of Interpol forms are used throughout the operation.
- Coordinating support services for families and relatives.



- Facilitating the repatriation of human remains and missing person property.

## 7.10. Staffing and Rostering for DVI Teams

[Return to Contents](#)

To ensure that the right people are appointed to specific positions, the application of human resource management principles is recommended. This involves selecting individuals with the right skill sets and then matching them with a position commensurate with those skills. For example, personnel need to be deployed to roles where their skills can be best utilised such as a member trained in AM collection being allocated tasks within the AM phase of the process. A failure to identify the skill requirements of each position or by mismatching personnel to a key position can severely undermine and slow down the DVI process.

In addition to placing the right staff in the right position, there should be a desire to create a work environment where the rotation of staff can be undertaken in a structured and predictable manner. This is particularly important where the DVI operation is likely to be lengthy. Although it can take some time for structures and staff arrangements to become settled, it is highly desirable that stable practices in the management and rotation of staff are implemented at the earliest opportunity. A suggested approach in the management of staff selections and staff rotations is through allocating a separate work unit within the DVI process to specifically attend to this function.

## 7.11. Communication Arrangements

[Return to Contents](#)

It is important that effective communication systems exist to support the DVI operation. Those systems include the provision of landline and mobile phones, email and remote communication services. These important facilities should be established early in the operation, as they enable interaction between all phases of the operation, which is critical when coordinating and synchronising activities.

To simplify the process of maintaining contact with key personnel within the DVI process, the development of a comprehensive contact list of staff is desirable. Apart from identifying the staff member, the lists should include the role they are performing, the discipline they are representing and their work location. Whilst such contact lists can be developed during an operation, it is suggested that comprehensive staff lists are developed for each jurisdiction as part of their planning process.

## 7.12. Information Technology Services and Support Staff

[Return to Contents](#)

With the ever-increasing emergence and reliance on technology, opportunities continually present itself to apply these modern advances in a DVI context. Over recent years, software products have been used in operations for data matching purposes. Additionally, operations require information technology products and supporting infrastructure to facilitate the running of the DVI operation.

It is therefore a feature of modern emergency responses that resources are allocated to establish and maintain technology systems that enable the management and ongoing monitoring of all aspects of the DVI response. Those resources include skilled staff members who can effectively and efficiently attend to technological demands. Furthermore, systems capable of reliably managing the requirements of the operation need to be selected, practiced and maintained.

To ensure that information technology systems are established for the operation and that related issues and problems are addressed, telecommunication technicians and/or IT administrators should be assigned to the DVI operation.

## 7.13. Security Measures (Including Information Security Arrangements)

[Return to Contents](#)

DVI operations present numerous security issues that should be of primary concern to authorities. These issues range from protecting areas where access should be restricted, to protecting sensitive and confidential information.

As far as physical security arrangements are concerned, adequate protections should be implemented

to secure sites such as disaster scenes and mortuaries, so that unauthorised access is prevented. Apart from the concerns about scene contamination and disruption, there are health issues associated with permitting entry to such areas. They include unsafe environments that may present hazards to individuals. It is also not appropriate for onlookers to be present, especially in cases where the victims of mass casualties may still be present.

From a confidentiality perspective, robust systems need to be established so that access to work areas containing confidential information such as missing person or victim data can be protected from disclosure. The systems that are designed to protect sensitive material needs to be applied not only to locations where the information is stored but extended to the processes associated with collecting and transmitting such material. A failure to ensure that adequate security arrangements exist can seriously undermine the integrity of DVI operations.

It is therefore incumbent upon all participating individuals operating in DVI operations to ensure that there is a disciplined observance of the DVI security arrangements and it is the responsibility of authorities to enforce strict compliance.

#### 7.14. Human Remains Management

[Return to Contents](#)

The nature of the disaster can significantly influence the type of scene processing approach that is likely to be adopted. Whilst it may take time to develop and implement plans, the efficient management of the deceased should be considered as an early priority for any DVI response. In developing these plans, consultation with key specialists likely to participate in the scene processing or involved with analysing objects or information from the scene should be consulted. Most importantly, the legal authority presiding over investigations into the deaths, such as a Coroner or equivalent authority, should be engaged at the earliest opportunity.

Depending on the number of deaths, or the amount of fragmented human remains that exist, this can usually present complex issues that need to be closely considered prior to embarking upon the scene examination process. In cases where the disaster is caused through a non-criminal event such as a flood or earthquake, decisions in respect to criminal investigations can be eliminated.

However, in cases involving culpable conduct such as criminal acts, the processing of human remains may not only be confined to victim identification, but complex criminal investigation activities. For example, in cases of terrorist bombings, post blast residue and other evidence may be found on victims and therefore the DVI approach to human remains processing needs to account for such complexities. In addition to considering the complexities that various scenes may present, it is highly recommended that a recognised and standardised numbering and processing system is applied when managing human remains at the scene. Establishing an agreed system at the infancy of operations is critical, as adverse consequences can unfold later in the DVI process if the system is flawed. Further information on the INTERPOL numbering system can be located in Part B of this Guide at [annexure 9](#).

#### 7.15. Mortuary and Storage Facilities

[Return to Contents](#)

Whilst mortuary facilities exist in several forms across the world, the capacity to cater for mass casualty events may be limited for many jurisdictions. This is mainly because mortuary facilities are maintained to service the routine demands of the community, rather than for the unexpected large scale mass fatality event.

As part of the pre-planning process for DVI operations, it is suggested that authorities identify alternative facilities where autopsies can be performed and human remains can be stored. The arrangements that are decided upon can vary depending on the availability of alternative locations but may include:

- Engaging refrigerated facilities such as containers or trucks.
- Establishing temporary mortuary sites.
- Utilising several hospital facilities to conduct autopsies and store human remains.



- Utilising funeral homes to assist with storage arrangements.

Although it is highly desirable to identify local alternative solutions to address potential deficiencies in facilities, there may be locations where these arrangements are unable to be identified or provided. In such cases it is recommended that authorities consider a broader range of options in the form of facilities that can be transported to the relevant location. In these cases, partnerships with specific service and product providers may address the deficiency.

## 7.16. Property Management

[Return to Contents](#)

There are significant legal and ethical responsibilities associated with the DVI property management function that may vary from jurisdiction to jurisdiction. To satisfy these significant responsibilities, standardised practices in accordance with the lead authority's policy position should be applied. Additionally, it is advisable that any property management system is compatible with and/or complements the jurisdictional property management system.

In terms of the Scene Phase, property located at the scene is usually in a chaotic state where ownership is often unclear and cannot be associated with a victim. Similarly, property managed in the PM Phase presents other challenges as there is a requirement to conduct autopsies and take forensic samples, whilst also managing property removed from the human remains.

In terms of the AM Phase, collecting objects to match against victim data presents additional complexities. The sources from where the objects or property may be collected can include a victim's home, victim's family or other locations such as hotels. Finally, the Reconciliation Phase of the process may also be involved with the responsibility of managing property when returning property to a victim's family.

Appointing a Property Management Team is therefore highly advisable so that activities across all phases of the DVI process that involve property can be monitored and coordinated. This approach enhances standardisation of recording, storing, tracking and repatriating property.

## 7.17. Information and Records Management

[Return to Contents](#)

Information management is a critical feature of the DVI process as the data collected will ultimately be utilised throughout the duration of the DVI operation. The following considerations therefore need to be placed high in the order of priorities when determining what documentation/recordings need to be created:

- Identifying and recording what documentation has or is being made and in what form, e.g. electronic or handwritten.
- Identifying how scenes and objects will be recorded; (e.g. photographic, video, maps or sketches) and how such recordings will be managed.
- Determining how all recordings will be stored and transferred confidentially and in a timely way to other areas and agencies requiring such recordings.

In addition to formalising the process of collecting and storing DVI information, consideration should be given to the rules surrounding the transfer of information so that information security protocols can be applied throughout the life of the DVI operation. These considerations include:

- Authorisation arrangements from the lead authority to release information to other parties.
- The extent and nature of information that has already been released to other parties (when, why and by whom).
- The nature of agreements that has been reached with other parties regarding the use of information once released to those other parties.
- Policy regarding the return of sensitive/confidential information to its original source.

## 7.18. Media Management

[Return to Contents](#)

A major event such as a mass fatality disaster will always attract media attention and therefore all DVI operations should be conducted with this in mind. Because the world has become more global through the evolving electronic media, it needs to be acknowledged that events in the form of both written and visual formats can be transmitted across the world in seconds.

Whilst the media is an important industry that can be very effective in a crisis situation, managing what is said by officials, what is released in terms of official information and statistics and what is seen in terms of disaster sites, requires the development of sound media strategies. Furthermore, ensuring that official comments and the release of official information is accurate and that misinformation is corrected, is highly important in maintaining the credibility of the emergency response.

The establishment of a media unit should therefore be viewed as important to an emergency operation. The role of this unit within this context includes:

- Providing the lead authority with advice on visual and audio media presentations, including appropriate talking points.
- Advising the lead authority on the public release of information and statistics.
- Maintaining close liaison with major media outlets.
- Monitoring all media sites and publications.
- Recommending media releases to authorities in response to media reports.
- Monitoring public opinion in respect to the emergency.
- Monitor official responses to ensure messages are consistent.

Whilst media management is important during a DVI operation, it is recommended that authorities establish media protocols and create healthy partnerships with the media industry in advance of disaster events. This proactive approach to media management enhances a lead authority's ability to present itself to the community in a professional and competent manner and aids in maintaining a cooperative relationship with the media.

## 7.19. Quality Assurance Controls

[Return to Contents](#)

It is widely accepted that all DVI operations is highly reliant on the maintenance of accurate and detailed information upon which identifications can be based. Establishing and maintaining robust quality control measures is regarded as a sound foundation to set standards of high quality in respect to the collection, collation and matching of relevant identification data.

The notion of quality assurance should be viewed from two perspectives. Firstly, it is recommended that jurisdictions ensure that review and auditing processes exist within all aspects of DVI disciplines and teams and that this principle exists as a standing arrangement in preparation to operational deployments. These standing arrangements should involve:

- Monitoring competency levels for all police DVI phase operators.
- Monitoring competency levels for all specialist / forensic experts.
- This includes the definition of identification with the jurisdiction e.g. how many points of similarity are required for ridgeologists to confirm identity. This may vary between countries and law enforcement agencies.
- Auditing of procedural arrangements.
- Auditing and monitoring occupational health, welfare and safety arrangements.
- Auditing compliance with operational equipment standards.
- Recommending matters for consideration to the DVI Commander and relevant jurisdiction.

Secondly, during operational deployments, a management review system is recommended to be formed to monitor all aspects of the DVI operation. This review system should encompass all aspects

of the DVI operation. Apart from ensuring that all phases of the DVI response are executed in accordance with established plans, each technical component and forensic discipline should be afforded close monitoring. The quality assurance activities that need to be considered during operational deployments involve:

- Monitoring all DVI phases for compliance to international and jurisdictional standards.
- Auditing PM and AM records for accuracy and compliance.
- Auditing reconciliation files prior to presentation to the identification board.
- Auditing and monitoring occupational health, welfare and safety arrangements.
- Auditing compliance with operational equipment standards.
- Recommending matters for consideration to the DVI Commander and relevant jurisdiction.
- Recording compliance or changes for operational debrief at the conclusion of the event.

INTERPOL is committed to the development of DVI management systems that is in line with international standards, and which will provide DVI jurisdictions with the continuing confidence that the identification process is accurate, impartial, scientifically reliable, and will withstand legal and judicial scrutiny. Ensuring all aspects of information and data is scrutinised throughout the DVI process adds confidence in the management and outcomes of DVI operations. Accuracy in processes and data management is therefore crucial to the DVI process and close attention to these key areas should be fully embraced by DVI management. Further detailed information regarding this important consideration can be found at INTERPOL website (DVI): DVI Quality management Guidelines.

## 7.20. Repatriation Arrangements

[Return to Contents](#)

The repatriation process involves the return of human remains and victim property to families, relatives and friends. The culmination of highly committed activities from all disciplines and services is likely to be judged on the quality of services provided during this sensitive repatriation process.

To ensure that local, national and international repatriation arrangements are met, it is suggested that jurisdictions establish proactive plans with key entities within relevant regions prior to operational deployments. These arrangements should focus on satisfying jurisdictional, procedural and coronial / legal requirements. Most importantly, the families, relatives and friends of victims need to be reassured that the human remains and property of their loved ones has been cared for in a competent, respectful and caring manner.

## 7.21. Contracts with Private Companies

[Return to Contents](#)

It is acknowledged that not all contingencies can be catered for and that deficiencies in skills, goods and logistical support may not be realised until an event unfolds. However, addressing this issue can be achieved through establishing agreements with companies in advance of disasters occurring.

If nations become concerned about potential jurisdictional deficiencies prior to events occurring, it is recommended that proactive audits are undertaken so that these deficiencies in skills, equipment, technical advice and logistical support can be addressed in an orderly and planned manner.

Furthermore, it is important that the integrity of jurisdictional and private company arrangements is transparent and auditable through credible and defensible business practices. To satisfy these high ethical standards, as a minimum, it is important to disclose:

- The full scope of the financial arrangements that is determined through the provision of services or goods.
- Any actual or perceived conflict of interest by the company providing any goods or services.
- Any business, group or personal affiliation between any entities associated with the lead authority and the company providing the goods or services.

When entering such arrangements, jurisdictions should be mindful of the contractual issues that may arise and that qualified advice should be obtained before agreements, contracts or partnerships are

secured. This is considered important as the engagement of private services can inflate costs and impose unforeseen obligations on jurisdictions.

## 7.22. Reference Materials

[Return to Contents](#)

There are a significant number of sources of information regarding DVI on the internet, including published documents by specialists from across the world. Whilst many of these publications are credible, INTERPOL encourages member countries to refer to the INTERPOL website (DVI)

<https://www.interpol.int/How-we-work/Forensics/Disaster-Victim-Identification-DVI>

The site contains this INTERPOL DVI Guide (Parts A and B), as well as the INTERPOL DVI Post- Mortem (PM) and Ante-Mortem (AM) forms, scene recovery documents and Comparison Reports.

## 8. Occupational Health, Welfare and Safety

[Return to Contents](#)

### 8.1. General

[Return to Contents](#)

As mentioned earlier in this Guide, the provision of a safe work environment is of paramount importance and is a responsibility imposed upon all members involved in DVI operations. This responsibility is not only confined to addressing hazardous environments, as there is a need to proactively apply organised work practices, especially during prolonged operations. All personnel assigned to DVI duties should also have access to a comprehensive program of medical and psychological care. Such support should be provided in all team disciplines before, during and after the operational response.

To proactively manage both physical and mental stressors, the following are offered as examples of the types of factors that should be embedded into routine practice and formalised in protocols:

- Where practicable, all DVI personnel should work defined shifts with appropriate rest periods.
- Due to the potential occurrence of high levels of stress, the mental and physical health of all personnel should be closely monitored.
- Individual DVI personnel have a responsibility to advise their Phase Coordinator/Team Leader of any difficulties they or other personnel are experiencing in performing their duties.
- All DVI personnel are to use appropriate personal protection equipment and that adequate supplies are made available.
- All DVI personnel have a responsibility to advise their Phase Coordinator/Team Leader of the failure of any personal protection equipment.
- All injuries to DVI personnel must be immediately brought to the attention of the respective Phase Coordinator/Team Leader and recorded, and appropriately treated.

#### 8.1.1. Medical

[Return to Contents](#)

All personnel who are at risk of contact with contaminated material are to be provided with appropriate vaccinations. These inoculations should be administered during the preparation phase in advance of disaster operations. There should also be an awareness of the time taken for some inoculations to become effective, as well as how long some inoculations may last. This is important for long term operations.

Additionally, consideration should be given to medically examine responders prior to operational deployments. This is particularly important as decision makers need to be comfortable that staff are healthy and physically capable of performing DVI tasks in often difficult and trying conditions. Furthermore, at the conclusion of operations, consideration should be given to examining responders so that any injuries or adverse physical reactions can be identified and remedied at the earliest opportunity.

The psychological burden imposed on personnel can increase with the duration, intensity and nature of a DVI operation. Whilst work practices can be implemented to minimise the physical stressors on individuals, care must also be afforded to the mental and psychological stressors that DVI events evoke.

Several factors can contribute to an individual's psychological reaction to a critical incident. These factors are related to the nature of the scene, the personal relevance of the incident, or a combination of the two. An emotional or physical reaction to such situations is not a sign of inadequacy or mental imbalance, rather it is an indication that, for that person, the incident was out of the ordinary and should be dealt with by qualified professionals. Critical incident stress may manifest itself in several ways, whether they are behavioural, emotional, cognitive or physical.

It is also important to highlight that all individuals will not react to incidents and environments in the same way. Adequate support arrangements in the form of counsellors and mental health professionals should therefore be available, not only during operations, but post deployment, as some symptoms may not present until well after the operational response.

## 9. Support Services for Families and Relatives

Humanitarian considerations alone imply the need to provide support and assistance for families and relatives of victims of a disaster. However, liaising with families and relatives of deceased loved ones is an extremely challenging function that involves a range of complex issues that requires close consideration.

These issues range from the initial notification that a loved one is deceased, followed by the expected outpour of grief and then navigating the many complex issues to ensure that a healthy relationship can be formed with the family to assist in the identification process itself. Whilst this balancing of tasks is difficult during the DVI operation, responders must be mindful that families and relatives may require on-going support and assistance well beyond the DVI operation. The reason for this is that there is likely to be a series of events that will reignite emotions such as the repatriation of human remains, the return of personal belongings, the funeral, legal requirements such as coronial inquests and anniversary dates of the disaster.

Providing an effective assistance network in the form of family support services can promote cooperation on the part of grieving relatives, especially in the collection of AM data, thus potentially enhancing the quality and speed of identification. A Family Liaison Unit traditionally play this type of support role, often in conjunction with AM Interview Teams. The role performed by services such as a Family Liaison Unit is therefore critical to ensure the needs of the family and relatives are being catered for in the best possible way, whilst providing a nexus to DVI responders who are responsible for the identification process.

In many parts of the world, family support mechanisms and specialists exist in both government and non-government forms. It is therefore highly recommended that jurisdictions actively engage with these organisations on a regular basis so that access to key specialists can be made easier when disaster events occur. By forming these partnerships well before a disaster occurs, several benefits can be derived, such as:

- Creating a coordinated response between family and relative support agencies and the DVI teams
- Establishing key contact points that can be engaged by the family and relatives to obtain information and advice about the complexities of the DVI process.
- Contributing to the portrayal of a professional and committed approach to the DVI function that is underpinned by courtesy, respect, compassion, credibility and transparency.
- Ensuring that contact can be made with authorities by families and relatives to obtain updated

information on the development of DVI operations.

- Providing families and relatives with a contact point to gain referrals to other support services.

There are several sources of information and research material available that can enlighten DVI responders to the issues faced by families and relatives in these circumstances. Further information on guidance and information for relatives can be located in Part B of this Guide at annexure 10.

## 10. Training and Equipment

[Return to Contents](#)

### 10.1. Training

[Return to Contents](#)

To maintain appropriate competency standards in contemporary DVI practices, protocols and procedures, jurisdictions should consider the maintenance of training regimes that encompass all aspects and disciplines of DVI. It is also highly recommended that any training materials and activities should be aligned to the DVI process and functions identified in this INTERPOL DVI Guide.

Apart from enhancing competency levels across a particular jurisdiction's DVI disciplines, standardisation of practices can be achieved, which can result in operational deployments being undertaken in accordance with internationally recognised practices. This is especially important when operating with external agencies or jurisdictions or performing duties in foreign environments. In such cases, if all jurisdictions embrace and train their personnel in these international practices, they are more likely to be able to operate more effectively with other agencies. For example, in a multi-national/multi-jurisdictional DVI response, where common practices are embraced by those participating entities across all DVI phases, this can lead to teams operating more cooperatively and inter-operatively.

There have been several international events where nations have come together to perform the DVI role and the application of standardised practices. This has proven to be invaluable in terms of enhanced cooperative relationships, increased professionalism and most importantly better identification outcomes. By developing and implementing standardised training regimes within each jurisdiction that follow international practices, operational deployments, especially with other agencies are likely to be undertaken with less confusion and misunderstanding.

In addition to embracing international DVI procedures and protocols, training and qualification tests to determine adequacy of preparedness for deployment for each DVI team member should be considered as a standard operating procedure. Regular proficiency testing of each member over the course of their DVI career should be considered to ensure preparedness in terms of not only technical and procedural competency, but physical and psychological requirements.

### 10.2. Equipment

[Return to Contents](#)

The provision of contemporary, reliable and officially validated equipment is critical to enable DVI practitioners to perform their primary functions. Apart from maintaining adequate supplies of equipment that supports the demands of each functional area of the DVI process, there is also a need for each DVI member to maintain their competency in the use of such equipment. Such equipment ranges from personal protection equipment to specialist equipment that is unique to each phase of the DVI process.

From both a management and occupational health and safety perspective, it is considered extremely important that DVI practitioners are provisioned with the necessary equipment that enables them to maintain their protection from hazards and assists them to perform their primary tasks competently.

#### 10.2.1. Personal Protection Equipment (PPE)

[Return to Contents](#)

The primary purpose of personal safety equipment is to protect DVI personnel against direct contact with human remains, associated contaminants and other hazards including environmental or man-made hazards. In addition to standard safety clothing such as surgical clothing, protective gloves,



rubber boots, aprons and oral masks etc., there are other forms of protective equipment that extend beyond the immediate scope of dealing directly with human remains that must be considered. These protective measures usually require the use of items such as overalls, helmets, safety boots, goggles, rainwear, sunscreen and reflective safety vests. However, depending on the environment, risk factors and potential hazards, the equipment requirements may vary. Therefore, from a management and supervisory perspective, flexibility in terms of addressing or mitigating operational hazards is regarded as a high priority.

To proactively identify and address hazardous issues that may impact upon DVI personnel, it is recommended that jurisdictions maintain an awareness of emerging hazardous issues and then undertake actions to assist in formulating specific strategies to either address or mitigate those hazards.

Although many hazardous issues may be addressed or mitigated within each jurisdiction or international environment, other challenges may be beyond the expertise of staff, thereby requiring the engagement of external professionals to deal with specific issues. Also, overcoming the issue of sourcing supplies of PPE during an operation is important through maintaining adequate supplies or engaging standing contractual arrangements that can facilitate the provision of equipment immediately from local suppliers.

### **10.2.2. Specialised Equipment**

[Return to Contents](#)

In addition to providing consumables in the form of PPE for staff, there are other standard equipment items that should always be readily available. This includes equipment required to process scenes, human remains and property, or enable the completion of tasks across all other phases of the DVI process and should include equipment required to evaluate hazards in the scene. I.e., atmospheric monitoring equipment.

However, there is also likely to be other equipment that may need to be acquired for specialist personnel and tasks which may vary depending on the nature or circumstances of a disaster. The breadth of this equipment can be wide ranging and identifying those requirements proactively should include close consultation with specialist staff. Consequently, specialist equipment may be required for unique tasks performed by pathologists, odontologists, biologists, anthropologists or other specialists, depending on the technical demands of the DVI response.

To identify potential specialised equipment gaps, jurisdictions are advised to undertake regular audits of their specialist capability resources and equipment. This can usually be achieved by examining a jurisdiction's technical strengths, weaknesses, possible research and development opportunities and potential risks. Although informing this audit can be achieved through local specialist knowledge and experience, jurisdictions are also encouraged to utilise INTERPOL networks to explore the worldwide body of professional knowledge and expertise across a vast array of DVI related disciplines.