

Annexure 4:

Phase 1 > Scene

Source: *INTERPOL DVI Guide*

Annexure 4: Phase 1 - Scene

As a rule, the search for the human remains of victims of a disaster cannot begin until all survivors have been rescued. The emergency rescue units that arrive at the disaster site ahead of the recovery teams should be informed that, while life-preserving rescue measures and medical management take precedence, care should be taken during these emergency measures to ensure that as many human remains as possible (including other evidence, personnel effects, etc.) are left untouched.

In most cases these operations are initially chaotic and disorganised but it should be remembered that the recovery of human remains and the preservation of evidence/personal effects represent the first crucial steps in the victim identification process. This is often made more difficult by the large number of very different organizational units that are frequently involved in this process, together with the related communication and coordination functions that are not fully established at that time.

In order to overcome this initial chaos as best as possible, a structured search and discovery plan should be prepared as soon as possible, through collaboration of the Evidence Collection Team, Disaster Investigation Team, and the Access Control and Security Teams. This plan includes the search for, and collection of, human remains, property and evidence (all of which may also be used in the subsequent investigation into the causes of the disaster).

In cases of disasters with large numbers of victims, the establishment of an Operational Section for recovery and evidence collection is an absolute necessity. This Operational Section is responsible for:

- Recovery of all bodies and body parts at the disaster site.
- Collection and preservation of property found at the disaster site that does not correspond directly to the recovery of human remains.
- Collection and preservation of other personal effects of disaster victims found in the extended surroundings of the disaster area (e.g. personal belongings of victims in hotels).

Wherever possible, responsibility for recovery and evidence collection operations should be placed in the hands of the police who may, in turn, call on various specialists, such as odontologists, anthropologists and pathologists, who are trained to recognize human from nonhuman remains as required.

4.1. Searching / Recording / Securing

Prior to the commencement of operations, all operational personnel should be briefed on the overall situation. This briefing process will also include the assignment of responsibilities and tasks to be completed. Subordinate external helpers and the provision of required sketches and maps of the disaster area should be considered to assist this process.

The disaster site should be searched and processed methodically on a sector-by-sector basis. Each individual team should be assigned a specific sector of the disaster area which is defined by the Sector Operations Commander. Before entering the disaster area, operational personnel should be equipped with appropriate safety equipment and clothing (e.g. helmets, overalls, boots, rubber gloves, masks) and appropriate recovery equipment and documentation, sufficient for each human remain and item of evidence. This latter equipment/documentation should be provided through the Recovery Command Centre.

These teams are responsible for ensuring that a thorough search of the assigned sector is conducted.

4.2. Scene Gridding

Personnel tasked with processing a disaster scene require accurate and detailed recordings of the disaster area to enable them to thoroughly search and record their findings accurately. For a wide disaster area, aerial photographs can greatly assist in preparing maps or plans, while for buildings, consecutively numbered floor plans may suffice.

The DVI Scene Controller is responsible for ensuring that the scene to be processed is gridded appropriately and sectors allocated for searching. These sectors need to be prioritised accordingly, having considered possible competing priorities with other expert examination teams, such as Bomb Scene Examiners (BSE). Thus, it is important that there is a combined approach taken to establishing search sectors based on agreed priorities in line with forensic investigations.

For locations such as airport runways, fields and other areas where the site is relatively contained, a grid is recommended. This, briefly, consists of a base line selected from or between fixed and recognizable points on the ground, and parallel lines marked out with tape at intervals, such as 10-metre intervals, to form squares in which to search methodically. It is important that the grid must cover the whole of the disaster site.

When using the 10 metre grid approach to define search sectors, the scene controller may allocate multiple grids to a sector depending on the amount of potential evidence yielded in each grid. Thus, in the example of a plane crash, the search grids surrounding the area behind the aircraft may be designated as one sector due to the low volume of debris. Whereas the main fuselage of the aircraft may be divided into multiple sectors due to the high volume of evidence present.

To assist a search/recovery team in processing a sector where there is a high volume of evidence present, the team leader may choose to adopt a 'sub-gridding' approach within their given sector. This will assist in their ability to process and record their given sector. This 'sub-gridding' approach follows the same principles as for the main grid.

If the incident occurs in rough terrain, experience has shown that a grid, with its regular squares, is often not the most useful system. The better option in such cases is to obtain aerial photographs and maps, or accurately sketch the ground to be covered, and then divide it into sectors based on natural or man-made features such as river banks, hedges, fields, roads, cliffs or buildings. These sectors may then have to be further subdivided into smaller, more manageable areas.

A chart corresponding to each sector is then prepared, clearly indicating the grid or the major fixed points, and an appropriate number of copies is made. The other search and recovery operations will be conducted in a similar methodical way, following the body recovery procedures, to ensure that every part of the site is properly searched and that all relevant finds are precisely recorded.

It is essential that an entry and egress route is established to clearly define the path responders take when accessing the scene. This must be established as a priority, thus this route may be the first sector that is processed to clear it for access to other sectors. The scene controller needs to consider ease of access within the scene for responders so that human remains recovery and the removal and securing of property and other evidence can be made.

An example of a basic grid layout for a disaster scene is attached to this annexure at Fig. 1.

4.3. Recovery and Evidence Collection

In order to ensure thorough search and photographic documentation, recovery and victim identification teams require accurate maps of the disaster area. As far as possible, the disaster site should be overlaid with a grid in order to facilitate search operations. This method has proven particularly effective for relatively large disaster areas. The grid consists of a baseline that proceeds from or runs between identifiable fixed points on the ground as well as parallel lines drawn at

intervals of 10 m for instance (but depending on the situation). This process forms square sections in which methodical searches can be conducted. Wherever possible, the grid should cover the entire disaster area. Recovered human remains, personal effects, data, etc. can be catalogued according to the grid area in which it is found, with the completed Victim Recovery documentation.

The Recovery and Evidence Collection Team performs the following tasks relating to the recovery of bodies:

- Identify and record the location of all human remains - using the Victim Recovery booklet.
- Exposure, uncovering and retrieval of the human remains - if necessary with the aid of appropriate support personnel and suitable equipment.
- Marking of human remains with an evidence plate or numbered post on which the recovery number is clearly readable and cannot be erased.
- Assignment of a separate, unique number for each human remain.
- Documentation of the discovery site - description, photos, sketch or survey of the position of the human remains with the aid of GPS and/or crime scene surveying instrument.
- Photographic documentation of the human remains for recovery files and forensic medical examination.
- Attachment of the recovery number to the human remains. This number is used as the body reference number and remains affixed to the human remains during the entire identification process.
- Completion of the INTERPOL DVI Victim Recovery documents, with reference to the recovery number.
- Placement of the human remains in a body bag, attachment of the recovery number to the outside of the body bag and sealing of the body bag.
- Removal of the human remains and transport to the Recovery Command Centre/Mortuary.
- Preparation and compilation of recovery documents and submission of documentation to the Recovery Command Centre/Mortuary.
- Procurement of new recovery documents as needed.

In order to perform the tasks in an appropriate manner, the following principles should be observed:

- The matching of separate human remains should be performed only by authorized forensic medical experts, and not by recovery personnel. More generally, it has to be avoided and each body part should be labelled. Medical (including anthropologists) and dental experts may be needed at the scene to assist the police in collecting human remains, including bones and teeth.
- During recovery operations, personnel should not search for evidence of identity or remove objects from victims' clothing or place such objects in victims' clothing.
- Should it become evident during the recovery operation that the condition of human remains may change rapidly due to external influences (e.g. weather); a DNA sample should be obtained by a suitably qualified person from the victims prior to commencement of the recovery operation. (The Commander of the Recovery and Evidence Collection Team should issue a corresponding order). All necessary evidence collection, labelling, transportation and storage precautions should be used.

General methodology when removing the human remains:

- Use a search plan that is adapted to the area.
- Controlled access (remains and belongings not removed or disturbed) until adequately documented.
- Adequate stocks of stakes, body bags and tags should be available.

- Grid and identify exact location of bodies and fragments (especially burned and fragmented remains according to the position of other remains or evidence).
- Remains and belongings directly connected placed in the same bag.
- Parts of remains in separate bags.
- Utilise photographs and written documents (INTERPOL DVI Forms) to record human remains and property.
- Remains and body bag should be labelled with the same number.

Always remember that any property may be crucial evidence that may assist the investigation. The following tasks should be performed with respect to property and personal effects.

- Identification and recording of the location of property at the disaster site as well as of personal effects within the extended area of the disaster.
- Marking and documenting the area in which property is found.
- Completion of the evidence list in the recovery documentation, including entry of the body recovery number.
- Labelling and packaging property; evidence-preserving packaging of large objects (e.g. luggage items) is not required. Evidence tags can be used to identify such objects.
- Once objects have been documented and prepared as evidence, property should be transferred without delay to the Evidence/Property Collection Centre, accompanied by the corresponding evidence list. If the Evidence/Property Collection Centre is not located in the immediate vicinity of the site, a site evidence administrator should be appointed and tasked with collecting and forwarding property/personal effects to the Evidence/Property Collection Centre.
- Personal effects of victims in the extended surroundings of the disaster site (e.g. hotel rooms) should also be localized and collected and managed in the same way as mentioned earlier. These items should also be listed in an evidence list provided with the recovery documents.
- The receipt/transfer of personal effects is recorded in a receipt/transfer record signed by the receiving and transferring parties - preservation of the 'chain of custody'.
- Received personal effects are also forwarded to the Evidence/Property Collection Centre, accompanied by the evidence list and the receipt/transfer record.

4.4. Collection Centres

In consultation with the Operations Sector Commander, the Recovery Command Centre is to be set up in the immediate vicinity of the disaster site. It may serve as a temporary morgue station/mortuary – in any case it serves as a collection centre (site) for human remains delivered by the Recovery and Evidence Collection Teams. The Command Centre ensures proper temporary storage of human remains and maintains victim recovery lists on the basis of data obtained from recovery reports.

The Recovery Command Centre also provides for the issue of recovery documents/equipment to the Recovery and Evidence Collection Teams such as:

- Recovery report (INTERPOL DVI Victim Recovery/Post-Mortem Form - pink).
- Evidence lists.
- Number plates.
- Body bags.
- Seals.

The recovery documents are reviewed by the Recovery Command Centre to ensure completeness/accuracy both at issue and on return.

4.5. Evidence / Property Collection Centre

The Evidence/Property Collection Centre should also be established in the vicinity of the disaster site in consultation with the Commander of the Recovery and Evidence Collection Team. Evidence/property found at the disaster site is collected at the Collection Centre along with personal effects of disaster victims.

On the basis of the large number of evidence lists reviewed for completeness and correctness by the Collection Centre, a master evidence list of all found and registered objects is prepared. Collection Centre staff are responsible for deciding which incoming objects are relevant and suitable for identification purposes and which should be handled as items of property.

Objects of relevance to identification are identified and listed accordingly. Information relating to personal identification derived from these objects is forwarded to the Victim Identification Team.

The Evidence/Property Collection Centre also performs the following functions:

- Assurance of proper packaging and storage of collected objects.
- Preparation of hand-over records for items of evidence that should undergo further examination for purposes of identification or forensic analysis before completion of scene-of-crime operations.
- Examination of property items for information of relevance to identification and classification as evidence, as required (e.g. items of value/personal documents) Separate storage of objects identified as property and notation as 'property' in the 'Remarks' section of the evidence list.
- Preparation of photographs of items of property as required for purposes of identification/matching.
- Arrangement for return of property to owners/entitled recipients.

Fig 1. Example of a basic grid layout for a plane crash

Scene gridding is used to record where human remains, property and items of evidence are located at a scene. Each grid is referenced by using horizontal and vertical co-ordinates. For example, all horizontal co-ordinates could be marked with alphabetical letters and all vertical co-ordinates could be marked with numerical values. In the diagram depicted below (Fig. 1), grid references have been marked as Grid A1 through to Grid O16. These grid references should be recorded on scene recovery documentation and these recordings can include GPS co-ordinates as an additional reference source.

DVI phase 1 teams are allocated specific grids to examine, record, process and clear. The Scene Controller should maintain a detailed record of the specialist teams allocated to each grid. The record should also identify the number of grids processed and the exact details of human remains, property and other evidence located in each grid.

It must be remembered that each disaster scene will be different due to a range of factors such as location, topography, environmental elements, the nature of the disaster, safety issues and the complexity involved in the management of human remains, property and other evidence. It is because of these factors that grids may not all be the same uniform size. Furthermore, the order in which the scene is processed will largely depend on priorities. For example, there may be several disciplines that need to be involved in the scene processing such as post blast examiners, crime scene examiners and those requiring intelligence for investigative purposes. Communication and co-operation between those key entities processing the scene is therefore vital to ensure that the scene is appropriately managed.

The following example (Fig. 1) is provided as a general guide only, in order to highlight the need to sectorise and maintain an accurate overview and recording of where human remains, property and other evidence was located. It must also be remembered that each jurisdiction may apply variations to this example.

Fig.

