INSARAG GUIDELINES 2015

Volume II: Preparedness and Response

Manual B: Operations

WHAT HAS CHANGED?

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OCHA United Nations Office for the Coordination of Humanitarian Affairs

INSARAG Preparedness – Response

Abbreviations

- ACSU Activation and Coordination Support Unit
- ASR Assessment, Search and Rescue
- BoO Base of Operations
- GDACS Global Disaster Alert and Coordination System
- IEC INSARAG External Classification
- IER INSARAG External Reclassification
- INSARAG The International Search and Rescue Advisory Group
- NGOs Non-governmental organisations
- NDMA National Disaster Management Authority
- LEMA Local Emergency Management Authority
- OCHA United Nations Office for the Coordination of Humanitarian Affairs
- OSOCC On-Site Operations Coordination Centre
- RCM Rapid Clearance Marking
- RDC Reception/Departure Centre
- SAR Search and Rescue
- SOPs Standard operating procedures
- UCC USAR Coordination Cell
- UN United Nations
- UNDAC United Nations Disaster Assessment and Coordination team
- USAR Urban search and rescue
- VO Virtual On-Site Operations Coordination Centre

Introduction

- The INSARAG Guidelines comprise three volumes: Volume I: Policy; Volume II: Preparedness and
- Response; and Volume III: Operational Field Guide. This manual, Operations, is part of Volume II,
- which includes Manual A: Capacity Building and Manual C: INSARAG External Classification and
- Reclassification (IEC/R).
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- This manual is targeted at the national INSARAG Operational Focal Point, the Urban Search and
- Rescue (USAR) Team Management, and the INSARAG Secretariat with the purpose of providing
- guidance in the training, preparations and coordination of a USAR team for national and/or international
- operations. It is based on the minimal standards and it describes the required capabilities for
- coordinated operations.
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- Tactical and technical details are described in Manual A: Capacity Building, Manual C: IEC/R and
- Volume III: Operational Field Guide.

- **Important note:** The Guidelines can be downloaded from www.insarag.org. Hard copies in English
- (and translated versions, where available) can be requested from the INSARAG Secretariat by email on
- insarag@un.org.
-
- This internationally accepted document describes the International USAR Response Cycle, the roles
- and responsibilities of the key stakeholders in a USAR operation, such as the United Nations (UN), the
- affected and assisting countries, and the international USAR teams.
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- It also describes the five components of USAR capability (Management, Search, Rescue, Medical and
- Logistics) within the USAR Response Cycle. This manual also outlines the USAR coordination
- structures and methods, including the INSARAG Marking and Signalling System and the link to the new
- On-Site Operations and Coordination (OSOCC) Guidelines.

1. International USAR Response Cycle

- An international USAR response has the following phases:
- **Post-Mission Mobilisation**
- **Demobilisation Operations**
- **Preparedness**

The preparedness phase is the period between disaster responses. In this phase USAR teams

Undertake preparatory measures to ensure that they are at the highest level of readiness for deployment

as possible. Teams will conduct training and exercises, review lessons-learned from previous experiences, update standard operating procedures (SOPs) as required, and plan future responses.

Mobilisation

The mobilisation phase is the period immediately following the occurrence of a disaster. International USAR teams prepare to respond and travel to assist the affected country.

- **Operations**

The operations phase is the period when international USAR teams are performing USAR operations in the affected country. It starts with arrival of a USAR team at the Reception/Departure Centre (RDC) in the affected country, registration with the On-Site Operations Coordination Centre (OSOCC), reporting to the Local Emergency Management Agency (LEMA) (or National Disaster Management Authority (NDMA)), and performing of USAR operations. The phase ends when the USAR team is instructed to cease USAR operations.

4.7 Sectorisation

- A disaster that warrants international USAR response is inherently a large-scale event. The scale of destruction may just involve one city or it may affect a large area involving numerous cities and even more than one country.
- Geographical sectorisation of the affected areas can be needed to ensure effective coordination of search and rescue efforts. Sectorisation allows better operational planning,more effective deployment of the arriving international USAR teams and better overall management of the incident .The size of the sector will depend on the level of resources and the needs of the affected area.

- **Sectorisation Plan**
-
- Sectorisation should be undertaken at the earliest possible stage of a disaster response to ensure its effectiveness. It is expected that the LEMA should have a sectorisation plan in place and that international USAR teams should follow it.
-
- However, if there is no sectorisation plan, it should be developed in close liaison with the LEMA. This may be done by the UNDAC team but will often be done by the provisional OSOCC or USAR Coordination Cell (UCC) personnel from the USAR teams. If the LEMA has no sectorisation plan, then a Wide Area Assessment may be necessary to get the relevant information to formulate a sectorisation plan. The expected volume of work, geographic area, geographic features, scale of response, span of control and other factors should be taken into account when determining a sectorisation plan.

Sector Identification

The default INSARAG sector identification system is to use a simple lettering system to code each sector; A, B, C, D and so on. A local name or description can also be added to ensure clarity e.g. Sector A, North Padang. If the LEMA has its own a coded sector identification system in place e.g. Sector 1, 2, 3, or Red, Blue, Green etc., it should be adopted and allow for it in any documentation or markings.

The diagrams below are simple illustrations of how geographical sectorisation can be done.

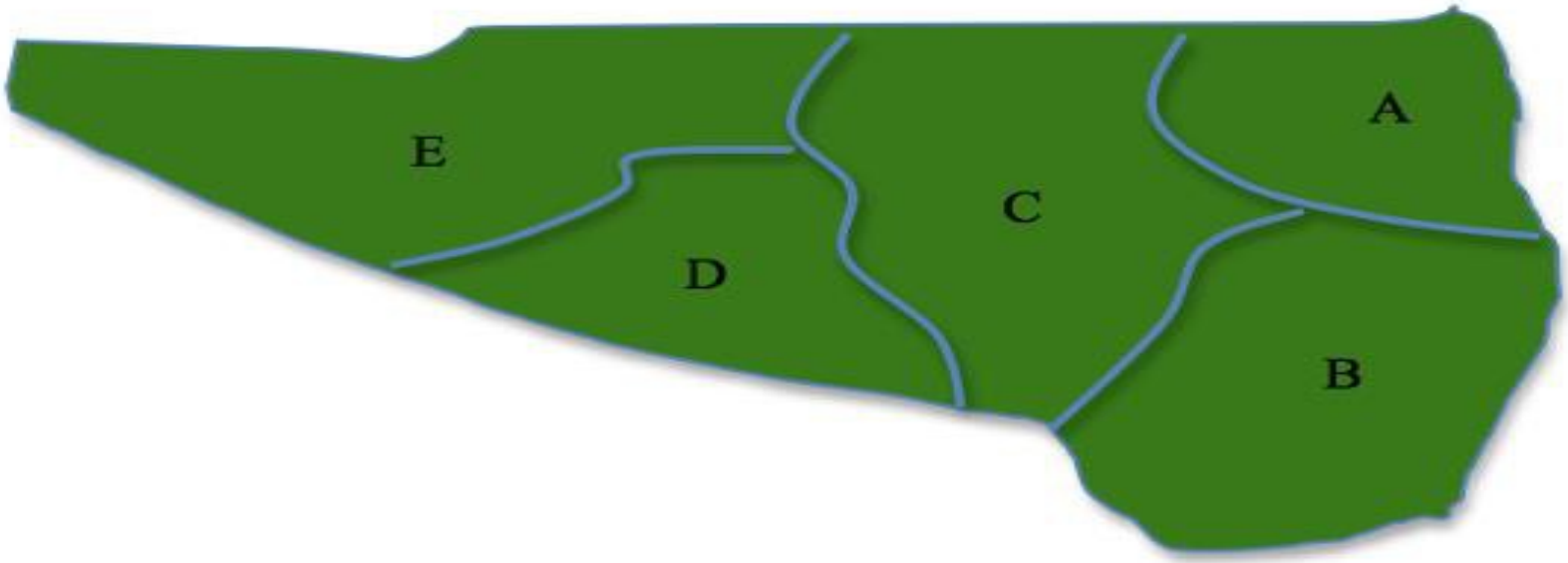


Figure 6: Sectorising an affected area using streets and city block layouts.

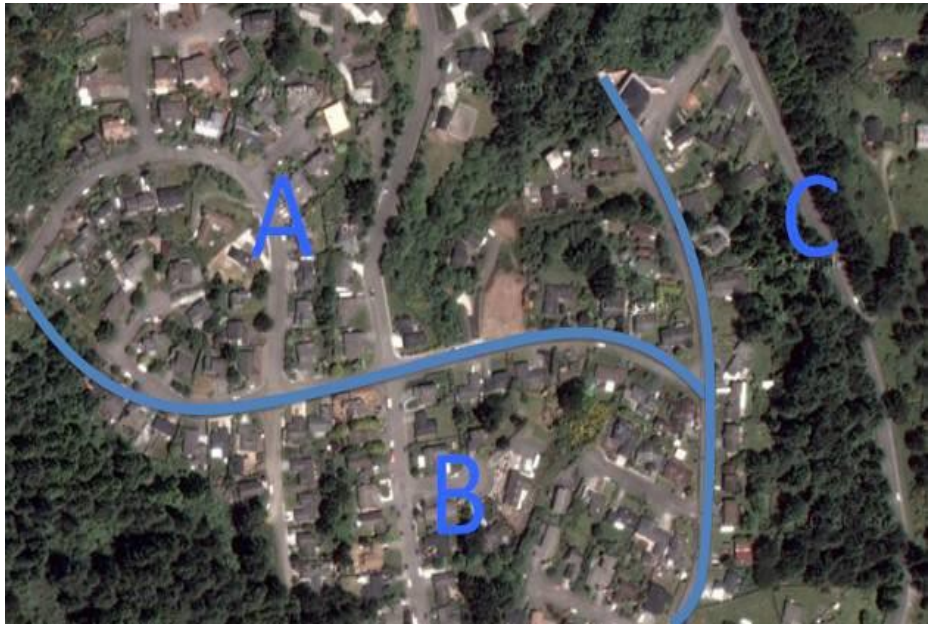
Figure 7: Sectorising an affected area using prominent features e.g. Sector A North of the river, Sector B South of the river.

4.8 Worksite

- To allow effective coordination it is essential to uniquely identify every site where significant USAR operations take place. Each of these sites will be known as a worksite.
-
- **Definition of a Worksite**
-
- A worksite can mean different things but the simplest definition is —Any site where significant USAR operations are carried out. Significant USAR operations normally only take place when there is thought to be the potential for a live rescue. Worksites will typically be one building where one USAR team or squad is working because of a potential live rescue. But a worksite could be much larger or much smaller. A large building or complex of buildings, e.g. a hospital, may be identified as a single worksite.
- Alternatively the site of a single rescue in an area of only a few square metres would also be identified as a worksite.

- **Worksite Identification**

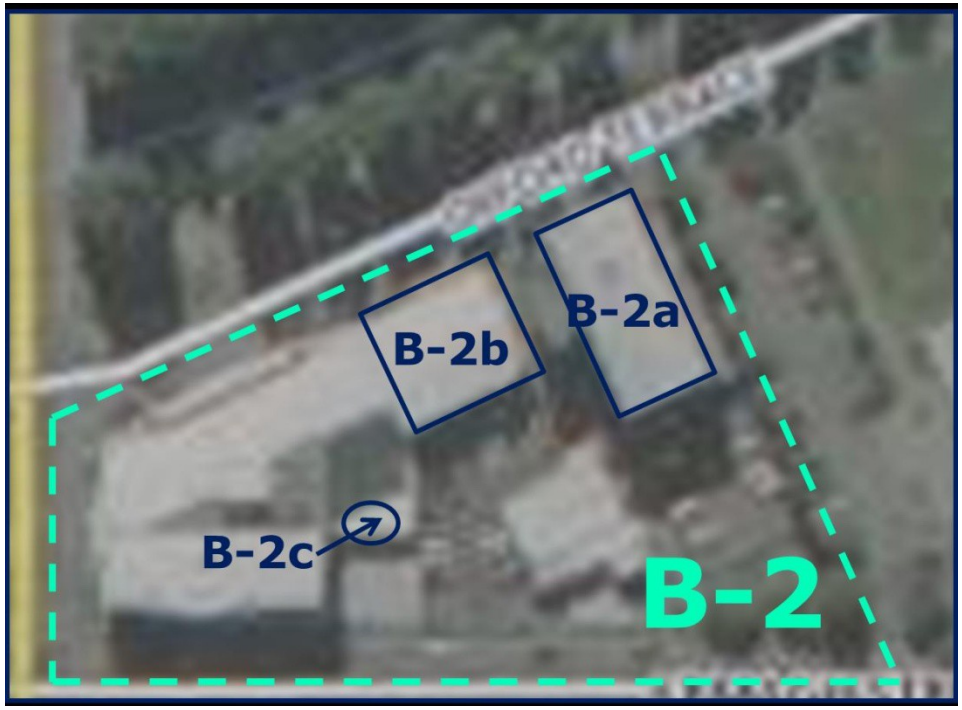
- When it is decided that a site will need significant USAR operations, usually rescue work, it should be given its own Worksite Identification (Worksite ID), which enhances the use of the primary geographical identification that should be the existing street name and building number, when possible. This can be done during Sector Assessment (see section on ASR Levels) but sites may also be allocated by the LEMA.
- In any case, each site should be allocated its own Worksite ID using the following protocol:
-
- · The first part is the Sector letter allocated to the area the site is in e.g. A.
- · As a worksite is identified a number is then sequentially allocated 1, 2, 3, etc.
-
- The sector letter and allocated number produces the unique Worksite ID e.g. A-1, A-2, A-3 etc. If more than one team is in the same sector, then the UCC will instruct teams on which numbers to use e.g. Team 1 uses 1 to 20, Team 2 uses 21 to 40 etc.
-
- If the LEMA uses a different sector code, e.g. numbers, then this should be used as the first part of the Worksite ID, e.g. 1-1 rather than A-1. In either case the sector code must be separated from the worksite number by a hyphen to prevent any possible confusion.
-
- **Important note:** If sectorisation has not been completed, the use of plain numerals is recommended; these numbers can subsequently be integrated into the complete Worksite ID system once established. Control of number use is required to achieve this, e.g. give search teams batches of numbers 1 to 19, 20 to 39, 40 to 59 etc.
-
- The diagrams below illustrate the process.


A
B
C


A-1
A-2
A
A-3
A-4

Worksites within Worksites

It is probable that a relatively large worksite, e.g. a hospital, which is initially identified as a single worksite, e.g. B-2, could end up with more than one rescue site in quite different locations. For coordination purposes it is useful to identify each of these separately. To do this the original single Worksite ID should be kept for each site but with a suffix letter added, e.g. B-2a, B-2b, B-2c etc. to provide a unique —address for each.



Important note: International USAR teams are deployed to support the LEMA. Any existing mechanism in use will be adapted by the international teams in order to better augment national resources already deployed for rescue work.

4.9 USAR Team Identification Code

- In order to standardise the identification of all USAR teams within the coordination system a code or
- Team ID identifies each team. The code is composed of two parts:
-
- · The three-letter Olympic code of the home country of the team
- · A number to differentiate teams from the same country
-
- For IEC classified teams the number will be decided by the home country at the time of classification and registered in the INSARAG USAR Team Directory. For non-IEC classified teams, the same country code system will be used; however, the number will be assigned by the RDC based upon sequence of arrival, starting from the number ten. Under this process the issue of a Team ID is temporary and is retained only for the duration of that specific deployment.
-
- If a country indicates to INSARAG that they do not want the three-letter Olympic country code issued to teams, the following process will be used:
-
- · The letters —SAR (search and rescue) will be used to replace any country code
- · Followed by a number starting at 10 – this may involve multiple countries
- o E.g. SAR-10 (country 1), SAR-11 (country 2) etc.

- For ease of use and consistent application, the USAR Team ID system will also be used as the standard for radio call signs for deployed teams.
-
- The following table shows some examples.
- **of origin Team name Team ID.**

- **Japan Japan Disaster Relief Team JPN-1**

- Australia Queensland USAR AUS-1

- Germany THW SEEBA Team GER-1

- USA Los Angeles County USAR Team USA-2
- USA Fairfax County USAR Team USA-1
- Indonesia XXX USAR Team (Non-Classified) INA-10
- Indonesia YYY USAR Team (Non classified) INA-11
- United Kingdom UKISAR Team GBR-1
- Australia (without national ZZZ USAR Team (Non-Classified) SAR-10 support)
- Germany ISAR Germany GER-2

Table 2: Examples of USAR team identification codes.

- **<u>Key Point</u>**:

  International USAR Teams are deployed to support the LEMA. Any existing mechanism in use will be adapted by the international teams in order to better augment national resources already deployed for rescue work.

- **Important note:** Teams may also be identified by their team name or acronym as provided and agreed upon with their national Focal Point.
- ----------

4.10 Assessment, Search and Rescue Levels

- **Introduction**
-
- A key element of the INSARAG coordination methodology is a means of clearly identifying and defining every level, or type of work, normally needed during a major USAR incident. This can range from initial assessment of the affected area all the way through to deconstructing a building to recover the lastdeceased victim.
-
- Having a clear definition of all the possible operational levels allows the coordination actors to be specific about the planning, tasking, specific USAR operations needed and the progress made.
- Information management tools (templates, forms, reports, marking system, VO etc.) used to facilitate coordination also relate to the level of USAR work being carried out

The Levels

- The five operational levels can define the phases of potential USAR related work. It should be remembered that not all these levels will always be carried out by international USAR teams; often the LEMA resources will do certain aspects. Levels can also be combined when appropriate and it is also possible that different levels of work are being carried out in different areas of the incident at the same time.

- **Important note:** The five levels are identified as:
-
- **· Level 1: Wide Area Assessment**
- **· Level 2: Sector Assessment**
- **· Level 3: Rapid Search and Rescue**
- **· Level 4: Full Search and Rescue**
- **· Level 5: Total Coverage Search and Recovery**
-
- Each level is explained and defined in more detail in the PAGES 32,33,34,35,OF THE INSARAQ manual.

ASR Level 1		Wide Area Assessment Definitions and purpose	Carried out when and by who	INSARAG Tools	Outputs

Assessment, Search and Rescue Level	1	• The preliminary survey of the affected or assigned area.
		• For the purpose of:
		  ○ Determining the scope and magnitude of the incident
		  ○ Identifying scope, location and types of damage
		  ○ Estimating the urgent resource needs
		  ○ Developing a sectorisation plan
		  ○ Establishing priorities
		  ○ Identifying general hazards
		  ○ Identifying infrastructure issues
		  ○ Identifying potential BoO locations
		• Usually accomplished by; vehicle, helicopter, waterborne craft, on foot or from reports from others e.g. the LEMA.
		• Initial, fast visual check of the damaged or assigned area.
		
		Teams carrying out this level of assessment must remain mobile, not engage in rescue operations and report the results as quickly as possible.
			1. The LEMA often do this prior to the arrival of teams and provide all or some of this information.
			If it is not complete it may be beneficial to redo this.
			
			2. Can be done by members of the OSOCC/UNDAC team on their arrival.
			
			3. By assessment elements of USAR teams when allocated areas not already assessed.
				1. Information on the VO.
				
				2. RDC/OSOCC briefing.
				
				These could be supported by information such as: LEMA briefings, maps, GPS coordinates, photographs, and video.
					1. Briefing back to the OSOCC/UCC and the LEMA.
					
					2. Sectorisation plan.
					
					3. BoO location(s).
					
					4. Initial deployment priorities and plan (Where or to which sectors the first teams are sent).
					
					5. Resource requests e.g. more teams.
					
					6. Posts on the VO.

ASR Level 2		Sector Assessment Definitions and purpose	Carried out when and by who	INSARAG Tools	Outputs
Assessment, Search and Rescue Level	2	• The main purpose is to identify specific and viable live rescue sites within the allocated sector to allow assignment prioritisation and make a plan of action. • It needs to be a fast paced but methodical assessment. • The aim is to assess the whole sector in a timely manner. • The Worksite Triage form should be used to gather the essential information at this stage. • Information from the local population and local responders is often valuable and should be sought during the assessment. • Rescues are not usually performed during this level **unless** an unexpected opportunity arises. • If live victims are found the decision on whether the Assessment Team stays to start the rescue or carries on the assessment will be dependent on the situation and the brief the team received, some options are: o Additional resources are called in to carry out the rescue o The Assessment team stays but must ensure the sector o Assessment is completed by others as soon as possible. o Adopt a strategy to send a combined team able to do both ASR Level 2 sector Assessment and ASR Level 3 Rapid Search and Rescue • An ASR Level 2 Assessment can be repeated later if it is thought necessary, e.g. a night time assessment or an assessment with additional dogs, which may produce different results.	1. It is preferably done closely behind the Level 1 Wide Area Assessment and as soon as possible after sectors have been established. 2. The LEMA may have sectorised and started this process prior to assistance arriving. If this is not complete it may be beneficial for a USAR team to redo this. 3. If the LEMA haven't done this then it should be the first action of the initial USAR team(s) in a sector. 4. Usually carried out by a small mobile assessment/search element of the USAR team. 5. Use of dogs or technical search equipment is optional and will depend on the situation. Using these will improve the detailed results but will slow down the process so a balance is needed.	1. Worksite Triage form. 2. Briefing from OSOCC/UCC. 3. A map of the sector area being assessed is highly recommended and should be used to clarify the areas assessed and cleared. *There could also be information such as: LEMA briefings, information from local teams, GPS coordinates, photographs etc.*	1. Completed Worksite Triage Forms identifying the sites teams are needed at. 2. A completed worksite ID 3. A map of the sector showing the area covered by the assessment. 4. Development of the sector plan of action and priorities by OSOCC/UCC. 5. Assignment of USAR teams to worksites. 6. Further resource requests.

ASR Level 3		Rapid Search and Rescue Definitions and purpose	Carried out when and by who

Assessment, Search and Rescue Level	3	• Usually applies in the early stages of a large scale event when a relatively small number of teams are available.
		• Teams are assigned to one or multiple worksites (usually identified during Level 2 Sector Assessment).
		• Fairly rapid progress needed to ensure the allocated structures are all searched relatively quickly to maximise the lifesaving opportunities.
		• There is relatively modest commitment to each site with:
		  ○ Use of physical, canine or technical search techniques
		  ○ Rescue operations using debris removal and limited shoring, breaking and breaching etc.
		  ○ Limited penetration into the structure/rubble
		• The search and/or rescues are normally possible to complete within one operational period, e.g. a few hours.
		• Team should be able to work simultaneously at more than one worksite.
		• This level of operation should achieve the rescues just beyond the capability of local responders, "citizen" rescuers or where no rescue effort has yet taken place.
		• A team will not normally undertake long term operations (more than one operational period) to penetrate deeply into the structure.
		• Deeply entombed victims may not be found during this level
		• At this level teams should identify those structures or worksites where a Level 4 search might be worthwhile.
		• If a confirmed deeply trapped live victim is identified, team may extend to Level 4 operations if the terms of engagement allow or they get permission from sector coordination. But they must ensure Level 3 work is completed for the remaining worksites assigned to them.
		• If additional rescue sites are identified at any time then a new Worksite ID should be created.
			1. This is usually done when USAR teams are initially allocated into sectors.
			
			2. Should always be done at identified worksites.
			
			3. Done by Medium and Heavy USAR teams.
			
			4. This work might also be done by LEMA national teams.
			
			5. One USAR team may be able to operate simultaneously at more than one worksite due to the limited commitment.

ASR Level 4		Full Search and Rescue Definitions and purpose	Carried out when and by who
Assessment, Search and Rescue Level	4	• This is the search and rescue work that should identify, locate and rescue the small number of heavily trapped or entombed survivors that local rescuers, first responders, LEMA resources or ASR Level 3 operations did not achieve. • It will usually be at a single worksite or a small number of worksites . • Teams will penetrate into most or all of the survivable voids. • These are likely to be longer term (more than one operational period) operations requiring a wide range of USAR skills, e.g.: o All possible search techniques and equipment and often repeated as access is achieved o Possibly extensive shoring to make the structure or access routes safe o Heavy and repeated breaking and breaching of the full range of structural elements o Lifting and/or moving of large elements o Some delayering may take place at this level if access is needed to an identified potential live rescue o Working in confined spaces, sometimes deep inside structures • This may involve several teams on the same worksite. • Complete command and control of the worksite is needed.	1. This level is normally carried out after or in conjunction with Level 3 Rapid Search and Rescue. 2. If the LEMA has identified specific sites already, a team may go straight into Level 4 operations as their first tasking. 3. Carried out by Medium and Heavy USAR teams.

ASR Level 5		Total Coverage Search and Recovery Definitions and purpose	Carried out when and by who
Assessment, Search and Recovery	5	• This usually means operations carried out at a worksite to recover the deceased victims. • This level is not normally carried out by international USAR teams. • Normally done after the rescue phase has been exhausted and the incident has moved into the recovery phase. • It is conceivably still part of the rescue phase if this is deemed necessary by the coordinating authority. • There may be a "miracle" find of a live victim that is achieved as the structure is de-layered or deconstructed. • If the work relates to collapsed structures or rubble pile worksites this work can include: o Searching or making access into every possible void o All the USAR skills listed in Level 4 o Delayering of large elements to allow access to all parts of the structure or rubble pile o Working with heavy machinery, e.g. cranes and demolition equipment, to achieve this access o Complete command and control of the worksite is essential	1. This is usually done after the rescue phase. 2. This level is not normally carried out by international USAR teams. 3. Usually done by the LEMA resources for their own body recovery purposes. 4. International USAR teams can be asked to undertake this task where area clearance and body recovery is a high priority. 5. Some international teams may do this and some will not, each team will make their own decision.
		Area Clearance to ASR Level 5 • This level can also apply to areas where damage is less but USAR skills are needed for access or safety to enable complete clearance of all possible victims. In this case the operations will include: o Systematic search of every room of every structure in the assigned area of operation. o This operation should quickly clear relatively large areas. o If necessary forced entry is used to gain access to all areas o Heavy machinery may occasionally be needed to clear smaller rubble piles • This may specifically be for deceased victim location/recovery. • The rules of engagement (brief) have to detail what teams do if they locate a live or deceased victim, e.g. call in other teams or stay and deal with it themselves. • Full control and coordination is needed with detailed recording by the teams of the exact areas they have cleared.	**Carried out when and by who** 1. LEMA resources usually do this but international USAR teams may be asked to do this in some circumstances. 2. USAR teams may or may not decide to move to this phase of work based on various factors e.g. other rescue possibilities, capacity of teams at the event, policy of the team, mandate from sponsors etc.

4.11 Worksite Triage

- The objective of Level 2 Sector Assessment is to identify specific and viable live rescue sites within the allocated sector to allow assignment prioritisation and make a plan of action. One of the considerations for the prioritisation of worksites is the triage category.

Triage categories from A to F are identified relating victim information, void size and assessment, search and rescue level required.

Triage Category	Victim Information	Void Size	ASR Level Required
A	Confirmed Live Victims	All voids	Level 3 Rapid SAR
B	Confirmed Live Victims	All voids	Level 4 Full SAR
C	Unknown or possible victims	Big Void	Level 3 Rapid SAR
D	Unknown or possible victims	Small Void	Level 3 Rapid SAR
E	Unknown or possible victims	Big Void	Level 4 Full SAR
F	Unknown or possible victims	Small Void	Level 4 Full SAR

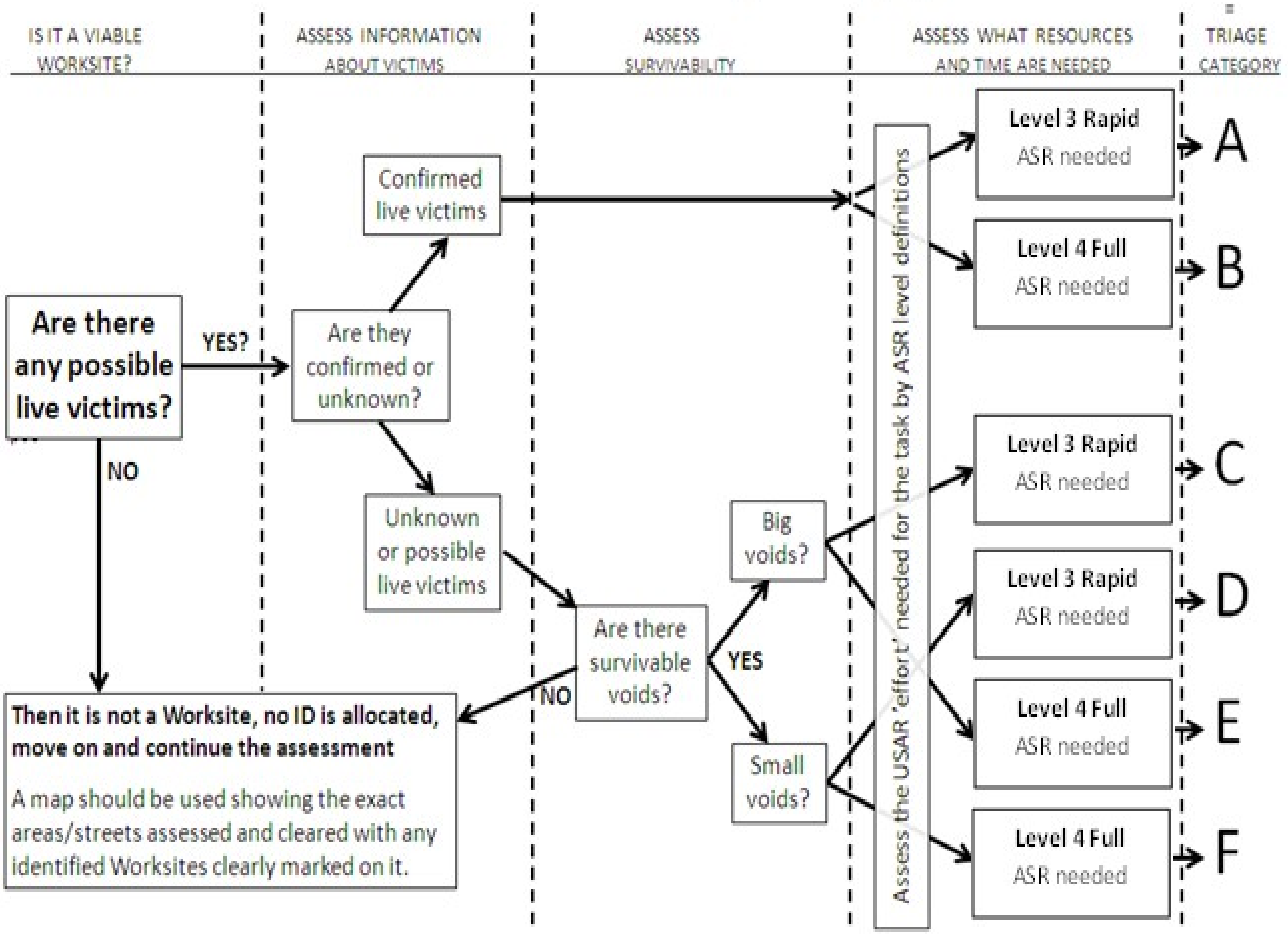
The following definitions are useful in the process of assigning a triage category to a worksite:

- · **Confirmed live victims:** Means that the assessment team knows that there are people alive in
- the collapsed structure.
- · **Unknown victims or possible victims:** Means that people are missing, but the assessment team does not know whether these people are alive or even in the structure.
- · A **big void** is big enough for a person to crawl. The chances of survival for a victim are greater
- in big voids than small voids. —Big is a relative term, i.e., a big void for a child will be considerably smaller than a big void for an adult.
- · A **small void** is where a person can hardly move and has to lie more or less still while waiting
- for help. In small voids, the chances of injury are higher as people trapped inside have less space to avoid falling objects and collapsing structural elements.
-
- The objective of a triage process is to evaluate the triage factors in order to compare collapsed structures and decide the order of priority. The key to triage is consistency in the comparison of triage factors (bigger or smaller, less or more stable, less or more time), not the exact size of voids or level of shoring.

- **Important note:** Other considerations when prioritising and tasking:
-
- · The triage category result
- · Numbers of likely victims at worksite
- · The type of construction
- · The size of the site
- · The resources and time available
- · Any strategy declared by the OSOCC/LEMA

	Level 3 Rapid ASR Needed	Level 4 Full ASR Needed
Confirmed Live Victims	A	B
Unknown Victims and Big Voids	C	E
Unknown Victims and Small Voids	D	F

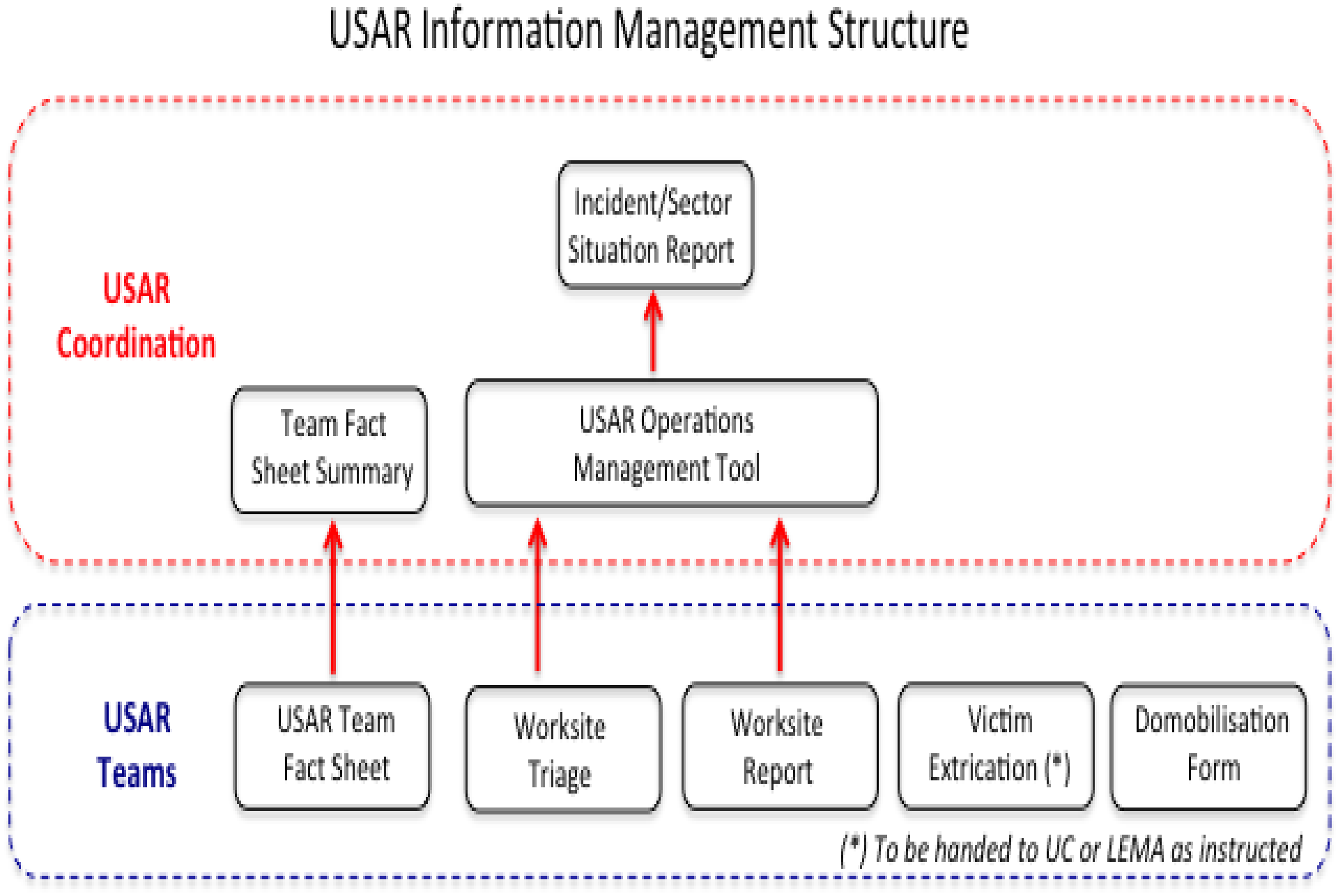
Sector Assessment Worksite Triage Category Flowchart



4.12 Information Management

- All stakeholders of the INSARAG community need information management, hence the need for a
- standardised and systematic approach to collect and report information at all levels. An information
- management system was designed and constructed to support the coordination methodology

Tools developed



Important note:

- It is paramount for all national USAR teams to maintain consistent links with the OSOCC to ensure two-way information sharing. Teams are especially advised to participate in regular Team Leaders meetings held at the OSOCC to update and receive the latest information from the VO.

5. INSARAG Marking and Signalling System

- **5.1 INSARAG Marking System**
- Marking systems are an essential tool used in USAR operations to display and share key information between rescue teams and other field personnel.
- They should also be a mechanism to strengthen coordination and minimise duplication.
- To maximise the value of using a marking system in an event it
- is necessary to identify and universally use a single, common methodology.
- For this methodology to be effective, it must be used by all responders, remain simple to apply, simple to understand, be efficient in the use of resources and time, communicate the information effectively and be consistently applied.

- The INSARAG Marking System strives to achieve these things and consists of three principle Marking elements, these being: Worksite Marking, Victim Marking and Rapid Clearance Marking. These components deliver a comprehensive suite of visual displays that capture critical information to both
- inform situational awareness and support planning and coordination.

- The INSARAG Marking System is used by teams as the default marking system in the absence of any national system in countries where operations are occurring. Marking system use will be determined by the OSOCC in liaison with the LEMA.
-
- Countries are encouraged to use the INSARAG Marking system as their national standard which will assist in times of crisis when international teams are required to be used. The INSARAG Marking System is designed to complement not compete with national systems.

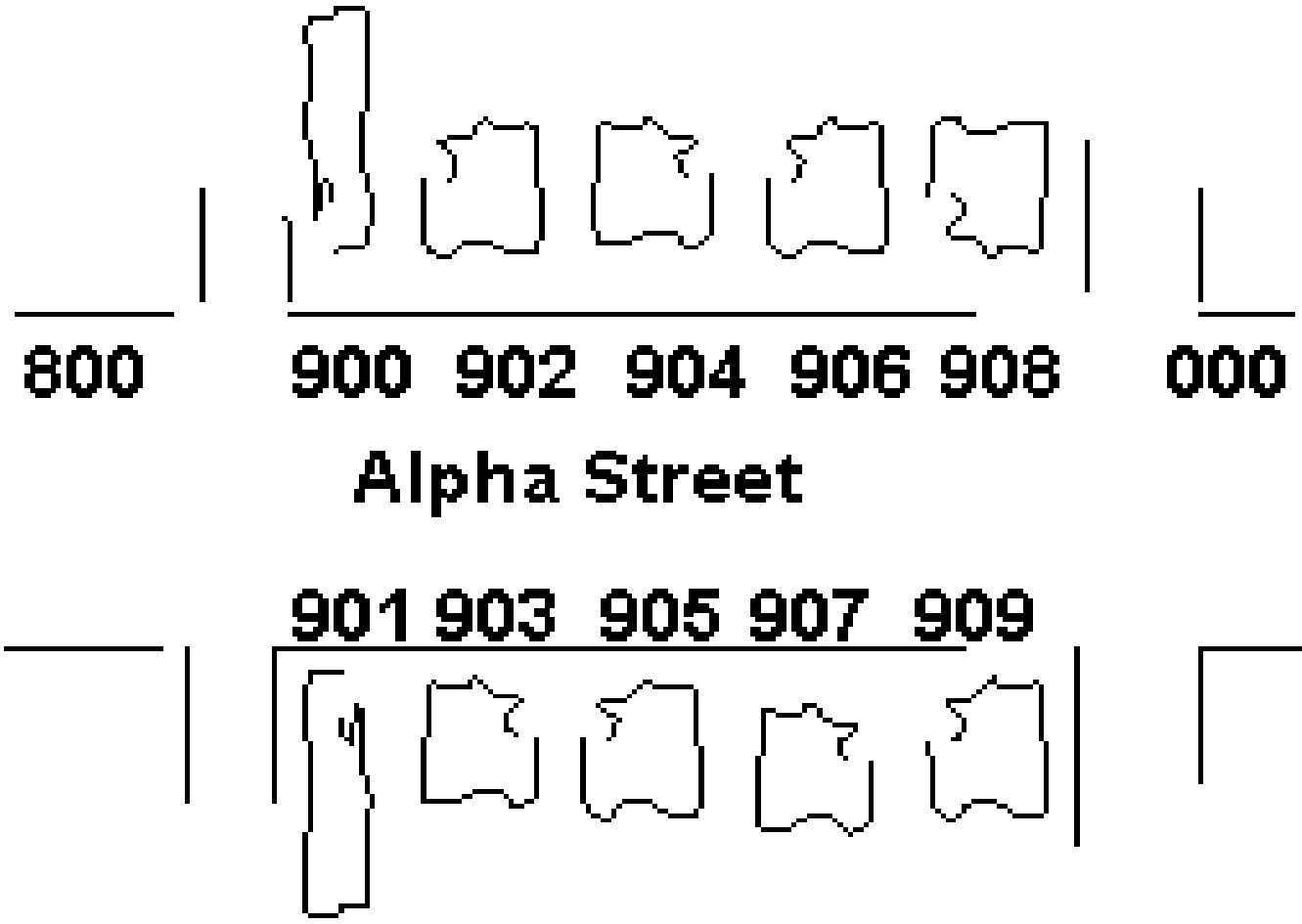
- **<u>Important note:</u>** The following is defined:

- · General Area Marking
- · Structure Orientation
- · Cordon Markings
- · Worksite Marking
- · Victim Marking
- · Rapid Clearance Marking (RCM)

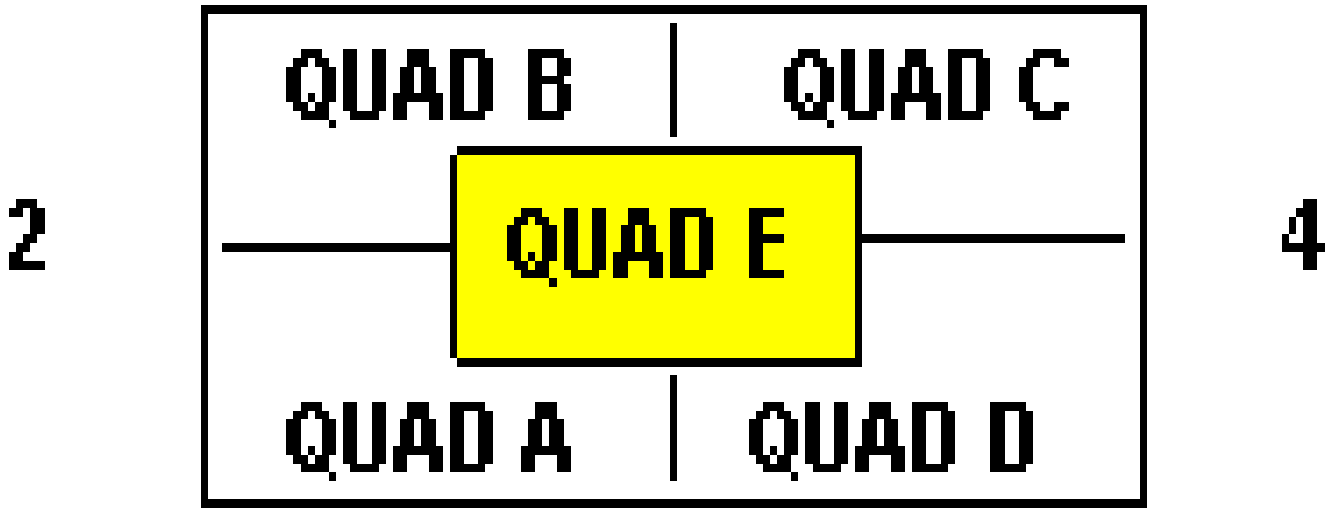
General Area Marking

- At times some general marking will be required to be applied to assist in navigation and coordination.
- This should be limited to essential information only and be as concise as possible.
-
- · General area marking can be applied
- using spray paint, builders crayon,
- stickers, waterproof card etc. as
- determined by the team.
- · The colour should be highly visible and
- contrasting to the background.
- · It may include:
- o Address or physical location
- o Landmark or code name (e.g.
- sugar factory building 1)
- o Assigned area or worksites are to
- be identified individually (see
- Worksite Marking
- · If no maps are available, sketch maps are
- to be produced and submitted to the
- OSOCC/LEMA.

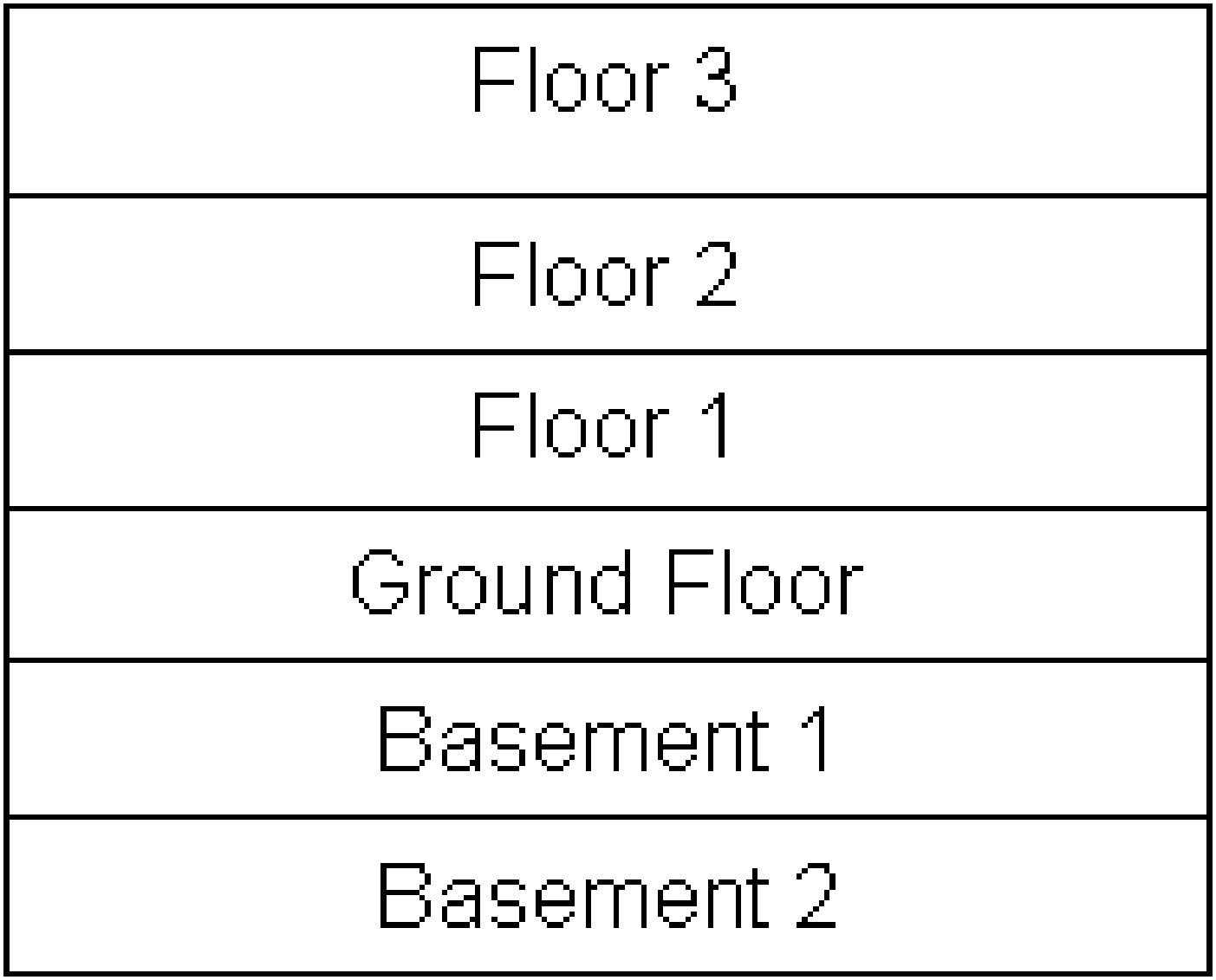
Street & Number Identification



REAR 3



FRONT 1

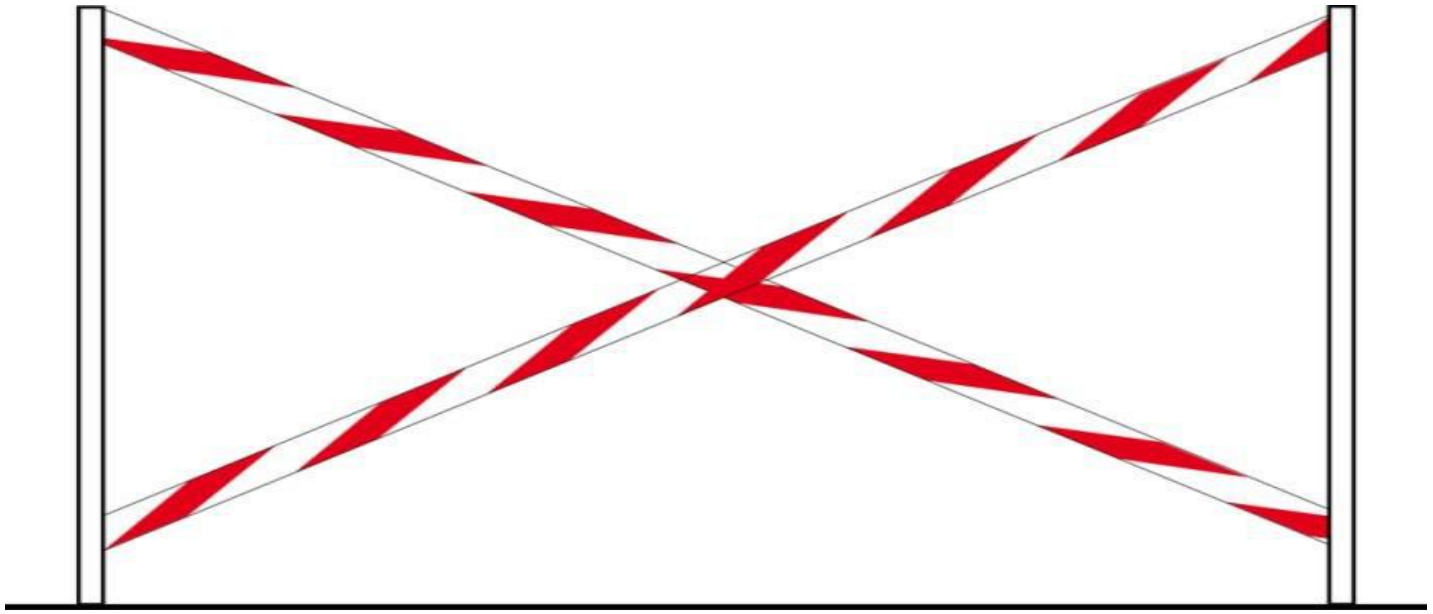

Floor 3
Floor 2
Floor 1
Ground Floor
Basement 1
Basement 2

Cordon Markings

Cordon markings are used to identify operational work zones as well as hazardous areas in order to restrict access and warn of dangers.

- **Operational Work Zone**

Hazard Zone



5.2 Worksite Marking

- Worksite marking is intended to uniquely identify specific and potential live rescue sites and is therefore
- an essential part of the coordination system. It displays critical information and is simple to understand
- and apply. It allows Worksites to be easily recognised and should be applied on collapsed structures assessed by USAR teams. The marking should be placed near the point of entry on the exterior of the collapsed structure that offers the best visibility. All assessment results are to be reported to the OSOCC immediately.
-
- Whilst key information is required teams can exercise discretion and adapt to environmental impacts
- within these boundaries whilst still maintaining a common, effective and consistent marking system. The
- system also compliments LEMA/National systems and can be adapted to work alongside these as
- required.

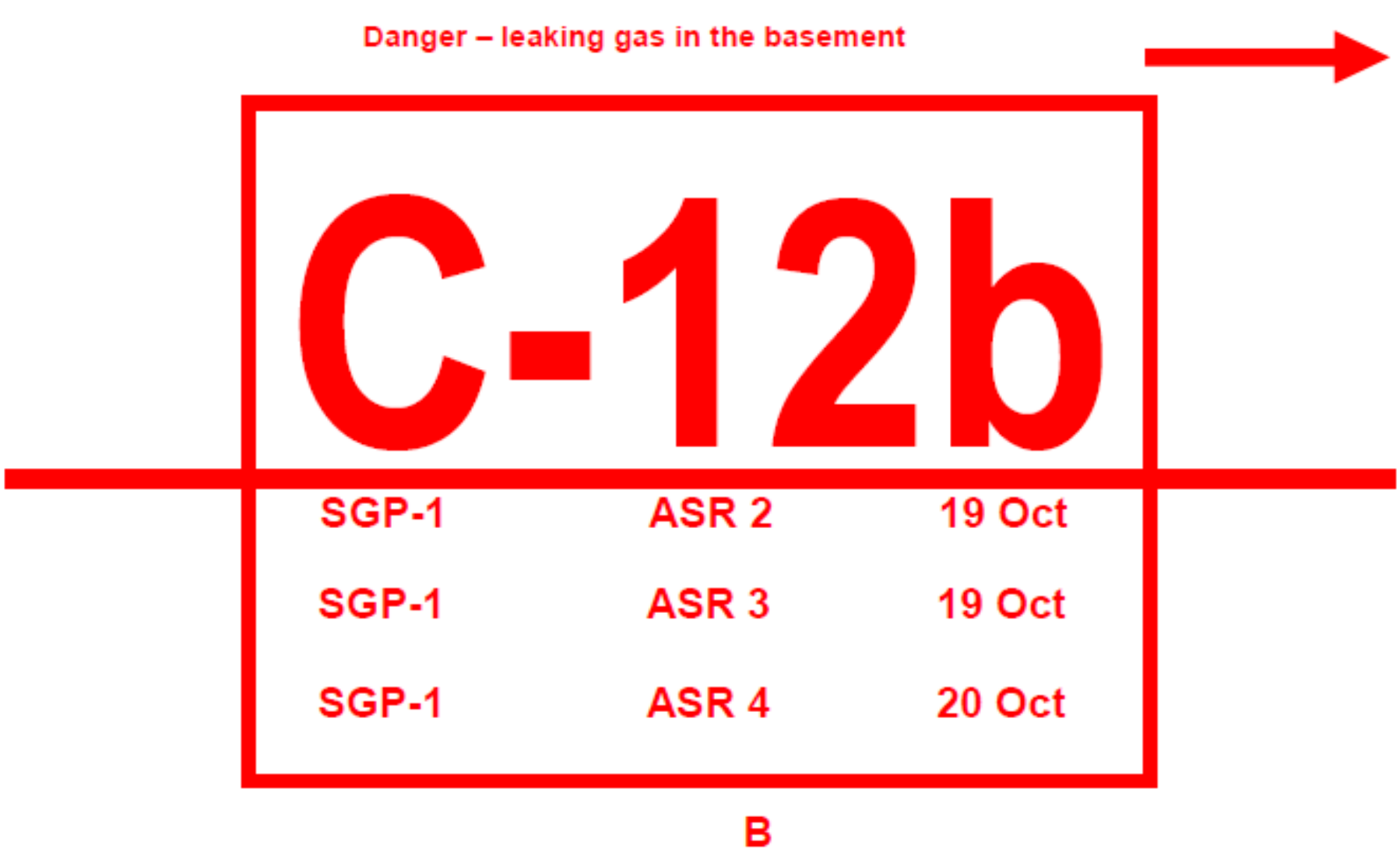

Hazard/s (if required)
ASBESTOS
Horizontal line placed at completion of all work, when it is determined no further work on site is required
Worksite ID
B-2b
FIN-1 ASR2 12Feb
RUS-1 ASR 3 12Feb
AUS-1 ASR 4 13Feb
- Team Id
- ASR level completed
- Date (Day/Month)
A
Triage Category

Marking Method

- Worksite marking should be applied during initial ASR Level 2 Sector Assessment after a site has been deemed to be a worksite. The marking should be applied to the front, (or as close as possible) or main entry to the worksite. The following method should be used when applying worksite marking:
- · Draw a 1.2 metre x 1.0 metre (approximately) box.
- · May draw a directional arrow to confirm exact location of worksite/worksite entry.
- · Inside box – displays:
  - o Worksite ID
  - o Team ID
  - o ASR Level completed. and
  - o Date
- · Outside of box – displays:
  - o Any hazard requiring identification e.g. Asbestos (top),
  - o Triage category (bottom)
- · Updated with Team ID, ASR Level completed and date as further levels of work (ASR) are completed.
- · Updated missing persons, victims rescued and deceased victims extricated as these occur.
- · Material used can be spray paint, builders crayon, stickers, waterproof card etc. as determined by the team.
- · The Worksite ID should be approximately 40cm high.
- · The Team ID, ASR Level and date should be smaller, e.g. approximately 10cm.
- · The colour should be highly visible and contrasting to the background.
- · After all work on the worksite has been completed and it is determined no further work is required a horizontal line is to be drawn through the centre of the entire worksite marking.
- If a team considers there is a need to leave critical additional information at the worksite this can be added to the worksite marking using plain language in full view when required. This and all other relevant details should be recorded on the Worksite Triage or Worksite Report forms and submitted through the information management process.

Progressive Examples

Above: Charlie Sector, Worksite 5, Australia 1 completed ASR 2 Sector Assessment on 19th October.
Asbestos was identified as a hazard. Triage category determined as —B



Above: Here the Singapore 1 team have completed work at the specific Worksite C-12b **within** Worksite C-12. An arrow has been added to the marking to make it clear that C-12b is to the right of the marking. A hazard warning about gas leaking into the basement has been added in plain language. Triage category determined as "B". Operations to ASR 2 and ASR 3 were completed on 19th October. Operations to ASR 4 Full SAR were completed on 20th October. No further operations are required on this worksite.

Here Finland 1 have completed an ASR 2 Sector Assessment at the specific Worksite B-2b **within** Worksite B-2 on the 12th February. An arrow has been added to the marking to make it clear that B-2b is to the left and below the marking. A hazard warning identifying asbestos has been added in plain language. Triage category determined as —E

- **Above:** Here Russia 1 were assigned to complete an ASR 3 on the B-2b Worksite following the Sector Assessment completed by Finland 1. Russia 1 completed ASR 3 Rapid SAR operations on 12th February.

- **Above:** Here Australia 1 were assigned to complete an ASR 4 on the B-2b Worksite following the ASR 3 Rapid SAR completed by Russia 1. Australia 1 completed ASR 4 Full SAR operations on 13th February.

- **Above:** Here Australia 1 having completed ASR 4 Full SAR on the worksite have determined no further work is required on this worksite. Marking has been updated with horizontal line through the centre.

5.3 Victim Marking

- Victim marking is used to identify potential or known casualty (Live or Dead) locations that are not
- obvious to rescuers e.g. below debris/entombed.
-
- **Method**
-
- The following method should be used when applying victim marking:
-
- · When teams (e.g. Search teams) are not remaining on site to immediately commence
- operations.
- · At incidents involving multiple casualties or where any confusion on exact location from search
- operations is possible.
- · Markings are done as close as physically possible to the actual surface point identified as the
- location of the casualty.
- · Material used can be spray paint, builders crayon, stickers, waterproof card etc. as determined
- by the team.
- · The size should approximately 50cm.
- · The colour should be highly visible and contrasting to the background.
- · Not intended for use when rescue operations are completed.
- · Not to be applied to the front of a structure with the Worksite ID unless that is where the casualties are located.

Progressive Examples

Description	Example
Large "V" applied to location of all potential victims – live or deceased.	V

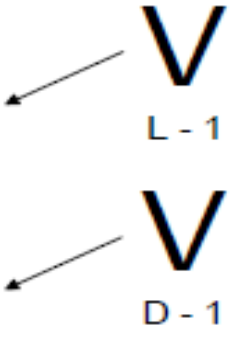
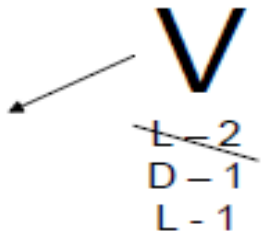
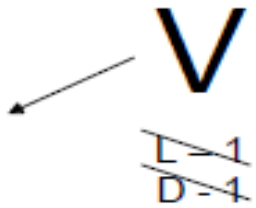
Optional arrow from "V" to clarify location if required.	
Under the "V" either: - An "L" indicating confirmed live victim, followed by a number (e.g. "2") indicating the number of live victims at that location – "L-2," "L-3" etc. and/or - A "D" indicating confirmed deceased victim, followed by a number (e.g. "3") indicating the number of deceased victims at that location – "D-3", "D-4" etc.	
On removal of any casualty the relevant marking is crossed out and updated (if required) below; e.g. "L-2" may be crossed out and an "L-1" applied indicating only one Live victim remaining.	
When all '"L" and/or "D" markings are crossed out, all **known** victims have been removed.	

Table 7: Progressive examples of victim marking.

5.4 Rapid Clearance Marking System

- The Worksite ID system is only used at potential live rescue sites, with other sites, where no rescues
- are possible, or required normally remaining unmarked. This allows teams to move faster, maximise life-saving opportunities and simplifies coordination. However there are situations where it is beneficial to have a marking that can be left at sites where teams have established there are no live victims or ‘deceased‘ only. Leaving a recognised _**clear’** marking will prevent duplication and have other advantages. When it is decided this level of coordination and marking is necessary the Rapid Clearance Marking (RCM) system can be used. The decision to use the system can be at the discretion of the
- USAR Team or be a requirement set by LEMA/OSOCC/UCC.
-

Method

The process for applying RCM is as follows:

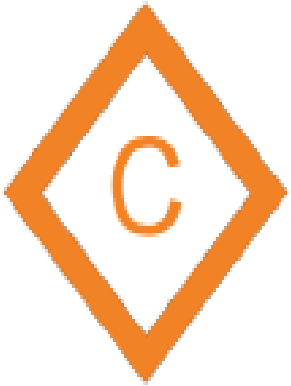
· A decision has to be made, by the team or by the LEMA/OSOCC to implement this level of marking.
· RCM can only be used when sites can be fully searched quickly or there is strong evidence confirming no live rescues are possible.
· Two RCM marking options are available, they are: Clear and Deceased Only.

	**Clear:** Equivalent to ASR Level 5 search completion – indicating that the area/structure is clear of all Live and Deceased casualties.
	**Deceased Only:** Indicates same level of comprehensive search has been completed but only **Deceased Casualties** remain in-situ. **Note:** When deceased are removed, apply "clear" RCM adjacent to original mark.

- · Can be applied to structures that are able to be searched rapidly or where information confirms there are no live victims or only deceased remain.
- ♦ Can be applied to non-structural areas – cars/objects/outbuildings/debris piles etc. – that have been searched to standards indicated above.
- ♦ Applied in the most visible/logical position on the object/area to provide the greatest visual impact.

- ♦ Diamond shape with a large —C inside for Clear, or with a large —D inside for Deceased Only. Immediately below, the following is applied:
- o Team ID: _ _ _-_ _ e.g. AUS-1
- o Date of Search: _ _/ _ _ _ e.g. 19/Oct
- o Material to be used can be spray paint, builders crayon, stickers, waterproof card etc. at the discretion of the teams
- o Size: Approximately 20cm x 20cm
- o Colour: Bright, contrasting colour to background

Progressive Examples

Examples	
Rapid clearance marking indicating Level 5 ASR complete on object/area applied. Applied by Australian Taskforce 1 on 7 July.	 AUS – 1 07Jul

Rapid clearance marking applied to car – indicating Level 5 ASR search complete on car only.

Completed by Australia Taskforce 1 on 19th October.

Rapid clearance marking applied to area indicating Level 5 ASR completed of area inside defined marked limits – paint or otherwise define edges. Completed by Australia Taskforce 1 on 19th October. **Note:** This pile has been turned over by machinery to confirm ASR Level 5 standard.	
Rapid clearance marking indicating comprehensive search complete on object/area applied, only deceased casualties remain in-situ. Victim Marking would be applied as required. Applied by Australian Taskforce 1 on 7 July.	 AUS – 1 07Jul

Rapid clearance marking applied to car – indicating comprehensive search complete on car, only deceased casualties remain in-situ. Victim Marking would be applied as required. Completed by Australia Taskforce 1 on 19th October.	
Rapid clearance marking applied to area indicating comprehensive search completed of area inside defined marked limits – paint or otherwise define edges. Deceased casualties only remain in-situ. Completed by Australia Taskforce 1 on 19th October. **Note:** This pile has been turned over by machinery to complete comprehensive search.	

5.5 INSARAG Signaling

- All USAR team members should be briefed regarding emergency signals.
- Emergency signals should be universal for all USAR teams.
- When multiple teams are operating on a single worksite, this common understanding should be reinforced to all personnel involved.
- Signals must be clear and concise.
- Team members are required to immediately respond to all emergency signals.
- Air horns or other appropriate hailing devices should be used to sound the appropriate signals as follows and located to allow immediate use:

Evacuate

(3 short signals, 1 second each – repeatedly until site is cleared)

Cease Operations – Quiet

(1 long signal, 3 seconds long)

Resume Operations

(1 long signal + 1 short signal)

6. Hazardous Materials Operations

- **6.1 Introduction**
-
- International USAR teams locate, extricate, and provide emergency medical treatment to victims
- entrapped as a consequence of structural collapse. Operations involving collapsed buildings normally include some form of hazmat component – examples include, broken heating oil pipes, domestic or industrial refrigerants, broken sewerage pipes, body fluids, etc. USAR teams should have the capability to deal with these issues as a normal part of search and rescue operations.
-
- In some instances structural collapse may involve the significant release of substances that have the potential to injure and/or cause death as well as resulting in significant environmental damage. These substances can include nuclear, biological, or industrial chemical contaminants. Hazmat incidents may also occur in conjunction with an explosive or incendiary device.
-
- Medium and Heavy USAR teams are required to have a basic capability to detect and isolate hazardous materials and report the situation to the OSOCC. Teams locating a hazmat source must cordon off the area and mark accordingly to alert other rescuers of the danger. If there is a suspicion that contamination exists, treat the site as contaminated, until proven otherwise.

- **6.2 Strategic Considerations**
-
- Medium and Heavy international USAR teams need to possess the inherent knowledge to recognize a hazardous environment, thus minimizing the risk of harm, injury or death to its members, the affected population and the environment. It is also expected that teams will be able to communicate its findings regarding contamination to others. As indicated, an international USAR team should:
-
- · Have the ability to recognize situations where contaminant(s) may be suspected.
- · Possess the technical expertise to offer sound advice to the LEMA, OSOCC and other actors.
- · Possess the capability to provide basic protection for team members by performing environmental detection and monitoring.
- · Implement basic decontamination procedures.
-
- · Be aware of the team's limitations in dealing with complex hazmat operations

- **6.3 Operational Considerations**
-
- If a determination is made that a site is contaminated or if a site is suspected to be contaminated, NO USAR operations should be conducted until an appropriate assessment has been undertaken. If it is within the capability of the team, the source of the contamination should be isolated. If it is beyond the capability of the team to isolate the source of contamination, the area should be cordoned off, marked
- accordingly, with the OSOCC being notified immediately.
-
- For operational considerations at worksite see Volume III, Operational Field Guide.

- **Annex A: Ethical Considerations for USAR Teams**
-
- 1. The conduct of deployed USAR team members is a primary concern to INSARAG, the assisting and affected countries, and the local officials of the affected country.
- 2. USAR teams should always aim to be perceived as representatives of a well organised, highly trained group of specialists who have been assembled to help communities in need of their specialist assistance. At the conclusion of a mission, USAR teams should have ensured their performance has been positive, and they will be remembered for the outstanding way they conducted themselves in the work environment and socially.
- 3. Ethics considerations include human rights, legal, moral and cultural issues and concern the relationship between USAR team members and the community of the affected country.
- 4. All members of an INSARAG USAR team are ambassadors of their team, their country and represent the wider INSARAG community. Any violation of principles or behaviour unbecoming by team members will be viewed as unprofessional. Any inappropriate behaviour may discredit the good work of the USAR team and will reflect poorly on the entire team's performance, their home country as well as the wider INSARAG community.

- 5. At no time during a mission should USAR team members take advantage of or exploit any situation or opportunity, and it is the responsibility of all team members to conduct themselves in a professional manner at all times.

- 6. USAR teams that deploy international must be self-sufficient so as to ensure they are at no time a burden to the already overwhelmed country they are trying to assist.
-
- INSARAG operates in accordance with the Humanitarian Principles, which form the core of humanitarian action. See https://ochanet.unocha.org/p/Documents/OOM_HumPrinciple_English.pdf for more details.

Sensitive Issues to Consider

- 1. The value that the local community attaches to life
- 2. Cultural awareness including race, religion and nationality
- 3. Wearing of sunglasses during conversations may be deemed to be inappropriate
- 4. Communication barriers due to language differences
- 5. Differences in work ethics and values
- 6. Different local apparel
- 7. Local customs with regard to food and manners
- 8. Local law enforcement practices
- 9. Local policy on weapons
- 10. Local living conditions, local driving habits and customs
- 11. Local policy on the use of different medications
- 12. Use of alcohol and illegal drugs
- 13. Handling of sensitive information
- 14. Use of search dogs
- 15. Care and handling of patients and/or the deceased
- 16. Dress code or standards
- 17. Gender restrictions
- 18. Recreational restrictions
- 19. Local communication restrictions and accepted use
- 20. Taking of and showing pictures of victims or structures

- 21. Collecting of souvenirs (building parts etc.)
- 22. Defacing property such as occurs with the use of the structural marking system
- 23. Access into restricted areas (Military, religious, etc.)
- 24. Moral standards
- 25. Consideration for other teams‘ capabilities and operating practices
- 26. Use of gratuities to promote cooperation
- 27. Political issues
- 28. Any actions or behaviour that may aggravate stressful situations
- 29. Smoking indiscriminately

Annex B: Media Management Guide

- **Interviewing "Do's"**
- · Ask the reporter's name. Then use it in your response
- · Use your full name. Nicknames are not appropriate
- · Choose the site (if possible). Make sure you are comfortable with the location of the interview.
- Consider what is in the background
- Choose the time (if possible). If you would be more comfortable waiting another five minutes, ask the reporter if it's okay. However, you should bear in mind that the reporter has a deadline for the report
- · Be calm. Your demeanour and apparent control of the situation are very important in
- establishing the tempo of evolving events
- · Tell the truth
- · Be cooperative. You have accountability to explain to the public. There is an answer to most questions, and if you don't know it now, let them know you will work diligently to determine the facts needed
- · Be professional. Don't let your personal feelings about the media, or this reporter in

- · Be professional. Don‘t let your personal feelings about the media, or this reporter in general, affect your response
- · Be patient. Expect dumb questions. Do not get angry to those ill-natured or ill-tempered questions. If the same question is asked again, repeat your answer without irritation
- · Take your time. If you make a mistake during a taped or non-broadcast interview, indicate that
- you would like to start over with your response. If appearing live, just start over again
- · Use wrap-around sentences. This means repeating the question with your answer for a
- complete _sound bite‘

Interviewing “Don’ts”

- · Do not discriminate against any type of press or any specific press agency. You should be open
- to all media such as TV or radio, nationwide or local paper and foreign or national press
- · Do not reply with _no comment‘
- · Do not give your personal opinion. Stick to the facts
- · Do not go off the record. Anything you say can and will be used against you
- · Do not lie. To tell a lie unintentionally is a mistake. To intentionally tell a lie is stupid
- · Do not bluff. The truth will come out
- · Do not be defensive. The media and their audience recognise a defensive attitude and tend to
- believe you are hiding something
- · Do not be afraid. Fear is debilitating and is not a characteristic you want to portray
- · Do not be evasive. Be upfront on what you know about the situation and what you plan to do to
- mitigate the disaster

- · Do not use jargon. The public is not familiar with much of the language used in this field
- · Do not confront. This is not the time to tell a reporter how much you dislike the media
- · Do not try to talk and command a disaster at the same time. You won‘t do either well
- · Do not wear sunglasses
- · Do not smoke
- · Do not promise results or speculate
- · Do not respond to rumours
- · Do not repeat leading questions
- · Do not run down the efforts of the affected country or any other organisation
-
- · Do not compare the response to one disaster with that of another

Annex E: Tools and Guidance Notes

USAR Team Fact Sheet Form

USAR TEAM FACT SHEET

Team details to be uploaded in the VO before departure and given to RDC/UC on arrival.

INSARAG
Preparedness – Response

TEAM INFORMATION

A.0 Team-ID

A.1 Team name _____ A.2 Home country _____

A.3 Number of persons _____ A.4 Number of dogs _____

A.5	Team type **responding**	Light		Medium		Heavy		Other _____
A.6	INSARAG Classification	None		Medium		Heavy	

Responding elements:

A.7	Technical Search	yes		no	
A.8	Canine search	yes		no	
A.9	Rescue	yes		no	
A.10	Medical	yes		no	
A.11	Hazmat detection	yes		no	
A.12	Structural engineers	yes		no	Number
A.13	RDC/OSOCC support	yes		no	
A.14	UC support	yes		no	

A.15 Other capabilities _____

A.16 Self-sufficiency (number of days) Water _____ days A.17 Food _____ days

A.18 Expected arrival date [DD-MMM] DD MMM

A.19 Expected arrival time [hh:mm] hh mm

A.19 Expected arrival time [hh:mm] hh mm

A.20 Point of arrival _____ A.21 Aircraft type _____

SUPPORT REQUIREMENTS

Transport for

B.1 Persons (number) _____ B.2 Dogs (number) _____

B.3 Equipment (ton) _____ B.4 Equipment (cubic metres) _____

Supplies

B.5 Gasoline (litres per day) _____ B.7 Cutting Gas (cylinders) *Type* | Oxygen | Propane | Acetylene

B.6 Diesel (litres per day) _____ *Number* | | | |

B.8 Medical Oxygen (cylinders) *No.* _____ *Size* | | | |

Size _____ B.9 BoO Space Requirement (m²) _____

B.10 Any other logistical needs _____

CONTACTS

C.1	Contact 1 Name	C.5	Contact 2 Name
C.2	Mobile phone	C.6	Mobile phone
C.3	Sat phone	C.7	Sat phone
C.4	E-Mail	C.8	E-Mail

C.9 Base of Operations Address (if known)

C.10 Radio Frequency (BoO) | | | | . | | | | MHz

C.11 BoO GPS coordinates (if known)

(GPS coordinates normally in Datum WGS84)

C.11	GPS Coordinates *decimal format*	±dd.dddd °	±ddd.dddd °
C.11	GPS Coordinates *other formats*		

Form completed by: Name _____

Date DD MMM Title/Position

- **USAR TEAM FACT SHEET**
-
- **Form guidance notes**
- **A.TEAM INFORMATION**
- Three letter Olympic Country code, these are listed on the separate worksheet; followed by-
- The national team number; 1,2, 3 for classified teams, 10, 11, 12 etc for unclassified teams.**A.0**
- **A.1**Team name as known internationally or domestically
- **A.2**Team's country of origin
- **A.3**Total number of persons deployed
- **A.4**Total of number of dogs deployed
- **A.5**Type of team responding according to INSARAG guidelines
- **A.6**The official INSARAG External classification (IEC) level of the team, medium or heavy (if

- held)
- **A.7**Has the responding team deployed with technical search capability?
- **A.8**Has the responding team deployed with canine search capability?
- **A.9**Has the responding team deployed with rescue capability?
- **A.10**Has the responding team deployed with medical capability?
- **A.11**Has the responding team deployed with hazmat detection capability?
- **A.12**Has the responding team deployed with structural engineers? Give the number of engineers
- **A.13**Has the responding team got the capacity for establishing a provisional OSOCC/ RDC?
- **A.14**Has the responding team got the capacity for supporting a UC?
- **A.15**Detail any other capabilities e.g. own tranpsortation, water rescue capability with boats etc.
- **A.16**Number of days with self-sufficiency of water supply.
- **A.17**Number of days with self-sufficiency of food supply.
- **A.18**Estimated arrival date to affected region - day as a number, month as 3 letters e.g. 13 APR
- **A.19**Estimated arrival time to affected region - 24hr clock using local time
- **A.20**Point of arrival to affected region (airport, city, port, etc)
- **A.21**Type of aircraft (model, size)
- **B.SUPPORT REQUIREMENTS**
- **B.1**Total number of people to be transported
- **B.2**Total number of dogs to be transported
- **B.3**Total weight of equipment expressed in ton to be trasnsported
- **B.4**Total volume of equipment expressed in cubic metres to be transported
- **B.5**Gasoline requirement expressed in litres to be supplied daily expressed in litres
- **B.6**Diesel fuel requirement expressed in litres to be supplied daily expressed in litres
- **B.7**Cutting gas cylinders to be filled daily
- **B.8**Medical oxygen cylinders to be filled daily
- **B.9**Space requirement expressed in square meters for the location of the Base of Operations
- **B.10**Other logistical requirements

- **C.CONTACT DETAILS**
- **C.1**Name or title of Contact 1
- **C.2**Mobile phone number of Contact 1
- **C.3**Satellite phone number of Contact 1
- **C.4**E-Mail address of Contact 1
- **C.5**Name or title of Contact 2
- **C.6**Mobile phone number of Contact 2
- **C.7**Satelite phone number of Contact 2
- **C.8**E-Mail address of Contact 2
- **C.9**Location or address of Base of operations - if known
- **C.10**Radio Frequency (BoO) in MHZ
- **C.11**GPS coordinates of the Worksite, taken at the Worksite marking:
- Standard GPS format is: Map datum WGS84
- If possible use decimal coordinates e.g. Lat ±dd.dddd° Long ±ddd.dddd°
-
- If another format is used then use the lower boxes and state the format used.

Worksite Triage Form

Used during assessment to identify worksites with rescue opportunities

INSARAG
Preparedness – Response

E1. Worksite ID			E2. GPS Coordinates ***Decimal format***	±dd.dddd °	±ddd.dddd °
or			E2. GPS Coordinates ***other format***		

E3. Address	
E4. Worksite boundary description:	

F1. Team ID	AAA	00	F2. Date	DD	MMM	F3. Time	hh	mm

F4. Building Use	
F5. Construction type	

F6. Floor area	m x m	F7. No. of floors		F8. No. of basements	

F9. Total number of missing/unknown persons at the Worksite	
F10. Of the total number, how many are confirmed live?	
F11. Triage category: Input letter using matrix: →	
F12. Degree of Damage (%)	
F13. Type of collapse:	
F14. Any unusual hazards at the Worksite?	

→ ↘ F11

	Level 3 Rapid SAR needed	Level 4 Full SAR needed
Confirmed live victims	A	B
Unknown victims and big voids	C	E
Unknown victims and small voids	D	F

F15. Assess the main USAR operations likely to be needed at this Worksite:

Indicate main work needed:		Give an estimate of the time, personnel and equipment needed:
A: Dog/technical search	×	Details:
B: Shoring and propping	×	
C: Breaking, Breeching	×	
D: Lifting and moving	×	
E: Rope/height working	×	
F: Medical Needs	×	

F16. Local Safety/Security situation:	
F17. Other Information:	

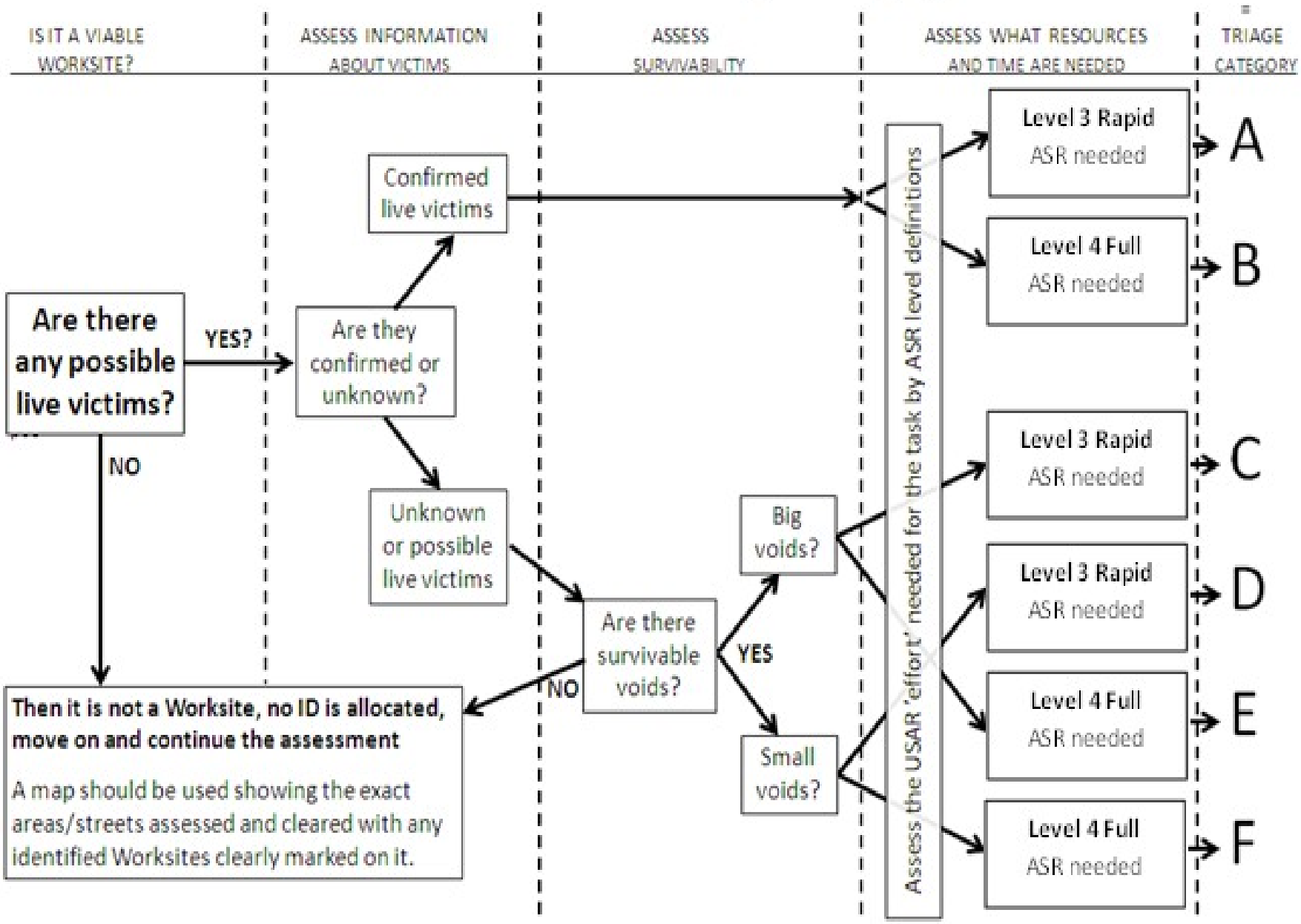
Completed by: Name		Title/position	

Worksite Triage Form

Guidance Notes

E1	Worksite ID: part 1 is the allocated Sector letter, part 2 is the number allocated to the Worksite e.g C-6 If no sector letter is allocated yet then just apply a number. The sector letter has to be inserted when possible.
E2	GPS coordinates of the Worksite, taken at the Worksite marking:
	Standard GPS format is: Map datum WGS84 or other if indicated by LEMA
	If possible use decimal coordinates e.g. Lat ±dd.dddd° Long ±ddd.dddd°
	If another format is used then use the lower boxes and state clearly on the form the format used.
E3	Street address or local name of the Worksite
E4	Additional Worksite boundary description if it is not clear what the Worksite ID includes. E.g a hospital may be a Worksite but include several associated buildings, this should be explained here, possibly with a sketch plan on the rear of the form to make it clear.
F1	Team ID of the team carrying out the assessment: 3 letter Olympic country code followed by national team number
F2	Date when the triage assessment was completed; the date written as a number, the month given by 3 letters e.g. 13 APR
F3	Time when the triage assessment was completed; 24hr clock using local time
F4	Describe the main use of the building e.g. hospital, factory, office, temple, dwelling, school, apartments with car park in the basement etc.
F5	Describe the main construction type e.g. reinforced concrete, steel frame, brick, masonry, timber frame
F6	Give the dimensions of the 'footprint' of the building/debris pile in metres x metres e.g 25m x 40m
F7	Give the number of floors above ground
F8	Give the number of basements (if applicable)
F9	Give the estimated **total** number of persons trapped, missing or unkown at the Worksite
F10	Of the total number, how many confirmed **live** contacts are there?
F11	Determine the Triage letter; using the triage matrix opposite and the separate full triage tree
Definitions of voids	A ***big void*** is big enough for a person to crawl. The chances of survival for a victim are greater in big voids than small voids. "Big" is a relative term, i.e., a big void for a child will be considerably smaller than a big void for an adult.
	A ***small void*** is where a person can hardly move and has to lie more or less still while waiting for help. In small voids the chances of injury are higher as people trapped inside have less space to avoid falling objects and collapsing structural elements.
F12	Estimate the degree of damage as a percentage e.g. 50%, 75%,
F13	Briefly describe the type or types of collapse/damage e.g. pancake, lean to, total, upright but with dangerous cracks etc.
F14	Provide brief details of any unusual hazards that might affect USAR operations at the Worksite
F15	Give a brief assessment of the USAR operations that are needed:-
	Mark the tick boxes to show the types of USAR work likely to be required and;
	Use the text box to give an initial estimate of the **personnel, equipment** and **time** likely to be needed to carry out the operations.
F16	Briefly describe the **local** safety and security situation at the Worksite
F17	Other Information e.g. Any photographs attached, local contacts details, number of known dead bodies at the site etc.

Sector Assessment Worksite Triage Category Flowchart



Worksite Report form

Report of activity at a Worksite for a specific work period (or to handover the Worksite)

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E1. Worksite ID			E2. GPS Coordinates ***Decimal format***	±dd.dddd °	±ddd.dddd °
		or	E2. GPS Coordinates ***Other format***		
E3. Address					
E4. Worksite Boundary description:					

Worksite Situation Report

Operational reporting period:	G1. Start date	dd	mmm	G2. Start time	hh	mm	
Assigned team(s)	G3. Team ID	AAA	00	G4. 2nd Team ID	AAA	00	
G5. ASR Level being carried out		G6. Completed / In progress?					
G7. Number of live rescues completed in this reporting period							
G8. Number of dead persons recovered in this reporting period							
G9. Other operational activities at the Worksite:							
G10. Resources able to be released from site							
G11. Local safety and security situation:							
G12. Operationally relevant Worksite contacts:							
Operational reporting period:	G13. End date	dd	mmm	G14. End time	hh	mm	
G15. Report number		G16. Assignment complete (yes or no):					

Worksite Planning Information

G17. Number of persons still missing at the worksite	
G18. Number of live contacts / rescues still in progress	
G19. Outline Plan of Action for next operational period:	
G20. Logistical needs and other Information:	

Estimated completion of assignment:	G21. Date	dd	mmm	G22. Time	hh	mm

G23. Completed Victim Extrication forms:- Ref No.s					

Form completed by:	Name:		Title/position:	

Worksite Report form

Guidance Notes

E1	Worksite ID: Part 1 is the allocated Sector letter, Part 2 is the number allocated to the Worksite e.g C-6. If no sector letter is allocated yet then just apply a number.
E2	GPS coordinates of the Worksite, taken at the Worksite marking: Standard GPS format is: Map datum WGS84 If possible use decimal coordinates e.g. Lat ±dd.dddd° Long ±ddd.dddd° If another format is used then use the lower boxes and state clearly on the form the format used.
E3	Street address or local name of the Worksite
E4	Additional Worksite boundary description if it is not clear what the Worksite ID includes. E.g a hospital may be a Worksite but include several associated buildings, this should be explained here, possibly with a sketch plan on the rear of the form to make it clear.
G1	Start date of the current operational reporting period; Day shown as a number, month shown by three letters e.g 12 NOV
G2	Start time of the current operational reporting period; 24hr clock local time
G3	Team ID of the team assigned to carry out USAR operations at the Worksite: 3 letter Olympic country code followed by national team number
G4	Team ID of a second team if two teams are assigned to the same Worksite: 3 letter Olympic country code followed by national team number
G5	State the Assessment, Search and Rescue (ASR) level; insert 3, 4 or 5 in the box
G6	State whether the ASR level work is completed or still in progress, circle it.
G7	Enter the number of live rescues **completed** in the reporting period, there should be a completed Victim Extrication Form for each victim.
G8	Enter the number of dead persons recovered in the reporting period, there should be a completed Victim Extrication Form for each victim.
G9	List other relevant operational activities taking place at the Worksite e.g. Extensive shoring operations, local crane operators assisting with heavy lifting operations.
G10	List any resources that could be released from the Worksite e.g. cranes no longer needed.
G11	Briefly describe the **local** safety and security situation at the Worksite
G12	List any relevant local contacts at the Worksite e.g. building owner, local rescue team leader, local crane operators.
G13	End date of the current operational reporting period; Day shown as a number, month shown by three letters e.g 12 NOV
G14	End time of the current operational reporting period; 24hr clock local time
G15	If lengthy operations at a Worksite generate multiple Reports then each F3 for the same Worksite should numbered sequentially.
G16	Mark here if the assignment at this Worksite is complete or not (Y or N)
G17	To help with planning; show the number of persons still thought to be missing at the Worksite
G18	How many live, positive contacts or rescues are still known at the worksite?
G19	Give an outline of the intended Plan of Action at the Worksite for the next operational period
G20	List any logistical needs the teams has for it's ongoing operations at the Worksite plus any other relevant information e.g. Any photographs attached, number of known dead bodies at the site etc.
G21	Give an estimated date of when the Worksite assignment might be completed
G22	Give an estimated time of when the Worksite assignment might be completed
G23	List the reference numbers of any Victim Extrication forms completed during the reporting period. This is the Worksite ID and the victim number combined

Victim Extrication Form

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Form used to collect basic information of all victims extricated to be handed to the UC or LEMA as instructed.

E1. Worksite ID		V1. Victim Number	

The Worksite ID combined with the Victim Number gives a unique reference used to record and track victims.

E2. GPS coordinates of victim location	E2. GPS Coordinates *Decimal format*	
or	E2. GPS Coordinates *Other format*	
E3. Street address		
G3. Team ID		
V2. Date of extrication		
V3. Time of extrication		

V4. Other victim information; **only** if requested by LEMA/UC e.g. name, nationality, gender, age etc.

Location of the victim:

V5. Floor Level		V6. Position in structure	

V5. Floor Level		V6. Position in structure	

V7. Level of work needed to extricate victim (mark with an x):

Assist only		Light debris removal		ASR3		ASR4		ASR5	

V8. Total time taken for extrication		hrs		mins

V9. Condition of the victim	Live		Deceased	

V10. Injuries of the victim	None		Stable		Critical	

V11. Victim handed over to:

Locals/family		Ambulance		Medical team		Field hospital	
Helicopter		Hospital		Mortuary		Other	

V12. Name and contact details of who victim was handed over to:

V13. Other information (e.g. other teams involved in the extrication)

Form completed by	Name:		Title/position:	

Victim Extrication Form

Guidance Notes

E1	Worksite ID: Part 1 is the allocated Sector letter, Part 2 is the number allocated to the Worksite e.g. C-6 If no sector letter is allocated yet then just apply a number.
V1	Victim Number: A number should be allocated for each victim that is extricated from a Worksite, simply use 1 for the first victim, 2 for the second and so on. The Worksite ID combined with the victim number provide a unique identifier for each victim so records and victim tracking is possible.
E2	GPS coordinates of the victim's specific location: Standard GPS format is: Map datum WGS84 If possible use decimal coordinates e.g. Lat ±dd.dddd° Long ±ddd.dddd° If another format is used then use the lower boxes and state clearly on the form the format used.
E3	Street address or local name of the Worksite
G3	Team ID of the team assigned to carry out USAR operations at the Worksite: 3 letter Olympic country code followed by national team number
V2	Date of extrication: the day should be shown as a number, the month as a 3 letter code e.g. JAN, FEB, MAR
V3	Time of extrication: 24hr format, local time
V4	Location of victim, Floor level: State or estimate the floor level the victim was extricated from
V5	Location of victim, Position in structure: indicate whereabouts in the structure the victim was extricated from e.g. kitchen, South east corner.
V6	Level of work needed by the USAR team to extricate victim, preferably referring to ASR levels
V7	Total time taken for extrication: Hours and minutes
V8	Condition of the victim: mark the relevant box for Live or Dead
V9	Injuries to the victim: mark the relevant box
V10	Victim handed over to: mark the box relating to the person/group the victim is handed to
V11	Contact details of who the victim was handed over to as detailed in previous field
V12	**Victims personal information only to be collected if instructed by the UC or LEMA due to patient confidentiality restrictions applicable in affected country or region.** Name of victim: If known or indicated by identification information Nationality of victim: If known or indicated by identification information Age of victim: estimate if necessary Gender of victim, male or female
V13	Other information: This box can be used to add any other details e.g. other teams involved in the extrication

other forms are:

Incident/Sector Situation Report

Demobilization form