Government of Saint Lucia

Urban Search and Rescue Plan
Document of the Saint Lucia National Emergency Management Plan

Adapted from the CDERA Land Search and Rescue Model Plan of October 2003

Cabinet Conclusion 1151/2009 (24 September, 2009), authorised the National Emergency Management Plan (NEMP) for Saint Lucia
Preamble

The CDERA Urban Search and Rescue Model Plan, on which the Saint Lucia Plan was based, was developed as a component of the project ‘Technical Assistance for Search and Rescue Capacity Building in CDERA Participating States’ funded by the United States Southern Command (US SOUTHCOM) with assistance from the United States Agency for International Development’s Office for Foreign Disaster Assistance (USAID/OFDA).

The Model Urban Search and Rescue (USAR) Plan is one element in a comprehensive Search and Rescue Programme being developed by CDERA. The process is being informed by collaboration and consultation with experts in the field. Initial funding support has been secured from SOUTHCOM/USAID/OFDA to address the development of a model SAR (Land) plan whilst funding through the Japan International Co-operation Agency (JICA) will address some equipment needs. With this support, the Region will shortly be better positioned to prepare for SAR activities through training, skill enhancement and establishment of a response capability.

The Model plan was prepared by the CDERA Co-ordinating Unit with input from the CDERA Search and Rescue Advisory Group (CDERA/SARAG). It is intended to serve as a model for adaptation in CDERA Participating States and has been designed to facilitate the process.

Acknowledgements

The CDERA Co-ordinating Unit has expressed its thanks and appreciation to the many persons and agencies which contributed to that process, in particular:

- US SOUTHCOM and USAID/OFDA for their funding support
- Disaster Management and other Specialised Agencies from different regions around the world who provided copies of their respective Search and Rescue (SAR) plans
  - National Search and Rescue Plan – Montserrat
  - Draft Search and Rescue Operational Procedures – Antigua and Barbuda
  - International Search and Rescue Advisory Group Guidelines
  - Japanese Basic Disaster Management Plan
  - United Kingdom Fire Service Search and Rescue Team Training Manual
  - West Sussex Fire Brigade Search and Rescue Team Training Notes
- St. Croix Rescue Academy
- Members of the CDERA/SARAG
- The CDERA/SARAG
  - Pan American Health Organisation
  - Caribbean Association of Chief, Deputy and Assistant Chief Fire Officers
  - Regional Security System
  - Lt. Horatio Tuitt, National Disaster Co-ordinator, Montserrat
- Central Emergency Relief Organisation, Barbados
Adapted Plan for Saint Lucia

The National Urban Search and Rescue Plan for Saint Lucia was adapted from the CDERA Model Plan described above. It is an adaptation of the Model Plan; this means that the Model Plan was not changed in its conceptual structure, it was only adapted to the conditions of Saint Lucia; doing it otherwise would have meant to design a totally different plan from the Model one, which has not been the intention... However, the National Emergency Management Organisation of Saint Lucia and the Saint Lucia Fire Service still may make changes as part of the current emergency planning process in Saint Lucia and according to changes in Search and Rescue organisations and resources in the country. The NEMO and the Fire Service may still make changes to this plan and decide its implementation under the light of the current Urban Search and Rescue Operations Orders used in Saint Lucia. Particularly, numbers of injured that determine the level of response should be carefully revised and updated.

The plan was adapted within the World Bank/OECS Emergency Recovery and Disaster Management Project by Arturo López-Portillo, Emergency Planning and Mitigation Advisor to the National Emergency Management Office of Saint Lucia.
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PART 1

1.0 INTRODUCTION

The USAR Plan is structured in three parts:

Part 1 generally covers the purpose, objectives, authority and administrative structures necessary for administering the plan;

Part 2 details the concept of operations;

Part 3 details the operational guidelines and procedures for responding to a Land-based Search & Rescue incident in ten (10) Functional Annexes.

2.0 DEFINITION

For the purposes of this plan, SAR is defined as:

An Emergency Response Function involving the location, rescue, and initial medical stabilisation of victims affected by a local, national or regional disaster or event that may result in the entrapment, injury or displacement of victims. It is a multi-hazard discipline that requires a multi-skilled team response to a range of emergencies or disasters including earthquakes, hurricanes, landslides, floods, fires, tornadoes and man made disasters including technological accidents, hazardous materials release and terrorism.

3.0 PURPOSE

This USAR plan establishes a process and structure for the systematic, co-ordinated, effective delivery of response to terrestrial SAR events at the National level. It outlines the planning assumptions, the operational concepts and response and recovery actions required in the event of an incident requiring SAR response by describing the processes and methodology for implementing and managing national response efforts to terrestrial SAR events.

4.0 OBJECTIVES

The Objectives of the USAR Plan are to:

I. Mobilise and co-ordinate timely national response to terrestrial events requiring SAR operations;
II. Eliminate or ameliorate, as far as practicable, the immediate consequences of terrestrial events requiring SAR response.

5.0 AUTHORITY

The USAR Plan is Part (Section 03 Subsection 09) of the Saint Lucia National Emergency Management Plan (NEMP) and will be executed in accordance with it and in keeping with the operational concepts and principles outlined.

The designated focal point at the Lead Agency with responsibility for terrestrial SAR as designated in the NEMP will after receiving information on a SAR Incident and in consultation with the Director of NEMO, invoke the USAR Plan and initiate call out procedures by contacting the SAR and Medical Response Team (MRT) Leaders.

6.0 SCOPE

Activities under this Plan will commence when the USAR Team is mobilised and deployed and may extend to the post emergency response phase when the situation is stabilised.

7.0 OPERATIONAL CONTEXT

6.1 This Plan will be operated in an environment in which a range of Governmental and Non-Governmental organisations will work to achieve the agreed objectives.

6.2 Actions under the Plan will be initiated by threats or impacts brought on by events as outlined in Part 2 (Concept of Operations).

6.3 The operational intentions of this Plan are to:
   I. Assess affected areas;
   II. Search affected areas;
   III. Provide medical assistance to victims found in the affected areas;
   IV. Rescue the living to places of safety;
V. Recover the dead;
VI. Recover critical items of equipment.

8.0 PLAN ASSUMPTIONS

8.1 National disaster plans and systems are in place [Includes Emergency Operations Centre Standard Operating Procedures (EOC SOP’s); National Telecommunications Plan; Mass Casualty Incident (MCI) Plan; Protocols for requesting International Assistance etc.]

8.2 Personnel involved in USAR response are familiar with the concepts and operation of the EOC and the Incident Command System (ICS)

8.3 Personnel will be available to the National USAR Team to implement the Plan as proposed.

8.4 The National USAR Team will be required to respond on short notice to provide timely and effective assistance in the instance of a terrestrial event requiring SAR.

8.5 Local residents and volunteers may initiate SAR efforts following the incident but lack specialised training and equipment. The actions of spontaneous volunteers will therefore require co-ordination and direction to ensure that it fits within the incident command structure.

8.6 Access to damaged areas will be limited.

8.7 Should the event requiring SAR be an earthquake, both disaster victims and rescue personnel may be threatened by aftershocks, secondary events and/or other disturbances.

8.8 International Support through the United Nations Disaster Assessment and Coordination (UNDAC) Team and its On Site Operations Coordination Centre (OSOCC) will be available.
PART 2: CONCEPT OF OPERATIONS

2.1 INTRODUCTION

These procedures have been developed to address the response activities to be undertaken given the different scenarios that may be posed by the impact of a hazard resulting in a USAR event.

2.2 OBJECTIVE

The main objective of this section of the USAR Plan is to establish the operational context within which response actions will be taken in the event of an incident requiring the mobilisation of land based search and rescue resources.

This section should be read in conjunction with the detailed operational procedures contained in the Functional Annexes (Part 3) to this Plan.

2.3 LEVELS OF OPERATION

Countries may structure their response to a USAR activity in three (3) ways depending on the scope and magnitude of the event.

Level I – Local event with less than [up to 10] persons affected or affecting [1-2] areas
(Event is manageable with local resources. Event is monitored at National Level, information shared and event documented)
This model Plan recognises that some countries may not have the capacity to routinely respond to a small local incident and would therefore need to commence their operations at Level II immediately upon notification of an event. In these circumstances, Level I of this Plan would be optional with the obligations there under being incorporated in Level II.

<table>
<thead>
<tr>
<th><strong>Level II – National event with [10-50] persons affected or affecting [1-4] areas</strong></th>
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<tbody>
<tr>
<td>[Event requires full enlistment of National resources to respond, mobilisation of USAR Team and activation of EOC at the National Level and ICS Structure on incident site.]</td>
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National response to events in this category should be linked to provisions in country’s Mass Casualty Incident Plan in which the threshold for mass casualty situations based on number of persons affected has been established.

This Level requires no regional response. DIRECTOR OF NEMO/EOC provides information, SITREPS to CDERA, other national and regional partners.

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<tr>
<th><strong>Level III – National event with over [50-100] persons affected or affecting [1-4] areas.</strong></th>
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<tr>
<td>[Event overwhelms national capacity and regional and extra-regional assistance is requested]</td>
</tr>
</tbody>
</table>

This Level requires full enlistment of all national resources and response capabilities and is supplemented by regional and/or international resources.

The Incident Commander through the EOC must determine the need for additional resources beyond his/her immediate available resource base. A formal request following prescribed protocols for making regional/international requests for assistance must be made to CDERA and other regional and international agencies. EOCs through their respective policy groups should examine the need to request assistance within the context of declaring a disaster or disaster areas for the affected area(s).
2.3.1  Level I Response

2.3.1.1  Notification

Notification of an incident requiring a USAR response may be received from a wide variety of sources including: Police, Radio Station, Media, and Individuals.

Notification of an incident will generally follow procedures outlined in the Country’s National Emergency Management Plan or specifically as outlined in the USAR Plan.

Immediately upon notification of a USAR incident the Fire Service will immediately notify:

- The Director of NEMO
- The Commissioner of Police from the Royal Saint Lucia Police Force
- The Chief Medical Officer, MOH.
- The Chief Engineer, MOW
- The Director of the Saint Lucia Red Cross
- The Director of the Saint John Ambulance

The Director of NEMO will invoke the National emergency Management Plan and its procedures and activate the EOC, if needed, to standby status for providing supporting mechanisms if necessary.

2.3.1.2  Response Actions

I.  The Fire Service will mobilise and deploy assets as normal for a routine incident.

II.  The Fire Service will open an incident log on initiation of response operations.
III. Once operations commences The Fire Service will provide SITREPS to Director of NEMO for decision making and briefing purposes. SITREP should clearly establish incident level and advise if potential exists for it to be elevated to higher levels.

2.3.1.3 Stand Down

Once incident has been contained the Fire Service will issue Stand Down notice to all response agencies. A debrief and After Action Report (AAR) must be completed as soon as possible after the incident has been concluded.

2.3.2 Level II Response

2.3.2.1 Notification

A Level 2 response assumes that the victim threshold level of the Country’s Mass Casualty Incident (MCI) Plan has been attained and therefore requires the full response of the Fire Service, USAR Team(s) and the EOC

Upon notification of a USAR Incident the Fire Service will immediately initiate call out procedures following the predetermined Call Out lists.

The Director of NEMO must be contacted as part of the call out procedures and be advised of the need to activate the NEOC to support the operations.

2.3.2.2 Response Actions (refer to Part 3: Functional Annexes)

Once response operations have been initiated, the Fire Service will open and maintain an incident log until the Stand Down notice has been issued.

On arrival at the incident site, an Incident Commander assumes control and establishes agreed command structure to co-ordinate and manage the response (See Annex A). The Incident Commander reports to the EOC and advises on scope of incident and need for additional resources.
The EOC will provide requested support to USAR operations. Where resources are not under the immediate control of the Fire Service, the EOC is required to co-ordinate and provide the resources from other support agencies (See Annex A).

During a Level II Response, the EOC once activated maintains command and control over the event at the national level supported by the Fire Service and other support agencies. Incident Commanders maintain command and control on the scene and report directly to the EOC. [The on-scene Point of Contact to the EOC should be the Incident Commander].

Communications for the event are also co-ordinated by the EOC employing arrangements under the National Emergency Telecommunications Plan (See Annex C).

2.3.2.2 Stand Down

Following consultations and advice from the Incident Commander and the Fire Service, the EOC issues the formal Stand Down for the event. Each incident site must be systematically returned to normal state following approved procedures. The Director of NEMO will also formally stand down the facility following the approved procedures contained in the EOC SOPs.

The Director of NEMO will convene a debriefing session involving all key players to discuss the operations and identify opportunities for enhancing plans, procedures based on the lessons learnt. This debriefing should take place within three days of the incident.

The Fire Service in conjunction with the NEMO is responsible for preparing a comprehensive After Action Report (AAR) following the event. The AAR should also identify where resources were utilised and needs replacement or replenishment in preparation for the next event.
2.3.3 **Level III Response**

2.3.3.1 **Notification**

Notification of Incidents requiring a response by USAR Team(s) will follow established procedures contained within the Country’s National Emergency Management Plan.

Upon notification of an event, the Fire Service will immediately assess the situation and advise the Director of NEMO of its scope and magnitude. The Director of NEMO will consult with the Chairman of the National Emergency Management Organisation and a decision made on the need to request external regional/international assistance. In the event that external regional assistance is required, the NEMO will contact CDERA and make a formal request.

Based on the Country’s request, CDERA will activate the Regional Response Mechanism and Regional USAR Team in accordance with the Team’s Operational Orders (to be developed) to provide the requested support and response.

2.3.3.2 **Regional USAR Activation Procedures** (See Box)

*The Regional USAR Team will be activated by CDERA as an inter-island co-ordination and response team when an actual or potential incident:*  

1. Exceeds the response capability available to the affected Country;  
2. May pose a substantial threat to the public health, welfare, environment, or to regionally significant amounts of property;  
3. Otherwise meets the definition of a major incident as defined in the National Emergency Management Plan; or  
4. When requested by the National Emergency Management Office.
2.3.3.3 **Response Actions**

On arrival in the affected Country, the Regional USAR Team(s) will work under the direction of the Director of NEMO. The Regional USAR Team Leader is required to provide Situation Reports (SITREPs) at the agreed intervals to the National Authorities and to CDERA.

The Fire Service in consultation with the Regional USAR Team Leader(s) will determine work plan for the team.

To facilitate the full integration of the Regional USAR Team(s) and its reporting obligations, consideration should be given to establishing a Joint or Unified Command Structure at the level of the NEOC where the Regional USAR Team Leader(s) would participate in the operational planning and response phase of the event.

2.3.3.4 **Stand Down**

The Regional USAR Team(s) will stand down operations when the prescribed notice is issued by the NEMO. The Team leader(s) will convene a debriefing session of his team and prepare the AAR. Lessons learnt which impact on the operations of the National Authorities should be shared.

In accordance with the Regional USAR Team(s) Operational Orders, team members will return to their respective station of origin.
PART 3: FUNCTIONAL ANNEXES

These functional annexes are designed to operationalise the intentions of this plan.

ANNEX A:  
USAR TEAM ORGANIZATION AND MANAGEMENT

A.1 TEAM ORGANIZATION

The National USAR Team(s) are comprised of personnel encompassing specialised skills in the critical areas of Search, Rescue, Medical Care, Technical Assistance and Logistical Support. The USAR Team has two components, the Search and Rescue Team (SAR) Team and the Medical Response Team (MRT). Each component of the Team is led in the field by a pre-designated Team Leader. Team members will be:

- National Fire Service
- National Police Force
- Ministry of Health
- Ministry of Works
- Red Cross
- St. John Ambulance

COMMAND AND CONTROL:

The Chief Fire Officer will, after receiving information on a SAR Incident, in consultation with the Director of NEMO, invoke the USAR Plan.

Call Out procedures will be initiated when the SAR Team and MRT Leaders are notified of the USAR plan being invoked by the Chief Fire Officer.

Upon activation, the Director of NEMO retains responsibility for oversight and co-ordination of national USAR response.

The Incident Command System (ICS) will be utilised as the on site command and control mechanism. Utilising the principles of the Incident Command System, an Incident Commander, will head the Incident
Command Post (ICP). The Incident Commander manages the event in keeping with the principles of the ICS and conveys information on the event status and response needs to the EOC.

The Incident Commander is supported in National USAR response by a Support Team. It is recommended that this team include:

I. Communications Officer  
II. Logistics Officer  
III. Transport Officer  
IV. Safety Officer  
V. Triage/Medical Officer  
VI. Staging Officer  

The designated USAR Team and MRT Leaders oversee the operation of the USAR team in the field and reports to the Incident Commander. The USAR response team is divided into:

I. SAR Team (headed by the SAR Team Leader and comprised of SAR Team Members);  
II. Medical Team (headed by the Medical Response Team Leader and comprised of Medical Response Team Members).
Figure 1: National USAR Team Organizational Chart

EOC.
- CHAIRPERSON OF THE EOC
  - FIRE SERVICE
  - POLICE FORCE
  - CHIEF MEDICAL OFFICER
  - SUPPORT AGENCIES

INCIDENT COMMAND POST
- Incident Commander
  - (FIRE SERVICE)
  - TRIAGE/MEDICAL OFFICER
  - COMMUNICATIONS OFFICER
  - LOGISTICS OFFICER
  - TRANSPORT OFFICER
  - SAFETY OFFICER

USAR TEAM
- SAR Team Leader
  - SAR Team Members
- MRT Leader
  - Medical Team Members
A.2 TEAM MANAGEMENT & FUNCTIONS:

1. Director of NEMO (EOC)

Functions:
   i. Oversees national USAR response;
   ii. Responsible for overall co-ordination in national USAR response;
   iii. Interacts with the media and issues press releases on USAR incidents;
   iv. Reports to political leadership on the status of USAR response.

2. Incident Commander (Fire Service)

Functions:
   I. Oversees and directs USAR operations in the field;
   II. Focal point for collection and dissemination of field information;
   III. Prepares status of operations reports and relays the same to the Director of NEMO;
   IV. Relays requests for operational support to the Director of NEMO;
   V. Coordinates briefing and debriefing of USAR Team;
   VI. Makes recommendation to the Director of NEMO to demobilize USAR Team.
3. **USAR Support Team**

I. *Overall Function:*

Provides support to the overall search and rescue mission to include: logistics, communications, mobilization, demobilization, staging, triaging, transportation, safety, nutrition and shelter. Assists the SAR Team and MRT Leaders with short and long range planning for the USAR Team operations.

II. *Composition*

A. *Logistics Officer:* The individual filling this post should be pre-designated.

*Functions:*

i. Oversees and directs the operations of the support team involved in providing support to the overall search and rescue mission to include: logistics, mobilization and demobilization;

ii. Provides inventory control of specialized equipment and supplies maintained in the USAR Team equipment cache;

iii. Responsible for the provision of portable shelter to the USAR Team as required;

iv. Coordinates mobile feeding units for USAR Team.
B.  *Communications Officer:* The individual filling this post should be pre-designated.

*Function:* Maintains, configures, distributes and trains personnel on all communications equipment in the USAR Team cache. Equipment includes local hand held and repeater systems, high frequency short wave and satellite systems, for voice and data transmission.

C.  *Transportation Officer:* The individual filling this post should be pre-designated.

*Function:* Coordinates transportation of USAR Team personnel and equipment.

D.  *Safety Officer:* The individual filling this post should be pre-designated.

*Function:* Oversees all operations in relation to search and rescue safety requirements. Implements safety measures within operational situations.

E.  *Triage/Medical Officer:* The individual filling this post should be pre-designated.

*Function:* Oversees and directs the triaging of patients delivered to the triage sector. Prioritizes patient transport to the correct receiving hospitals and facilities for care.
F. **Staging Officer**: The individual filling this post should be pre-designated.

*Function:* Oversees and directs the receipt, display, dissemination, tracking and storage of all vehicles and equipment.

4. **SAR Team Leader** – *The individual filling this post should be pre-designated.*

*Functions:*

i. Oversees and directs the overall operations of the SAR Team including the operations of the SAR Team in the field.

ii. Manages deployment of SAR Team in the Field

4.1 **Search and Rescue Team Members** – *The individuals comprising this Team are (To be defined):*

4.1.1 *Functions*

I. Evaluate compromised areas

II. Stabilise structures

III. Utilize appropriate search techniques to locate trapped victims

IV. Extricate live victims

V. Provides emergency medical care to victims

VI. Provide support to the overall search and rescue mission to include: hazardous materials evaluation, structural integrity assessments, and technical documentation.

VII. Co-ordinate operations of heavy equipment, such as cranes, backhoes and other equipment needed to move heavy portions of structures during rescue operations.
4.1.2 Composition

The SAR Team will contain 6 persons. Personnel will be sourced from the Fire Service and trained in the critical search, rescue, technical and medical aspects of SAR. These should include at (but not be limited to):

**Search Techniques:** To be defined: physical search techniques, electronic search, structural collapse, K–9 or others.

**Rescue Techniques:** high angle rescue (rope rescue), confined space rescue, collapse structure, confined space rescue and vehicular rescue/extrication, trench collapse, flood/swift water, rough terrain, man tracking and navigational skills.

**Technical Skills:** Hazardous materials, heavy rigging and equipment operation, structural specialist.

**NB:** All SAR Team members should be trained as a specialist in at least one aspect of search and rescue.
5. Medical Response Team

5.1 MEDICAL RESPONSE TEAM (MRT) LEADER – The Chief Medical officer.

*Functions:*

i. Oversees and directs the operations of the medical response team.

ii. Responsible for managing and supervising the medical function of the MRT during incident operations.

5.2 Medical Team Members - The individuals comprising the Medical Team should be pre-designated and report directly to the Medical Response Team leader. They should be named (To be defined).

5.2.1 *Functions:*

i. Responsible for performing the medical function of the USAR Team incident operation.

   ii. Provide pre-hospital and emergency care for USAR Team members and victims to include crush syndrome/confined space medicine.

   iii. Responsible for minimising health risks and limited treatment of hazardous materials exposure, for task force personnel.

   iv. Debrief and counsel USAR Team Members and Victims: critical incident stress debriefing

5.2.1 *Composition:* Members may be drawn from the medical personnel of the Ministry responsible for Health and non-governmental organisations with a Health Care mandate.
5.2.2 Training: Medical Response Team Leader - Licensed physician, Other Medical Response Team members should at minimum be trained as EMTs. (To be defined).

USAR Team personnel must conduct round-the-clock (24-hour operations) (Box 23).

More than one USAR Team may be deployed and functioning in one area of operations.

The SAR Team and MRT leaders may, in consultation with the Incident Commander, add or edit the number of personnel within any team as appropriate to accomplish a mission.
ANNEX B: USAR Team Mobilisation

B.1 CALL OUT

Following the decision to invoke the national USAR response mechanism, the designated focal point of the National Lead Agency for USAR is responsible for issuing activation orders to the SAR Team and MRT Leaders.

In rapid onset events, the designated focal point at the National Lead Agency may advise the Director of NEMO (Chairperson of the EOC) that the team will be mobilised and proceed issuing activation orders to the SAR Team and MRT Leaders.

The SAR Team and MRT Leaders are the single designated points of contact to receive all official notifications from the designated focal point of the Lead Agency. SAR Team and MRT Leaders must be available by telephone and facsimile 24 hours a day everyday. The SAR Team and MRT leaders retain responsibility for call out of the Team members. The Team call out sequence is illustrated in Figure 2.

Figure 2: USAR Team Call Out Sequence

B.2 ACTION ON CALL OUT:

Upon call out, USAR Team members should collect their full personal kit/equipment cache and proceed to the point of assembly. Each member of the USAR Team is required to have the capability to be at the designated assembly point within a prescribed time of receiving an Activation Order.
Point of Assembly:

The point of assembly is where all personnel report for check-in and briefing on activation. This point should be large enough to accommodate all aspects of the mobilisation process and be equipped with telephone and facsimile facilities. At this point, check-in stations will be set up to process personnel sign-in and personal equipment inspection.

Each member’s SAR Team and MRT Member information sheet should be checked at sign-in for accuracy and an emergency contact name and telephone number.

Those pre-designated members of the team should proceed to retrieve team equipment from designated storage areas prior to proceeding to the point of assembly.

B.3 TEAM PLANNING:

The Incident Commander, in conjunction with the SAR Team and MRT Leaders and USAR planning support (Logistics, Transport, Communications, Safety, Triage/Medical and Staging Officers), will develop information on the incident from credible sources (including official and media sources). This will include researching the incident area and obtaining topographical maps of the area as required.

Reconnaissance of the affected area(s) will be carried out by a designated reconnaissance team before framing an initial USAR response plan.

The designated reconnaissance team should include but not be limited to the SAR Team and MRT Leaders.

B.4 Team Briefing:

Once all personnel are checked in, the SAR Team and MRT Leaders will brief the entire team. The objectives of the briefing are to:

I. Outline the Mission Objectives;
II. Provide up-to date information to team members;
III. Inform team members of the agreed USAR operations and deployment plan.

B.5 TEAM TRANSPORT:

Transportation required to move the USAR Team should be identified during the development of the initial USAR Plan. The designated transport officer should coordinate transportation, liaising with Government or Non-Governmental Organizations as necessary.
ANNEX C: COMMUNICATIONS & INFORMATION FLOW PROCEDURES

1. The deployed USAR Team(s) will usually communicate with the Incident Commander at the ICP using all possible means of telecommunications services available (HF, UHF, VHF, CB, Cellular, SATCOM) Predetermined frequencies to be used in all cases (Box 25).

2. SAR Team and MRT Leader(s) convey information directly to the Incident Command Post.

3. Incident Command collates and analyzes information and passes on to EOC for dissemination to political leadership and media (See Figure 3).

Figure 3: Information Flows
ANNEX D:
USAR TEAM SEARCH AND RESCUE STRATEGY
(STRUCTURAL COLLAPSE)

Background:

This Annex has been developed to provide guidance only for response to events resulting in structural collapse.

STEP 1: Initial reconnaissance may need to be performed prior to beginning search and rescue operations:

Required Actions:

1.1 Identify structures affected

1.2 General area assessment, that is, to identify separate buildings which have high potential for viable rescue opportunities. This may include buildings of high occupancy such as hospitals, schools, nursing homes and multi storey buildings.

1.3 Obtain information on
   I. Numbers trapped
   II. Location of casualties
   III. Type and extent of damage – assess damage to structures
   IV. What rescue is already being done (the efforts of volunteers should be coordinated with the operations of the USAR Team)

1.4 Identification and location of additional hazards

Incident Command Actions:
1. Initial estimation of assistance needed;
2. Targeting and prioritising of areas for initial and subsequent searches.
STEP 2: Surface Assessment

Required Action

1.1 Sweep search of the affected areas;
1.2 Send walking wounded to triage areas;
1.3 Remove all casualties found in non-difficult situations;
1.4 Locate and map casualties requiring extrication

This facilitates:
1. The development of rough maps and sketches essential to organize equipment and personnel in an efficient manner;
2. Refining of estimation of resources required;
3. Identification of specialist equipment needed;
4. Establishment of the Incident Command Post;
5. Securing of the affected area.

STEP 3: Surface Search and Rescue

Required Action

1. Search areas blocked by light debris – likely to be areas of high survivability;
2. Look for voids (these are possible survival points);
3. Rescue survivors found.

Incident Command Actions:
1. Debriefing of personnel to improve information;
2. Questioning of witnesses and survivors;
3. Revision of plan and assistance requirements;
4. Assembly of any additional personnel.

STEP 4: SYSTEMATIC SEARCH AND RESCUE

Required Action

1. Remove selected debris and continue searching voids;
2. Rescue survivors found;
3.  Removal of debris by human chains;
4.  Emergency shoring of high risk structural elements;
5.  Obtain all available structural information.

**Incident Command Actions:**

1.  Consideration of personnel rotation

**STEP 5: Systematic Debris removal**

**Required Action:**
1.  Systematic debris removal and searching;
2.  Use of heavy equipment for debris removal (supervised by safety officer);
3.  Assess building stability and consider structural shoring;
4.  Concentrate on specific areas to reduce numbers of personnel at risk;
5.  Mark all areas searched to avoid wasting time re-searching and to avoid handling debris twice.

**Incident Command Actions:**

1.  Organization of regular relief and rotation of personnel
2.  Liasing with security forces to identify if persons are still missing

*NB: Search and rescue operations will cease once all missing persons are accounted for.*
ANNEX E: MEDICAL GUIDELINES

1.0 INTRODUCTION

The MRT is organized, staffed, and equipped to provide life support and out-of-hospital care throughout the course of a mission. It is recognized that both serious injuries and illnesses may be encountered and will require treatment.

2.0 PREPAREDNESS PHASE

Staffing for the MRT should ensure that all members are capable of providing life support and must be able to provide this care either as an emergency trained doctor or emergency-trained medic. These members must be capable of performing continuous operations.

2.1 Treatment Priorities

The treatment priorities for the MRT are:

First — the USAR Team personnel, and other assigned support staff including K – 9/equine care (if existing and/or available).

Second — victims directly encountered by the USAR Team.

Third — other persons as possible.

It is not the intent of the MRT to be a freestanding medical resource at the disaster site. Capable local medical systems will be considered the primary providers of general medical care to disaster victims.
2.2 Medical Equipment Stock (See Box)

I. The Medical Team equipment stock should be selected to provide immediate life-saving medical treatment for the USAR Team as well as victims encountered during operations at a work site. It is recommended that the quantity of equipment and medicines in the equipment stock provide for anticipating on average the following injuries during a mission:

- 4 critical cases;
- 6 moderate cases;
- 10 minor cases.

II. Appropriate medical equipment, medicines and supplies should be pre-assembled to ensure continuous availability to provide medical care to USAR Team members and to provide immediate care to victims.

3.0 ACTIVATION PHASE

3.1 The MRT Leader must address several issues when the USAR Team is activated for a mission.

Additionally, necessary information concerning infectious disease and other health-related issues specific to the disaster area should be gathered.
3.2 All USAR Team members should have identification documentation on file that includes pertinent personal information to assist in deployment activities. Information required would include the member’s name, address, telephone numbers, blood type, emergency contacts, medical history, immunization records, etc. Other actions include:
- A review of each member’s personal information;
- Team personnel passing a physical exam;
- Team personnel having current inoculations for the affected area(s).

3.3 The MRT Leader, in conjunction with the SAR Team Leader, should review the functions, tasks and assignments for the mission. All USAR Team members should be briefed on the indigenous environmental conditions and health concerns in the affected disaster area, including a review of stress and health maintenance issues.

4.0 IN TRANSIT PHASE
4.1 Home Base to Affected Area
Appropriate life support supplies must be available to the MRT at all times;
Certain elements of the medical equipment stock should be prioritized for initial movement to the assigned area of Operations.

5.0 OPERATIONS PHASE

5.1 It would be beneficial to identify and meet with the local medical authority of the affected area and the senior authority for medical operations at or supporting the work site.

5.2 The medical plan should include:

- Objectives;
- Strategies and tactics;
- Contact with local medical system;
- Resource availability;
- Re-supply needs;
- Deceased victim management;
- Indigenous health concerns;
- Local victim transfer of care;
- Team member evacuation process;
- Air/marine evacuation contingencies.

5.3 The MRT Leader should coordinate with the appropriate officials on:

- The potential for hazardous materials contamination or other exposures;
- Decontamination information for various contaminates or exposures;
The treatment options for general hazardous materials exposures.

5.4 Close coordination between SAR Team and MRT members is important to ensure a safe effective operation and optimal patient care.

5.5 Rescue operations must be monitored for potential impact on trapped victims, and rescuers of dust, carbon monoxide generation, oxygen consumption, etc. Medical actions to prevent these situations may be necessary.

5.6 It is expected that under normal circumstances some medical equipment will be a limited resource and will not leave the work site with patients. A high priority is placed on maintaining such assets at the operational work site for the continued protection of USAR Team personnel and other victims being extricated. The organization responsible for patient transportation (See Box) and follow-up medical care should be prepared to provide such equipment, if necessary, for patient transfer to a medical facility.

5.7 Patient Documentation

Patient and team members’ physical assessment and/or medical intervention performed by the MRT must be documented.

This document would also be used to record any real or perceived chemical or biological exposures, with a copy made available when a patient is transferred from the Team’s control to other medical systems;
The MRT must maintain a copy of each completed document for their files;
A patient treatment log must be maintained.

5.8 Medical Care and Evacuation of Injured USAR Team Members

The MRT Leader shall:
Evaluate the team member’s injury or illness;
Treat as necessary;
Recommend the team member’s duty status/capability to perform;
Evacuate as appropriate, if necessary;
Investigate and document the occurrence.

5.9 Death of a USAR Team Member

The MRT Leader shall:
Verify the identity and confirm death (Note: death may have to be confirmed by appropriate national legal authority);
Secure remains and personal effects;
Investigate and document the cause of death;
Forward information to appropriate officials;
Evaluate the effects on the USAR Team.

6.0 REASSIGNMENT/STAND DOWN PHASE

The MRT Leader should:

Evaluate general physical and mental condition of the USAR Team;
Evaluate the equipment stock capability for reassignment;
Determine equipment/supplies that may be donated.
ANNEX F:
PLANNING RESPONSIBILITIES OF THE FIRE SERVICE

1.1 Serves as National USAR Co-ordinator;

1.2 Responsible for the establishment, maintenance and management of national USAR response system. This includes the specification, maintenance and availability of USAR vehicles and equipment, maintenance and evaluation of operational readiness;

1.3 Responsible for recruiting members to the USAR Team;

1.4 Responsible for the development and sustainability of a training programme for USAR team personnel as appropriate;

1.5 Maintains the national USAR personnel list and updates this list on a quarterly basis. List should contain:

I. Name;
II. Contact points – members are required to notify if leaving country;
III. Indicate areas of training and currency of training;
IV. Name of a point of contact in case of emergency;
V. Medical information as indicated at Annex E (3.2).
ANNEX G

MODEL CONTENTS FOR SEARCH AND RESCUE EQUIPMENT CACHE

This list is a possible model for a 6-person Search and Rescue Team (To be Revised by the Fire Service)

I. TEAM EQUIPMENT

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ITEM</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ladders 6 ft.</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Shovels</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Bowsaws</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Chain Saws</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Bolt cutters</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Crowbars 15 in.</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Hammers</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Cold Chisels 5 in.</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Screw Drivers</td>
<td>18</td>
</tr>
<tr>
<td>10</td>
<td>Nails</td>
<td>30 packs</td>
</tr>
<tr>
<td>11</td>
<td>Buckets</td>
<td>10</td>
</tr>
<tr>
<td>12</td>
<td>Spray Paint</td>
<td>20</td>
</tr>
<tr>
<td>13</td>
<td>Water Containers</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Tarpaulin 12 ft. x20 ft.</td>
<td>10</td>
</tr>
<tr>
<td>15</td>
<td>Pick-Axe</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>Cutlass</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>Wheel Barrows</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>Hacksaw</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>Hydraulic Jacks 4 tonne</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>Tirfor Winchers</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>Anchor Pins</td>
<td>20</td>
</tr>
<tr>
<td>22</td>
<td>Shear Pins</td>
<td>20</td>
</tr>
<tr>
<td>23</td>
<td>Anchor straps</td>
<td>20</td>
</tr>
<tr>
<td>24</td>
<td>Generators 7.5 kw</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>Lighting</td>
<td>20</td>
</tr>
<tr>
<td>26</td>
<td>Shackles 2 in.</td>
<td>20</td>
</tr>
<tr>
<td>27</td>
<td>Shackles 3 in.</td>
<td>10</td>
</tr>
<tr>
<td>28</td>
<td>Slings - 30 ft.</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>Slings - 15 ft.</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>Loud Hailers</td>
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</table>
### II. PERSONAL EQUIPMENT INDIVIDUAL PACKS

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ITEM</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Knapsack</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Torch Light (Multi function)</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Helmet with torchlight</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Rescue Coverall – Heat Resistant</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Boots – Heat Resistant</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Water Bottle</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Files</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>Side Pouch</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>Paracord</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>Pen-knife</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>Whistle</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>Gloves</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>Socks</td>
<td>6</td>
</tr>
</tbody>
</table>
ANNEX H

NATIONAL USAR TEAM CONTACT LIST

The Contact List is part of this Plan and is a stand alone document.

(TO BE PREPARED BY THE FIRE SERVICE)
ANNEX I

INCIDENT LOG

AGENCY REPORTING: ____________________________________________

PERSON REPORTING: __________________________________________

DATE: __________________的时间: ________________

<table>
<thead>
<tr>
<th>INCIDENT NUMBER</th>
<th>PROBLEM/LOCATION</th>
<th>ASSIGNED TO</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX J

USAR TEAM DEMOBILISATION

1.0 INTRODUCTION

Based on the recommendation of the Incident Commander, the Director of NEMO will make the decision by to demobilise the USAR Team. This decision should be conveyed to the SAR Team and MRT Leaders through the Incident Commander.

2.0 DEBRIEFING

A thorough debriefing of the USAR Team(s) should take place at the soonest possible opportunity following the decision to demobilise. Debriefing should aim to identify operational issues arising during response; identify lessons learnt and initiate a corrective action plan.

The debriefing process should address at minimum:

1. Safety issues arising during the response;
2. Management and co-ordination issues;
3. Information flows;
4. Communication issues;
5. Effectiveness of planning;
6. Logistics – including equipment, use and replenishment of resources and supplies;
7. Medical issues – including victim treatment and supplies;
8. Overall USAR team performance.