UNITED NATIONS, DISASTER ASSESSMENT AND COORDINATION

UNDAC

Field Handbook

United Nations

**TABLE OF CONTENTS**

A. Preface  
A.1. Introduction to the Handbook  
A.2. How to Contact OCHA

**PART I • OCHA’S ROLE IN COORDINATION**

B. OCHA’s Role in Coordination  
B.1. Introduction  
B.2. Field Coordination Mandate, Goals and Objectives  
B.3. Field Coordination Functions  
B.4. OCHA Country Level Coordination Structures  
B.5. Coordination Fora  
B.6. Coordination Variations Between Natural Disasters and Complex Emergencies

**PART II • UNDAC FUNCTIONING**

C. The United Nations Disaster Assessment and Coordination (UNDAC) System  
C.1. Concept  
C.2. UNDAC Standard Terms of Reference  
C.3. The UNDAC Mission Cycle  
C.4. Skills needed from UNDAC members

D. Mobilization and Mission  
D.1. Standard Mobilization Procedure  
D.2. Personal Preparedness  
D.3. Collection of Baseline Data  
D.4. International Travel  
D.5. Plan of Action  
D.6. Arrival and First Steps  
D.7. Mission Support  
D.8. Radio Communications Procedures  
D.9. Safety and Security  
D.10. Medical Evacuation  
D.11. Mission End

E. Disaster Assessment
   E.1. Introduction
   E.2. Methodology and Planning
   E.3. Principles of Assessment and Response
   E.4. Water Sanitation
   E.5. Food and Nutrition
   E.6. Shelter
   E.7. Health
   E.8. Infrastructure
   E.9. Assessment Checklists
   E.10. Tables

F. Coordination in the Field
   F.1. Establishing a Coordination Centre
   F.2. Coordination Techniques/Trouble Shooting
   F.3. Structure and Establishment of an On Site Operations Coordination Centre (OSOCC)
   F.4. Working with the Military in the Field

G. Information Management
   G.1. Introduction
   G.2. UNDAC Reporting and Sitreps
   G.3. Information Gathering and Analysis
   G.4. Contacts with Media
   G.5. Information Outputs
   G.6. Preparation of Appeals
   G.7. Annexes

H. Urban Search and Rescue
   H.1. Responsibilities of Partners Involved in International Urban Search and Rescue Operations
   H.2. Basic Facts
   H.3. Assessment and Response
   H.4. Duties of an OSOCC Supporting SAR Teams after an Earthquake
   H.5. Annex - INSARAG Markings During a
I. UNDAC and OCHA Support Resources
   I. 1. Introduction
   1.2. Human Resources
   1.3. UNDAC Equipment Support
   1.4. Additional Services Provided by OCHA's Disaster Response Branch (DRB)

PART III - INTERNATIONAL RESPONSE ORGANISATIONS AND COORDINATION IN THE FIELD

J. United Nations and International Response Organisations
   J. 1. Introduction
   J.2. The United Nations System
   J.3. The Red Cross and Red Crescent Movement
   J.4. Non-Governmental Organisations (NGO's)
   J.5. The US DART Team

PART IV - REFERENCES

K. Personal Health
   K. 1. Personal Health
   K.2. Safe Food for Travellers
   K.3. Safe Water for Travellers
   K.4. Stress
   K.5. Medical Emergencies and First Aid

L. Disaster Logistics
   L. 1. Introduction
   L.2. Logistics Overview
   L.3. Logistics Assessment Checklist

M. Climate and Terrain
   M. 1. Introduction
   M.2. Climate and Terrain Zones
M.3. Polar Regions
M.4. High Altitude Regions
M.5. Tropical Regions
M.6. Desert Regions

N. References
N.1. Conversion Table to Metric System
N.2. Characteristics of Radio and Satellite Communications
N.3. Characteristics of Aircraft that may be used during Disaster Operations
N.4. Characteristics of Helicopters that may be used during Disaster Operations
N.5. Aircraft Loading and Offloading Methods
A. PREFACE
A. PREFACE

A.1. Introduction to the Handbook (p. 1)

The United Nations Disaster Assessment and Coordination (UNDAC) handbook is intended as a quick reference guide for members of an UNDAC Team before and during a mission to an area affected by an emergency. The handbook is not an authoritative instruction but rather represents an accumulation of institutional memory related to procedures for international emergency assessment and coordination as seen in the scope of the UNDAC terms of reference.

The UNDAC handbook has been developed in cooperation between the Office for Coordination of Humanitarian Affairs (OCHA) staff and members of the international UNDAC System. The information contained in the handbook draws on references from a variety of sources, including: OCHA publications, the United States Office of Foreign Disaster Assistance (OFDA) “Field Operations Guide” and “Disaster Assessment Procedures Manual”, the United Nations High Commissioner for Refugees (UNHCR) “Handbook for Emergencies” and other UNHCR reference material, the World Food Programme (WFP) publication “Food Aid in Emergencies” the UNICEF handbook “Assisting in Emergencies”, Training Modules of the United Nations Disaster Management Training Programme, the Oxfam publication on landmines “Legacy of Conflict” by Rae McGrath, publications by the Red Cross and Red Crescent Movement and the Sphere Project publication ‘Humanitarian Charter and Minimum Standards in Disaster Response’.

The UNDAC handbook has been developed by the OCHA Field Coordination Support Unit (FCSU) of the Disaster Response Branch. FCSU is financed entirely through voluntary contributions from interested Governments. Any
comments on the handbook or proposals for improvements can be addressed to:

Office for the Coordination of Humanitarian Affairs
Field Coordination Support Unit
Palais des Nations
CH 1211 Geneva 10, Switzerland
  Telephone: +41(0)22 9 17-1234
  Facsimile: +41(0)22 9 17-O 190

A.2. How to Contact OCHA

UNDAC Mobilization and Missions

During UNDAC mobilization and mission two separate lines will be opened exclusively for communications with the UNDAC team:

Facsimile: +41 (0)22 9 17-0023
Telephone: +41 (0)22 9 17-1600

Other Purposes

For any other purpose or, when an UNDAC team has not been activated, the following contact points should be used:

GENE VA

During Office Hours: +41 (0)22 917-1234

United Nations Office at Geneva Switchboard number. If known, direct numbers to OCHA officers can also be used.

In Emergencies: +41 (0)22 917-2010

OCHA-Geneva Disaster Response Branch maintains a 24-
hour duty system 365 days-a-year. The call is received by an answering service, Digicall, which conveys the message to the OCHA-Geneva Disaster Response Duty Officer who then calls back.

Facsimile: +41 (0)22 917-0023
Telex: 414242 OCHA CH
Internet: ochagva@un.org
Mail: United Nations Office for the Coordination of Humanitarian Affairs
Palais des Nations
CH- 1211 Geneva 10
Switzerland

**Field Coordination Support Unit (FCSU)**

Given below are the office telephone numbers and e-mail addresses of the staff of FCSU in case UNDAC team members need to contact them

<table>
<thead>
<tr>
<th>Name</th>
<th>Telephone</th>
<th>e-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arjun Katoch</td>
<td>+41229171199</td>
<td><a href="mailto:katoch@un.org">katoch@un.org</a></td>
</tr>
<tr>
<td>Thomas Peter</td>
<td>+41229173143</td>
<td><a href="mailto:petert@un.org">petert@un.org</a></td>
</tr>
<tr>
<td>Jesper Lund</td>
<td>+41229171783</td>
<td><a href="mailto:lund@un.org">lund@un.org</a></td>
</tr>
<tr>
<td>Katarina</td>
<td>+41229171107</td>
<td><a href="mailto:tollk@un.org">tollk@un.org</a></td>
</tr>
<tr>
<td>Toll-Velasquez</td>
<td>+41229173513</td>
<td><a href="mailto:derivero@un.org">derivero@un.org</a></td>
</tr>
<tr>
<td>Juliette de Rivero</td>
<td>+41229173218</td>
<td><a href="mailto:perezl@un.org">perezl@un.org</a></td>
</tr>
<tr>
<td>Ana M. Donamaria</td>
<td>+41229173530</td>
<td><a href="mailto:donamaria@un.org">donamaria@un.org</a></td>
</tr>
</tbody>
</table>

**NEW YORK**

**During Office Hours:** +1 212 963-1234
United Nations Headquarters switchboard. If known, direct numbers to OCHA officers can also be used.

In Emergencies: +1 212 9634962

OCHA-Geneva. See above.

Facsimile: +1 212 963-9489/1312/1040

Internet: ochany@un.org

Mail: Office for the Coordination of Humanitarian Affairs

1 United Nations Plaza

10017 New York

USA
PART I – OCHA’S ROLE IN COORDINATION

B. OCHA’S Role In Coordination
B. OCHA’S ROLE IN COORDINATION

B.1. Introduction (p.2)
   B.1.1. Coordination is Essential and Important (p.2)

B.2. Field Coordination Mandate, Goal and Objectives (p.5)
   B.2.1. OCHA’s Mandate (p.5)
   B.2.2. Field-based Goal/Objectives (p.6)

B.3. Field Coordination Functions (p. 8)
   B.3.1. OCHA’s Primary Coordination Functions (p. 10)
   B.3.2. OCHA’s Auxiliary Coordination Functions (p. 10)
   B.3.3. Principal Field Coordination Activities (p.11)

B.4. OCHA Country Level Coord. Structures (p.13)
   B.4.1. The Representative of OCHA (p. 13)
   B.4.2. Field Coordination Unit (p. 14)
   B.4.3. The OCHA Operations Coordination Centre (p. 15)
   B.4.4. Regional Coordination Mechanism (p.15)
   B.4.5. Simultaneous Humanitarian, Security and Development Operations (p.16)

B.5. Coordination Fora (p. 16)
   B.5.1. Local Authorities (p. 16)
   B.5.2. United Nations Disaster Management Team (p. 17)
   B.5.3. Sectoral Coordination (p. 18)
   B.5.4. Military/Humanitarian Operations Interface (p. 18)
   B.5.5. NGO Coordinating Councils (p. 19)
   B.5.6. Donor Councils (p. 19)

B.6. Coordination Variations Between Natural Disasters and Complex Emergencies (p.20)
B.1. Introduction

The purpose of the coordination chapter in the Field Handbook is to provide an easily accessible, pocket reference to support a United Nations Office for the Coordination of Humanitarian Affairs (OCHA) staff-person, member of an UNDAC Team, or a staff-person of a humanitarian organization working in a OCHA field-based coordination setting. It covers coordination issues for both natural disasters and complex emergencies. Its focus is on the “how to” of coordination but also includes sufficient context to ground the user in OCHA's mandate. It gives guidance on coordination functions and structures as well as helping “trouble shoot” coordination barriers that may be encountered.

B.1.1. Coordination is Essential and Important

An emergency situation is characterized by overwhelming needs; competing priorities; destroyed or damaged communication and transportation infrastructure; a rapid influx of providers of humanitarian assistance coupled with an outburst of mutual aid from local citizens; and highly stressed local governmental and non-governmental institutions. Given this view of the emergency conditions an image of chaos quickly springs to mind.

While coordination may not be easily defined, its absence is characterized by gaps in service to affected populations; duplication of effort; inappropriate assistance; inefficient use of resources; bottlenecks, impediments, and slow reaction to changing conditions; and frustration of relief providers, officials and survivors - in general, an unsatisfactory response to the emergency.

Coordination is a result of intentional actions to harmonize individual responses to maximize impact and achieve synergy - a situation where the overall effect is greater than the sum of the parts. There can be a little coordination or a lot of coordination and, for the most part, the more coordination -
At its best, coordination results in humane, neutral, and impartial assistance; in increased management effectiveness; a shared vision of the best possible outcomes from a given situation; a seamless approach to service delivery; and donor confidence resulting in sufficient resources to achieve the desired outcomes, i.e., the least possible amount of human suffering and material damage and a rapid return to normal living conditions and the ongoing progress of development.

Coordination begins with the initiation of working relationships and regular sharing of information. As coordination increases there is a resulting change in the way relief providers implement their programmes of assistance. Because relief providers cooperate, individuals and organizations adapt and adjust their efforts based on changing needs and each other’s strengths and weaknesses.

Coordination rarely is the result of one group or organization telling another what or how to do their work. Certainly examples of coordination as “directing” exist, especially where relief operations are directed and controlled by a strong national government, but these situations are rare.

Usually coordination is a result of voluntary efforts. In situations of voluntary participation, coordination as “directing” is rarely effective. Relief agencies partly function within a framework of self-interest. Their first objective is to assist their targeted beneficiaries. Their second objective is to assist their beneficiaries in such a way that their good works are seen and valued by the donor community and the “profile” of their agency is enhanced. Farther down the list is the goal of recognizing the contributions of others or declaring/admitting that someone else can do a particular job better than they can. Coordination is not, then, an agency’s first priority.

The person or organization charged with promoting and ensuring cooperation is, therefore, working in an environment
where the coordination authority has few if any resources to "require" coordination. Therefore, agencies and individuals must see some added value from participating in the coordination process and the benefits must outweigh the costs. And, indeed, there are costs to coordination. Coordination requires time and other resources. Coordination may result in one organization taking a "back seat" to another, closing operations in one area, taking on a challenge at which they may be less successful, or reducing their organization’s profile.

Coordination, therefore, is far from a sure thing. Thus, the coordinating organization, in this case OCHA, must establish a coordination process based on certain characteristics. To achieve the best possible coordination the process should be:

**Participatory**
Coordination occurs through the legitimacy derived from involvement. The tasks of coordination must occur within a structure and process agreed and supported by the actors in the emergency situation. The coordinators must secure and maintain the confidence of the other actors, engendering an atmosphere of respect and good will. Organizations need to participate in deciding the policies, procedures, strategies and plans which will affect them.

**Impartial**
The coordination process should not be seen to favor one organization over another but rather to identify the distinctive competencies of the various actors. Coordination should advocate the principle of impartiality, i.e., the provision of relief solely on the basis of need irrespective of race, religion, political affiliation, gender, or age; provided by the actor most likely to achieve the desired outcomes.

**Transparent**
Coordination requires trust and trust requires transparency; the willing flow of information, open decision-making processes, and publicly-stated, sincere, and honest rationales for decisions. This will include the need to admit failure or at
least falling short of objectives.

**B.2. Field Coordination Mandate, Goal and Objectives**

**B.2.1. OCHA’s Mandate**

UN OCHA is responsible for coordination in a disaster or emergency. This responsibility has been historically determined and mandated. As such, OCHA’s mandate is to ensure that the relief provided is effective, not to provide effective relief.

In December, 1991, the United Nations General Assembly, by its resolution 46/182 recognized the need to strengthen and make more effective the collective efforts to provide humanitarian assistance. The resolution supported a strengthened leadership role of the Secretary-General to ensure better preparation for, as well as rapid and coherent response to, natural disasters and other emergencies. To this end, the resolution called for the Secretary-General to designate an Emergency Relief Coordinator, at the level of Under-Secretary General for Humanitarian Affairs, and specified that the Emergency Relief Coordinator should be supported by a secretariat, this is OCHA.

The responsibilities assigned to the Emergency Relief Coordinator and his/her secretariat, OCHA are essentially coordination, advocacy and information. This should include the following:

- Coordinating, facilitating, and mobilizing the humanitarian assistance of the United Nations system in those emergencies that require a coordinated response;
- Providing services that maximize the efficient use of resources for humanitarian assistance, such as consolidating, managing and disseminating information including situation reports, early warning data and needs assessments;
- Mobilizing resources through the preparation of interagency appeals, management of revolving funds, and financial
tracking of donor responses;
- Promoting competent staff through training programmes and other staff development activities;
- Acting as focal point for advocacy on humanitarian concerns, and for maximizing opportunities for preventative action and for securing access to people affected by conflict;
- Ensuring that relief contributes to future development, and that development plans incorporate measures for disaster mitigation, preparedness and prevention;
- Supporting and strengthening national capacity for emergency response.

B.2.2. OCHA Field-based Goal and Objectives

Field-based Goal
The goal of humanitarian coordination is to ensure that humanitarian actors responding to disasters or emergencies work toward a common strategic vision, design and deliver their assistance in a complementary fashion according to their mandates and capacities, and adapt their activities in response to mutual agreement on changes in circumstances and thus of needs.

There are two aspects of humanitarian coordination, the first referring to requirements at the strategic level, and the second to those at the operational level. The two are interlinked with one aspect feeding the other.

“Strategic coordination” is concerned with the overall direction of the humanitarian programme. Thus it includes the setting of agreed goals for the programme, drawing on a common strategic analysis of the problem. It allocates tasks and responsibilities, according to mandates and capacities, and ensures that these are reflected in a strategic plan. It includes the undertaking of advocacy of humanitarian principles. It ensures that resource mobilisation for the programme is a process conducted in a manner which responds to agreed priorities. It monitors and evaluates the overall implementation of the programme to ensure that changing
circumstances and constraints are identified and are then responded to in an agreed manner. In so doing, it may address issues more generally regarded as operational when these issues are seen to have an impact on the programme as a whole.

“Operational coordination” is concerned with two requirements. The first is the need, within the strategic framework of the humanitarian programme, for substantive coordination in relation to specific sectors, with regard to geographical areas or beneficiary groups. This is to ensure that, within each sector, the activities of different actors are conducted in a complimentary manner and according to an agreed plan. The second requirement is for common services for humanitarian actors. Thus, operational coordination ensures that matters such as security, communications and common logistical systems are managed in a manner best calculated to respond to changing operational needs.

Field-based Objectives
Several objectives have been identified by OCHA as essential to achieving effective sustained field coordination consonant with its goal. These objectives include:

1. Ensure a comprehensive and coordinated programme of humanitarian assistance by:
   - Creating a framework and mechanism/platform and act as catalyst for strategic decision-making and consultation;
   - Identifying critical needs and target resources to those needs;
   - Ensuring access to populations-at-risk;
   - Developing and adopt a unified approach that eliminates gaps and duplications;
   - Promoting an appropriate division of responsibilities resulting in a streamlined and coherent service provision;
   - Promoting accountability through the use of monitoring and evaluation information; and
   - Promoting emergency assistance that is supportive of recovery and long-term development.
   - Advocating for humanitarian principles and concerns as
well and the security of humanitarian workers.

2. Ensure a steady and reliable flow of information to inform decision-making by:
   - Monitoring events, conditions and trends to provide sufficient early warning to enable a timely response; and
   - Establishing and maintaining an effective information collection, analysis, dissemination and clearinghouse capacity.

3. Ensure sufficient resources to accomplish agreed programmes by:
   - Mobilizing sufficient resources to accomplish tasks in a coordinated and systematic manner;
   - Providing essential coordination/common services otherwise not available; and
   - Promoting sharing of resources among providers of humanitarian assistance.

4. Essentially, coordination normally needs to progress through the undermentioned phases of increasing interaction.
   - (a) Information sharing
   - (b) Agreed distribution of programme tasks and responsibilities amongst all participants
   - (c) Common goals and programming

B.3. Field Coordination Functions

Overview
OCHA seeks, overall, to improve the impact of field operations through coordination. Coordination is determined by the General Assembly (GA) to add value to the United Nations’s efforts but is not expected to add a layer of decision-making or extra bureaucratic impediments.

If field operations are improved they will show improvement in one of the areas of efficiency, effectiveness and impact. Efficiency covers those improvements which ensure that services are provided for the least possible cost and minimal amount of resources. Effectiveness is improved when
humanitarian assistance providers are able to achieve the objectives of their programmes. Finally, impact is the extent to which the overall “quality of life” conditions in the emergency are improved.

As an example, consider a program to distribute seeds and tools to a displaced population so that they might grow some of their own food and reduce their dependency on the humanitarian assistance community. An efficient program would distribute the seeds and tools with a low cost per seed pack and tool delivered. An effective program would distribute all the seeds and tools to qualifying beneficiaries. A high impact program would require that the seeds and tools were used and that food was grown.

It is easy from this example to see that a program could have high efficiency but low effectiveness and low impact; low efficiency but high effectiveness and impact; high efficiency and high effectiveness but low impact; or low efficiency, effectiveness and impact, etc.

To carry out its mandate field coordination requires the provision of certain key functions. The mandate to ensure coordination does not, however, mean that OCHA must provide all of them—it must ensure they are there. Detailed below are the functions normally required as part of a field coordination effort.

*The Coordinator’s Office*

Certain functions require the status inherent in the representational role of the Resident Coordinator/Humanitarian Coordinator as the designated representative of the Secretary General and Emergency Relief Coordinator and are closely linked with the responsibilities of the coordinator him/herself.

Objective: Responsible for overall leadership of the humanitarian coordination; representing the UN system to high levels of government and other high-level liaison; and facilitating sensitive political or inter-agency agreements.
Specific functions related to this objective include:
- Convene and chair coordination body;
- Facilitate agreement on division of responsibilities;
- Negotiate access to emergency areas for all organizations; and
- Advocate for humanitarian concerns.
- UNDAC Teams work to support the Government of the affected country, UN Resident Coordinator in country and the Emergency Relief Coordinator.

B.3.1. OCHA Primary Coordination Functions

In order to achieve strategic coordination, OCHA will typically provide the primary functions of: (1) operations/programme coordination and (2) information collection and dissemination. The following are the objectives for these primary functional responsibilities:

1. Operations/Programme Coordination
   Objective: Responsibility for facilitating a coordinated, comprehensive and coherent operation/programme of assistance to meet the humanitarian needs in the emergency situation

2. Information Collection/Dissemination
   Objective: Responsibility for collecting, compiling, analyzing, displaying and reporting on the general emergency situation, its consequences, resource need and availability, the response activities, the achievements, and the unmet needs.

B.3.2. OCHA Auxiliary Coordination Functions

In order to achieve operational coordination OCHA may need to provide certain auxiliary functions. These include: (1) telecommunications coordination, (2) logistics support and coordination, and (3) support for monitoring and implementation of security procedures. In regard to these functions, OCHA’s primary responsibility is to ensure that
these functions are being adequately performed. When it is clear that these areas are not adequately covered and the gap cannot be immediately filled by other entities, for example during the early stages of an emergency, OCHA may have to arrange to provide these auxiliary functions. It may also be determined that for various reasons a service, while provided by another agency e.g. WFP logistical support, will be most effective when co-located with the OCHA effort. The objectives for auxiliary functions are detailed below.

1. **Telecommunications Coordination**
   Objective: Responsibility for ensuring the creation, effective implementation and coordination of the necessary communication systems including planning, supervision of installation, and the management of communication networks among the UN agencies and, to the extent possible, the humanitarian assistance community in-country.

2. **Logistics Support/Coordination**
   Objective: Responsibility for facilitating sufficient logistical support to enable humanitarian assistance to be delivered in the most efficient manner possible. Coordinates and provides, when necessary, logistical support services.

3. **Security**
   Objective: Responsibility for supporting adequate preparedness and response to changing security situations, protection of personnel and assets under the authority of UNSECOORD and the Designated Official.

**B.3.3. Principal Field Coordination Activities**

OCHA staff will engage in the following activities when working to achieve the above listed goal and objectives.

**Assess**
A coordinated programme of assistance requires accurate and timely information on the humanitarian situation. This information must be regularly collected and analyzed. OCHA
is responsible for identifying areas for assessment and coordinating and supporting inter-organizational assessments; ensuring that all areas of possible assistance are assessed and that, to the extent possible, assessment teams do not duplicate each others work or leave important areas unassessed (see Chapter E)

**Plan**
Information collected on the humanitarian needs and programmes of assistance offered by various responding organizations must be shared and discussed by these organizations. OCHA is responsible for regularly convening the organizations to plan integrated and comprehensive interventions; facilitating agreement on the division of responsibility; and taking such actions as are necessary to ensure plans are updated and interventions implemented as envisaged in the plan(s).

**Mobilize**
The resources required to effectively respond to an emergency will be significant, and frequently fall outside of normal budgetary projections. OCHA is responsible for supporting the fund mobilization process, perhaps through the Consolidated Appeal Process (CAP). OCHA may also be required to mobilize personnel and material to support humanitarian assistance efforts.

**Direct**
In the early stages of a humanitarian emergency, especially a natural disaster with search and rescue requirements, OCHA will be responsible for identifying priority areas and directing international assistance providers to these areas, in support of national and local authorities.

**Monitor**
As the humanitarian emergency evolves, new areas of need will develop; some needs will be met or otherwise decrease in importance; and new providers will join the effort. OCHA is responsible for monitoring the emergency situation, needs and assistance provided to quickly identify emerging needs, gaps
and duplications in assistance, and the extent of programme accomplishments.

**Report**

OCHA is the principal organization through which information on the humanitarian situation is gathered and analyzed. OCHA is also, therefore, responsible for regularly communicating the results of the analysis to interested parties such as emergency responders, donors and the media, in the form of regular situation reports and briefings.

**Liaise**

An emergency situation of sufficient magnitude will be characterized by a large number of different entities, i.e., UN agencies, 10s and NGOs, providing humanitarian assistance. OCHA is responsible for ensuring that these organizations are linked with each other and with the overall effort. OCHA is, therefore, responsible for maintaining contact to promote integrated programming and regular and effective sharing of information.

**B.4. OCHA Country Level Coordination Structures**

**B.4.1. The OCHA Representative**

**UN Resident Coordinator**

In the great majority of countries where the UN system is present, overall coordination of UN activities falls primarily to the Resident Coordinator, in consultation with the relevant UN agencies. In most cases, the Resident Representative of the United Nations Development Programme (UNDP) is designated as the Resident Coordinator. The Resident Coordinator is responsible for coordinating UN humanitarian assistance. In the period before a natural or man-made disaster occurs, the Resident Coordinator coordinates preparedness and mitigation activities; monitors and provides early warning of potential emergency situations; leads contingency planning based on early warning monitoring; and chairs the UN Disaster Management Team (UN DMT). Unless otherwise
designated, once an emergency occurs, the Resident Coordinator will continue to lead and coordinate the UN inter-agency response. For the duration of the emergency he reports to the UN Emergency Relief Coordinator who is also USC of OCHA.

**Humanitarian Coordinator**

If an emergency becomes significant in size and/or complexity, the Emergency Relief Coordinator, in consultation with the UN agencies, may appoint a Humanitarian Coordinator. If the Resident Coordinator has the necessary skills, he/she will normally be designated the Humanitarian Coordinator. If not, either a new Resident Coordinator will be appointed to serve in both functions, or a separate Humanitarian Coordinator will be appointed. In countries where there is a significant risk of the occurrence of a complex or major emergency efforts will be made by the Administrator, UNDP, whether through specific training or accelerated rotation, to find a Resident Coordinator with an appropriate humanitarian profile. The Humanitarian Coordinator normally phases out once the emergency subsides.

**Lead Agency as Coordinator**

In instances where one UN agency is providing the overwhelming majority of UN humanitarian assistance, the IASC may designate this agency as Lead Agency and its representative as the Humanitarian Coordinator, acting under the Emergency Relief Coordinator’s authority and reporting to the Emergency Relief Coordinator on coordination matters.

**B.4.2. Field Coordination Unit**

During an emergency, OCHA is responsible for ensuring that the Resident/Humanitarian Coordinator receives the support required to carry out his/her responsibilities. In major or long running emergencies the Coordinator will need substantial assistance in the form of a core of experienced and energetic professional and support staff, and adequate logistical,
administrative and financial support. This may entail the establishment of a dedicated field coordination unit (FCU).

B.4.3. The Operations Coordination Centre

In situations combining a high number of humanitarian actors and a rapidly evolving emergency situation requiring a high degree of real time “operational coordination”, the OCHA field coordination activity may be organized in an Operations Coordination Centre. The Centre serves as the entity for the coordination of the operational activities undertaken by humanitarian organizations responding to the emergency, including the United Nations agencies, Government, and non-governmental organizations. It provides a clearly visible focal point and “meeting place” for interaction amongst the organizations carrying out or supporting the humanitarian response operation. The Centre focuses on the multi-sectoral overview of the situation, actors and response in the emergency. It ensures that sectoral coordination is integrated and presented within a plan for the overall humanitarian response, ideally through sectoral coordination carried out from the Centre by the agency designated responsible for a given sector.

In a natural disaster, the Centre will typically be known as an On-Site Operations and Coordination Centre (OSOCC) and be located at the disaster site. Field offices may be established at other locations affected by the emergency.

B.4.4. Regional Coordination Mechanism

In situations where the emergency is likely to, or already has, involved more than one country, the IASC and ERC may establish a Regional Coordination Mechanism of some kind. Operating under the supervision of the Emergency Relief Coordinator, a Regional Coordinator mechanism will have responsibility for facilitating congruence of country-specific policy on sub-regional humanitarian assistance issues,
including, where appropriate, standardization of agreement governing cross-border operations and providing logistical support including regional telecommunications networks. Examples of such a mechanism are Operation Lifeline Sudan, the Regional Humanitarian Coordinator for the Great Lakes Region.

B.4.5. Simultaneous Humanitarian, Security, and Development Operations

In some situations, the UN agencies in-country will simultaneously be involved with humanitarian, security, and development operations. In such cases there may be three separate and distinct reporting lines. Peace-keeping forces will be overseen by a Force Commander, humanitarian affairs by a Humanitarian Coordinator, and development activities by a Resident Coordinator. There may also be a Special Representative of the Secretary-General (SRSG).

An SRSG may be appointed to act on behalf of the UN SG in an emergency which is “complex or of exceptional magnitude” – normally one in which there are major political negotiations and/or when UN peace-keeping forces are deployed. An SRSG has overall responsibility for UN system-wide action and coordination. The OCHA Coordinator(s) has a dual reporting requirement to both the SRSG and the Emergency Relief Coordinator.

B.5. Coordination Fora

B.5.1. Local Authorities

In most emergencies, the main UN counterpart in-country is the national government. In most countries the government will appoint a special ministry or other entity charged with overall coordination of government humanitarian assistance, and with interacting with international assistance entities. When such a government coordination structure exists, this
will be an important counterpart for UN humanitarian coordination staff. Other government ministries that OCHA may liaise with include Foreign Affairs, Interior (normally encompassing the police and border control functions), Defence, and Civil Defence. The UNDAC team may at times be tasked to strengthen this capacity of the national Government.

At the field level, it is not unusual for local authorities, such as Regional Governors or local military commanders, to have considerable authority and some degree of independence from the capital. An important task of OCHA field level staff is to ensure that such authorities are well informed concerning the objectives, principles, and implementation of humanitarian assistance, both of the UN as well as the larger international system.

In complex emergencies, UN assistance may need to be provided to persons living in areas outside of the control of the national government, i.e., under the control of opposition groups. Opposition groups may have established their own coordination mechanisms and OCHA field staff must be able to work effectively with them.

B.5.2 United Nations Disaster Management Team

The UN General Assembly has mandated that a standing UN Disaster Management Team (UN DMT) be formed in every disaster/emergency-prone country. The DMT is chaired by the Resident Coordinator. Its composition is unique to each country depending on its special circumstances and normally includes representatives, if present in the country, from FAO, UNDP, UNICEF, WFP, WHO, and UNHCR.

The primary purpose of the UN DMT is to prepare and ensure a prompt, effective, and concerted response and promote coordinated UN assistance to the Government for post-emergency recovery. This does not supersede the mandates of its members. During an emergency, the DMT is the main in-
country mechanism by which UN agencies coordinate policies and programmes of humanitarian assistance.

B.5.3. Sectoral Coordination

The responsibility for coordination within the various response sectors of the emergency, e.g., health, women and children, refugees, sanitation, nutrition, etc. or specific geographical area, resides with the specific UN agency with that mandate. The agency with the appropriate mandate may find it desirable to establish a sectoral coordination mechanism. OCHA supports the activities of the sectoral coordinating agency. OCHA ensures that the operational actions within each sector are complimentary and integrated within the overall Plan of Action.

B.5.4. Military/Humanitarian Operations Interface

In countries which have a UN peace-keeping mission or other multi-national military presence it can be expected that such operations would have resources which can be of considerable value for the implementation of humanitarian operations. Apart from providing security to humanitarian operations, such resources as logistics, telecommunications, and engineering support such as road, bridge, and site preparation may be useful or essential.

A UN peace-keeping operation may typically have a humanitarian cell or other humanitarian liaison function. US military operations or US-led multi-national forces often have a Civil-Military Operations Centre (C-MOC) with humanitarian liaison as one of its responsibilities.

Ideally, such military liaison functions should work to support OCHA's coordination role. As the availability, type of resources, and expertise will differ in each situation, it is not possible to create a generic link between a Peace-keeping Operation and the OCHA coordination structure.
Organizational, the military support element can be limited to a position in a liaison cell or take up a more active position in other cells.

The military assets available for humanitarian activities should be integrated or at least linked to the OCHA coordination structure. However, it is important that the military liaison functions, if in the form of a humanitarian cell or C-MOC, act in support of and not parallel to or in front of a primary humanitarian coordination function. OCHA Geneva has a Military Civil Defence Coordination Unit (MCDU) which can assist in establishing a military - civilian interface.

**B.5.5. NGO Coordinating Councils**

In any given emergency there may be a large proliferation of NGOs. They may have organized themselves into NGO coordination bodies to meet their collective needs and integrate activities to maximize their impact. Such efforts may be organized by the International Council of Voluntary Agencies (ICVA), InterAction or other NGO umbrella organizations. The activities of these NGO Coordinating bodies should be integrated into OCHA's overall coordination effort.

**B.5.6. Donor Councils**

In some emergencies, donors may form a coordination body for their own benefit. These bodies are more likely to be created at the height of an emergency, when donors need information quickly and when, individually, they are not able to get reliable information. These efforts may be sustained during the rehabilitation and reconstruction phase as well.
B.6. Variations Between Natural Disasters and Complex Emergencies

While each emergency situation is unique, many aspects of the emergency environment and how the response is managed are the same in natural disasters and complex emergencies. Significant variations also exist and are detailed below. The terms disaster and emergency have generally, though not universally, accepted definitions (see glossary).

The Role of the National Government

“The sovereignty, territorial integrity and national unity of States must be fully respected in accordance with the Charter of the United Nations. In this context, humanitarian assistance should be provided with the consent of the affected country and in principle on the basis of an appeal by the affected country”

“Each State has the responsibility first and foremost to take care of the victims of natural disasters and other emergencies occurring on its territory. Hence, the affected State has the primary role in the initiation, organization, coordination, and implementation of humanitarian assistance within its territory”

These principles from GA Resolution 46/182 are fundamental to the UN system.

While for most natural disasters, the State is a willing and legitimate partner and must request international assistance. In complex emergencies, the legitimacy and territory of the State is under, often violent, dispute. In some situations a State, per se, may not exist. Even if it does exist it may have limited authority and capability.

This situation makes the adherence to the above principles problematic in complex emergencies. In these cases the commitment to the victims may supersede the commitment to the State. More likely, however, OCHA coordination efforts will need to acknowledge the legitimacy of competing authorities. Thus, OCHA may need to develop and maintain
effective relationships not only with the State but also with the antagonists and political opposition.

**Time Frame**

While the basic human needs for security, food, water, shelter and medical treatment are the same for beneficiaries in natural disasters and complex emergencies, the role of an UNDAC Team in a natural disaster will be circumscribed to a short period of time. In a natural disaster speed of response is critical and is measured in hours and days. This is especially so in an earthquake situation where trapped people are unlikely to survive more than 3-4 days unless rescued.

For most complex emergencies the OCHA presence and coordination mandate will need to be sustained over a longer period of time and needs created by the emergency will become chronic. This will inevitably affect the coordination approach and determine priorities.

**Donor Response**

In a natural disaster, donor response whether financial or in kind donor response is largely bilateral between the donor Government and affected Government. In this case coordination becomes even more difficult and the people responsible for coordination have to make a special effort to drawn donor governments and organisations into the coordination process. This is less of a challenge in complex emergencies since donor response is mostly through multilateral channels in such cases.

**The Role of the Military**

Using military assets for humanitarian needs in a complex emergency is a very political decision and has been opposed in the past in recipient countries e.g. Somalia. In a natural disaster it is far easier to use military assets for relief as there are fewer political implications to such use.
C. The United Nations Disaster Assessment and Coordination (UNDAC) System
C. UNITED NATIONS DISASTER ASSESSMENT AND COORDINATION (UNDAC) SYSTEM

C.1. Concept (p.1)
C.2. UNDAC Standard Terms of Reference (p.3)
C.3 The UNDAC Mission Cycle (p.4)
C.4 Skills needed from UNDAC members (p. 10)

C. 1. Concept

The UNDAC System is designed to assist in meeting international needs for early and qualified information during the first phase of a sudden-onset emergency and, when necessary, in the coordination of international relief operations at the site of the emergency. It also aims at strengthening national and regional disaster response capacity in disaster prone countries.

The UNDAC System consists of three components:

1. **Staff**
   OCHA Disaster Response officers together with professional and experienced emergency managers made available for UNDAC missions by their respective governments or organizations. All members of the UNDAC System have been specially trained and equipped for their task;

2. **Procedures**
   Predefined methods for the collection of information as well as structures for coordination support during the first phase of a sudden-onset emergency;

3. **Support**
   Systems to mobilize, deploy and support an UNDAC team in achieving its objectives in any emergency environment within the necessary time frame.

**Added Value**
An UNDAC Team works under the authority of the United Nations Resident/Humanitarian Coordinator and in support of the Government of the Disaster affected country and/or the
UN Resident Humanitarian Coordinator. It can be dispatched at very short notice at the occurrence or early warning of a sudden-onset emergency. The Team reinforces the office of the Resident/Humanitarian Coordinator or local Government with specialized knowledge in multi-sectoral emergency assessment and management. When required, an UNDAC Team can also be reinforced with experts covering specialized fields of disaster assessment and/or coordination. The UNDAC Team is generally self-sufficient when deployed to an emergency area.

**UNDAC Regional Teams**

In emergencies of mainly national or regional concern, UNDAC can draw upon is Regional Teams consisting of UNDAC members from the affected country/region. The first UNDAC Regional Team was established in Latin America in 1995 and a second in the South Pacific in 1996.

**Triggers for Mobilisation of the UNDAC Team**

Indicators triggering the mobilization of an UNDAC Team include:

**Natural Disasters.**
- The disaster causes serious casualties or destruction and it is unclear whether sufficient resources are available nationally to meet the immediate requirements of the emergency;
- Or the disaster causes major international concern even if resources to meet its consequences are available nationally; or there are catastrophic consequences to the environment

**Complex Emergencies.**
- The sudden onset, or change of intensity, of an emergency; and, absence of adequate resources in-situ required to provide structure and support for a new or strengthened coordination mechanism.

In each case, the deployment of an UNDAC team is decided by the Emergency Relief Coordinator (ERC) in consultation with the United Nations Resident/Humanitarian Coordinator and affected Government, as necessary. The Team normally stays in the affected area for the initial period and first phase of an emergency operation.
C.2. UNDAC Standard Terms of Reference

In sudden-onset emergencies, or in a sudden deterioration of the condition of an emergency, OCHA can decide to dispatch an UNDAC team under the authority of the joint memo of the UNDP Administrator/ERC of 26 March 1999 and para 9 of UNDP Assistant Administrators memo number UNDP/ADM/93/57 of 2 September 1993.

The following are standard terms of reference given to members of an international UNDAC team. They may be modified, depending on the requirements of the situation.

1. The UNDAC team is a tool provided by the ERC that will work in support, and under the authority, of the United Nations Resident/Humanitarian Coordinator (the Coordinator), or any other lead entity appointed by the United Nations Secretary-General.

2. The UNDAC team will cooperate closely with and support the national and local authorities of an affected country responsible for the emergency response as appropriate.

3. The UNDAC team will assist in the assessment of international relief requirements during the first phase of the emergency and, when necessary, in the coordination of international relief operations at the site of the emergency.

4. The UNDAC team will focus its activities on the on-site situation of an emergency and therefore, when possible, immediately upon arrival in the affected country seek the fastest means to travel to the affected area where it will act as a focal point of the United Nations in cooperation with UN agency representatives present.

5. In emergencies with a wide-spread geographical scope, the UNDAC team will be based in the office of the Coordinator and, as far as possible, cover areas of special interest to its mission through field-trips.

6. The UNDAC team will report to the Coordinator and inform him/her of the on-site situation and other information
which might, *inter alia*, be included in OCHA information distributed to disaster relief organizations and the international community.

7. When required, the UNDAC team will act as a catalyst in the establishment of an On-site Operations Coordination Centre (OSOCC) at the site of the emergency or, in emergencies with a wide-spread geographical scope, support a new or strengthened coordination mechanism within the office of the Coordinator.

8. The UNDAC team will assist the Resident/Humanitarian Coordinator in ensuring that regular reporting on the situation, needs and relief efforts is made to the United Nations Emergency Relief Coordinator. This will normally be through the Disaster Response Branch of OCHA Geneva.

9. The UNDAC team will maintain communication links with and report on the progress of its work to OCHA headquarters throughout the duration of the mission.

10. The UNDAC team is mobilised for a particular emergency primarily by utilising specialised emergency managers made temporarily available by member states of the UN. It is thus a temporary entity which is embodied for the emergency phase of a disaster only which normally lasts at most 2-3 weeks.

**C.3. The UNDAC Mission Cycle**

Given below is an outline of actions which an UNDAC member may be required to take during the various stages of a typical mission cycle commencing from preparation of the mission to lessons learned.

**1. UNDAC member’s Awareness (pre-mission info)**

- the international disaster environment (the consequences of floods, earthquakes, refugee movements, etc.)
- the key players (who are they) and their mandates
- international humanitarian law
- international resources for relevant information (e.g. web sites)
2. Personal preparation as an UNDAC team member

- vaccinations / medical
- family
- physical (pre-, during, & post-mission)
- kit (personal & UNDAC team equipment)
- state of readiness

3. UNDAC mobilization

- know the system:
  - step by step
  - forms and procedures
  - national / Geneva level
- contractual arrangements for:
  - insurance
  - liability
  - readiness
  - compensation
  - contracts
  - lengths of mission
  - Daily Subsistence Allowance (DSA)
  - certificate / documentation
- status as a “UN Expert On Mission”
- climatic conditions at disaster area
- arrangements for evacuation in the event of serious injury / illness
- arrangements / preparations for the possibility of death

4. Deployment

- terms of reference
- mission objectives (determined in consultation with UN Resident Coordinator and OCHA Geneva)
- briefing (mission, roles, expectations, methods of operation, briefing file, initial Plan of Action)
- team capability (members’ strengths and weaknesses, and collectively)
5. Arrival in country

- contacts (who, why)
- entry formalities (forms, telecommunications and IT equipment.)
- logistic practicalities(bills, transport, money, food etc.)
- select appropriate team profile level / visibility on entry
- marketing our services (using targeted literature, presentations, member profiles)
- identifying the key people and gaining their confidence as soon as possible
- establishing communication links (with the field, OCHA Geneva)

6. Orientation phase

- to dispel pre-conceived ideas and re-adjust objectives on facing reality
- beginning of the information management process which continues throughout
- identify the key issues, establish a clear aim / objectives and then stay focussed
- although missions are short, look at transition (short - medium - long term), i.e. what happens after the UNDAC missions and plan the exit strategy now
- win Resident Coordinator’s / other key players’ (govt, UN agencies) confidence and manage their expectations
- get a feeling for the security situation

7. Plan of action

- why a plan of action / who with
- contents (times, objectives, etc.)
- states clearly to the team and to outsiders what UNDAC is doing in the country ?
- gives mission focus, i.e. facilitating inter-agency coordination or more in support of bilateral relief / teams
8. Execution

a) Assist and work under the UN Resident Coordinator:
- who is / what is Resident / Humanitarian Coordinator
- their Term of Reference (TOR) and roles in specific disaster situations
- ERC responsibility, role, power etc.

b) Participate in the DMT:
- what is it / who sits in it
- how is it supposed to work
- its responsibility vis-à-vis the affected country
- as an effective platform for coordination (yes in theory, but in practice?)

c) Provide cross sectoral support to information and response coordination:
- what do these things mean (i.e. what are the tasks / activities they imply)
- how do we accomplish these things tasks / activities
- identify and obtain the support we require (Govt. Service Packages / Military and Civil Defence Assets (MCDA))

d) Participate in joint assessment (of situation, response & relief needs):
- know the characteristics and needs of other stakeholders in assessment
- where, when & how to carry out joint assessment
- how UNDAC can best support the joint assessment
- how to achieve consistency of assessment information
- how to prioritize needs and act as an arbiter between stakeholders
- how to identify gaps, overlaps, and inefficient or weak response
- how to present assessment findings

But assessment in the UNDAC context is more than just survey and reporting, it is the whole Information Management cycle:
- define priority information requirements
- collect the relevant information
- collate the information collected
- consolidate and organise the information
- analyse the collate and consolidated information
- make recommended courses of action, for decision-makers
- report and disseminate the findings and recommendations, as appropriate

e) Coordination:
- who are the major players?
- what are their expressed intentions, & their possible agendas?
- what does coordination mean to different people / agencies?
- is there a “main plan” or model for coordination & is it workable
- identify possible conflicts of interest
- what is working in this situation & what isn’t?
- identify and analyse existing coordination fora for strengths / weaknesses
- practice (i.e. group exercises) in “coordination” in a range of different scenarios requiring various different levels of coordination from the “welcome, have a cup of tea” office, through to the full-blown OSOCC required for complex emergencies

f) Sitreps:
- what are they, who are their audience and what is their purpose?
- how are they configured & what they should / should not contain?
- how are they prepared (dos and don’t’s)
- what is the UNDAC role in preparing them?
- what happens to them in Geneva?
- practise good sitrep producing skills (by reading, writing & critiquing them)

g) Appeals
- what are they, who are their audience and what is their purpose?
- when to do them, when not to (they should be
generated in-country / be joint)

• how are they configured & what they should / should not contain
• what is the extent of UNDAC’s (supporting role) in their preparation
• how they are implemented in the country, & what happens to them in Geneva
• practise good appeal producing skills (by reading, writing & critiquing them)

h) Maintain links with the DRB desk / FCSU (i.e. the Standard Operating Procedures (SOPs) for):
   • keeping in contact
   • reporting
   • movement
   • personnel, etc.

9. Consolidation Phase

• an open discussion; “are we on the right track?”
• are the right people doing the right jobs
• are team members getting the support they need
• analyse distribution of work load (do we need to rotate?)

10. UNDAC team Disengagement (pulling-out) Phase

• exit strategies (must be integral to the team’s entry strategies, i.e. in the Plan of Action)
• clarify to partners that UNDAC is not there for ever, but just a stage in a longer process
• who makes the decision, based on what, clearances and needs
• indicators for withdrawal
• full or partial pull-out, who to handover functions to
• ensure systems are in place to avoid total breakdown of structures the team set-up
• what equipment stays behind (i.e. is left for counterparts to continue using)
• bring in other resources / counterparts / agencies earlier, to facilitate hand-over
• “shadowing” by local counterparts from the start of the mission, to build capacity
11. Geneva debrief

- with whom (involve the whole team?)
- type of debrief / format / presentation
- keep in-house to improve the system (i.e. with confidentiality) and / or open to promote transparency and confidence in the UNDAC system?
- when (how soon after the mission end: an immediate “post mission” unburdening of the team members and / or a later follow-up of members’ mental & physical states?)

Lessons learned from the Mission

- for “closing the loop”
- a corrective action process to improve practise / rectify problems
- a way of marketing our services (“continuous improvement” for future missions)
- providing feed-back to team members about the corrective action process
- mission reports: their purpose, audience (the UNDAC Team & focal points, the UN team in country, the national govt., OCHA desks, donors?)
- a standardised format for reports, and approach to their production on mission
- how big (i.e. how much time and effort should be expended on them?)

C.4. Skills needed from UNDAC members

Introduction

This section attempts to break a typical UNDAC mission cycle into its inherent sequential components and analyse the knowledge an UNDAC member needs or various actions he/she may be called upon to perform at each stage of the mission. It should provide UNDAC members with a check list that allows them to anticipate the next steps they may need to take during a mission. Not all the actions listed here are applicable all the time and this is primarily meant to be a guide for the UNDAC members discretionary use.
Core UNDAC Skills

Skills needed for UNDAC missions

- planning
  - meetings (chairing, recording, participating)
- briefing
  - security awareness
  - cultural awareness
- negotiation (with authorities, UN)
- first aid
- use of modern telecoms
- information technology
- time management
- team maintenance
- personal administration
- presentation (graphical display of info)

- writing (briefs, reports)

> we cannot really influence an individual’s qualities on short UNDAC courses, therefore we must refine the selection process (NB not just the selection criteria)
> we can train some skills on relatively short courses but not others, therefore prospective members must come to the courses already equipped with certain skills
> we can impart the specific knowledge to function effectively on UNDAC missions through short courses, so this should be the emphasis of our course contents
D. Mobilization and Mission
D. MOBILIZATION AND MISSION

D.1. Standard Mobilization Procedure (p.2)
  D. 1.1. Mobilization (p.2)
  D. 1.2. Stand Down (p.4)
  D. 1.3. Termination of Mission (p.5)
  D. 1.4. Test (p.5)

D.2. Personal Preparedness (p.6)
  D.2.1. Documents (p.6)
  D.2.2. Personal and Team Items (p.6)
  D.2.3. Vaccinations (p.9)
  D.2.4. Team Leader Checklist (p. 9)

D.3. Collection of Baseline Data (p. 10)
  D.3.1. UNDAC Briefing File (p. 10)
  D.3.2. Additional Information (p. 11)

D.4. International Travel (p. 11)

D.5. Plan of Action (p. 13)
  D.5.1. Content (p.13)
  D.5.2. Operations Briefing (p. 16)

D.6. Arrival and First Steps (p. 16)
  D.6.1 Initial Briefing by the UNDAC team to
       the UN Coordinator or DMT (p. 19)

D.7. Mission Support (p.21)

D.8. Radio Communications Procedures (p.21)
  D.8.1. Preparing the Set (p.22)
  D.8.2. Transmitting (p.22)

D.9. Safety and Security (p.30)
  D.9.1. United Nations Security (p.31)
  D.9.2. Team Safety/Security (p.35)
  D.9.3. Personal Safety/Security (p.39)
  D.9.4. Mines Precautions (p.4 1)
  D.9.5. Evacuation Plan (p.45)

D.10. Medical Evacuation (p.45)
  D. 10.1 Injury or death of an UNDAC member
       (p.47)

D.11. Mission End (p.47)
  D. 11.1. In-Country (p.47)
  D. 11.2. DHA-Geneva (p.48)

D.12. Mission Report (p.50)

Annex -Letter of 26 April 1999 issued by the
Emergency Relief Coordinator and the UNDP
D.1. Standard Mobilizing Procedure

Mobilization of an UNDAC team will be commenced on the occurrence, or early warning, of a sudden-onset natural disaster in which early information indicates that an UNDAC team might be needed. The mobilization will follow a pre-set routine in 4 phases: 1) Information, 2) Alert, 3) Stand-by, and 4) Dispatch. The UNDAC mobilization procedure can be interrupted at any time by the transmission of a Stand-down message (M3 b).

Two telephone numbers designated for communications with OCHA-Geneva will be used during the mobilization of an UNDAC team:

Facsimile: +41 (22) 917-0023
Telephone: +41 (22) 917-1600

D.1.1. Mobilization

Information (M. 0)
1. When a large emergency occurs, OCHA-Geneva (FCSU) can send an information message (MO) to the National Mobilization Centre of all countries participating in UNDAC.

2. No confirmation or other reply need be sent to OCHA-Geneva.

3. An information message will not automatically trigger other UNDAC messages.

Alert (MI)
1. OCHA-Geneva sends an alert message (MI) to the National Mobilizing Centre of all countries participating in UNDAC. An alert message need not be preceded by an information message.
2. The National Mobilizing Centres pass the message, by prearranged means of communication, to the UNDAC stand-by team members.

3. The National Mobilizing Centres copy the alert message to the national authority responsible for UNDAC.

4. The members confirm receipt of the alert message to the National Mobilizing Centres.

5. The members reply directly to OCHA-Geneva (M 1 -reply), indicating their availability, contact point, the airport closest to their present location and the earliest time they can be at the airport ready for departure to the disaster site.

**Stand-by (M. 2)**

6. OCHA-Geneva, depending on the magnitude and type of disaster, selects an UNDAC team from amongst UNDAC members who have indicated they are available for mission.

7. OCHA-Geneva sends a stand-by message (M2) to the National Mobilizing Centres, indicating the names of the selected members.

8. The National Mobilizing Centres pass this information to all members and to the national authority responsible for UNDAC.

9. The selected members confirm receipt of the stand-by message to the National Mobilizing Centres and also directly to OCHA-Geneva.

10. The selected members prepare for their departure.

**Dispatch (M.3a)**

11. OCHA-Geneva, in light of the development of the disaster situation, makes the decision to dispatch an UNDAC team.

12. OCHA-Geneva makes flight reservations for the selected members and arranges for the issuing of pre-paid tickets to be collected by the selected members at the airports of their
departure.

13. OCHA-Geneva takes out insurance covering medical evacuation for all selected members (see Chapter C.10, for more details of coverage, etc). NOTE, all other necessary insurance is the responsibility of the selected member or his government/organization.

14. OCHA-Geneva sends a dispatch message (M3a) to the National Mobilizing Centres, stating its decision to dispatch a team and including travel arrangements for each selected member.

15. The National Mobilizing Centres immediately inform the selected members of OCHA-Geneva’s decision.

16. The National Mobilizing Centres inform also the national authority responsible for UNDAC as well as non-selected members of OCHA-Geneva’s decision.

17. The selected members confirm receipt of the dispatch message to OCHA-Geneva and to the National Mobilizing Centre.

18. The selected members depart for the UNDAC mission.

D.1.2. Stand-down (M.3b)

1. OCHA-Geneva, in light of the development of the disaster situation, makes the decision to stand-down the UNDAC team.

2. OCHA-Geneva sends a stand-down message (M3b) to all National Mobilizing Centres.

3. The National Mobilizing Centres pass the message to all members as well as to the national authority responsible for UNDAC.

4. All members confirm receipt of the stand-down message to
the National Mobilizing Centre and directly to OCHA-Geneva.

D. 1.3. Termination of Mission

1. Once an UNDAC team is in country and has completed its mission, the decision to terminate the UNDAC team’s mission is taken by OCHA Geneva in consultation with the Resident/Humanitarian Coordinator and the Team Leader.

D.1.4. Test (M.1-test and M.2-test)

The above mobilization procedures will be tested at regular intervals (quarterly). The test will follow the procedure described below:

1. OCHA-Geneva sends a test message (M.1-test) to the National Mobilizing Centre of all countries participating in UNDAC.

2. The National Mobilizing Centres pass the message, by prearranged means of communications, to the members.

3. The National Mobilizing Centres copy the test message to the national authority responsible for UNDAC.

4. The members reply directly to OCHA-Geneva (M.1-test).

5. OCHA-Geneva sends a response message (M.2-test) to the National Mobilizing Centre, listing the members that responded and indicating the time their replies were received at OCHA-Geneva.

6. The National Mobilizing Centre informs the national authority responsible for UNDAC of the results of the test.

7. End of test.
D.2. Personal Preparedness Checklist

Clothing and equipment requirements for an UNDAC mission will vary according to the location of the disaster, the climate and culture of the affected area, the season, extent of damage, and other factors. Team members are expected to maintain a high level of readiness to allow them to leave on mission at very short notice and to be fully independent throughout the mission with regard to clothing and personal effects.

Items below marked with an asterisk are part of the UNDAC standard equipment issue.

D.2.1. Documents

1. Passport and extra passport photos (6), with copies of the passport
2. International certificate of vaccinations, with copies of the certificate
3. International driving licence, with copies of the license
4. Credit cards, traveller’s checks, foreign currency (including US dollars in small denominations)
5. Clipboard, paper, pens, pencils

D.2.2. Personal and Team Items

**General**

1. Food and liquid for the first 72 hours of the mission (in case none is initially available)
2. * Rucksack
3. Clothing (at least 2 changes), underwear and sturdy walking shoes appropriate for the location, elevation, time of year and expected duration of the mission (normally less than two weeks)
4. Jacket and tie (for meetings with local officials as appropriate. Female UNDAC members to have appropriate clothing)
5. * Rain gear (jacket and trousers)
6. * Sleeping bag
7. * Foam mattress
8. Extra pair of glasses (contact lenses are not recommended)
9. 2 pairs of sunglasses (you can easily lose a pair)
10. UNDAC identification kit (vest, arm-badge and field cap)
11. Dust masks
12. Lightweight stove and one litre bottle for fuel (empty for air transport)
13. Mug, plate, eating utensils
14. Toilet articles
15. Toilet paper
16. Ear plugs
17. Flashlight with spare bulb and batteries
18. Pocket knife (Swiss army model)
19. Sewing kit
20. Shoe/Boot polish and brushes
21. Washing powder (usable in cold water)
22. Ball of string
23. Plastic bags
24. Matches
25. Candles
26. Universal adaptors for telecommunication equipment
27. Canteen

Warm Weather
1. Mosquito net
2. Cool boots/shoes

Remember that short sleeves and shorts may not be culturally acceptable in some countries.

Cold Weather
1. Winter jacket and over trousers
2. Warm boots (water-resistant)
3. Heavy socks, gloves, thermal underwear and warm hat

Medical/Health
See also Chapter L. Personal Health.

1. First-aid kit including:
   - wash swabs
   - dry swabs
   - assorted bandages
- gauze roller bandage
- first-aid rescue sheet
- protective gloves
- respiratory sheet
- cleansing swabs
- scissors

2.* Standard WHO health kit including:
- antibiotic tablets
- rehydration salts
- diarsed (against diarrhoea)
- anti-inflammatory cream
- malaria prophylactics
- prevention of mycosis (powder and cream)
- insect repellent
- insecticide powder
- single-use disposable syringes and needles

3. Over-the-counter painkillers
4. Prescription medicine for expected length of stay
5. Water purification tablets or drops
6. Sun screen (15 or higher)
7. Lip salve
8. Certificate of blood type

Optional
1. Camera and film
2. Compass
3. Alarm clock
4. Micro-cassette recorder
5. Pocket-size binoculars
6. Electrical adapters for appliances
7. Tobacco
8. “Dog Tag” with name, nationality and blood type

Items Included in Various UNDAC Mission Support Equipment
The UNDAC mission support kits are stored at OCHA-Geneva and will be deployed with OCHA-Geneva members of an UNDAC mission as judged necessary:
1. Telecommunications equipment (see Chapter G)
2. Global Positioning System (GPS)
3. Emergency office kit (see Chapter G)
4. Car flags
Dr2.3. Vaccinations

UNDAC stand-by team members should have their vaccinations up to date and registered in an international certificate of vaccination (WHO standard recommended). It is unlikely that there will be time to arrange for vaccinations before departure. More information on personal hygiene in tropical areas and vaccinations is to be found in the chapter on health and in the brochure included in the WHO health kit.

1. Vaccination against yellow fever is required by some countries for entry into their territory, in accordance with international health regulations, depending on the traveller’s point of departure and itinerary.

2. Certain vaccinations are recommended:
   - Tetanus
   - Polio
   - Hepatitis A
   - Hepatitis B
   - Typhoid
   - Meningitis

D.2.4. Team Leader Checklist

1. Where to meet the team
2. Prepare briefing file
3. Prepare specific items for team briefing
4. Travel authorizations
5. Team member contracts
6. Visas
7. UN certificates
8. Press pack - OCHA/DRB/FCSU pamphlets and handouts
9. SOS passport
10. Team member traveller’s checks
11. UNDAC team equipment
12. Customs papers for UNDAC team equipment
13. Insurance for equipment carried
14. List of contact points (addresses, telephone numbers, etc.)
15. Preliminary division of roles/responsibilities of team members
D.3. Collection of Baseline Data

Prior to the departure of the UNDAC team, it is essential to collect all available relevant data which could be useful for the successful performance of the mission. As it will not be possible to brief all team members in Geneva, the Desk Officer, together with the OCHA team leader, will collect all relevant data in a BRIEFING FILE for the UNDAC team members. This will be done during the mobilization phase of an UNDAC team.

D.3.1. The UNDAC Briefing File

The contents of the Briefing File shown below include a variety of possible information. Additional material can be added, as appropriate.

Contents

1. The Situation
   - Information/Situation Reports on the disaster
   - Field Situation Reports
   - Latest Reuters reports
   - Other information, e.g. IFRC reports, etc.

2. Country Information
   - Country profile
   - Other available information on the country, e.g. Statesman’s Yearbook
   - Media reports

3. Maps
   - Map covering the whole country
   - Map covering the affected area (large scale)

4. Correspondence
   - Request for assistance
   - Announcement to UN Resident Coordinator of UNDAC team’s arrival
   - Latest information on contributions, pledges, OCHA emergency grant, etc.

5. Reference Materiel
   - OCHA/DRB Information Sheet
   - Reports on previous disasters in the area
   - List of goods available at the Pisa warehouse
6. Forms
- Fax forms
- Standard Survey forms
- Contact Point forms
- Log forms

D.3.2. Additional Information (carried by the team leader)

1. General
- Terms of Reference
- Travel Authorizations
- UN Certificates
- Travel advance
- SOS passport

2. List of Contact Points
- UN Offices in the country
- Possible contacts in the capital (ministries, embassies, NGO’s, hotels, travel agencies, etc.)
- Telephone/fax list of OCHA-Geneva/New York staff (including home numbers)

3. List of Equipment
- Telecommunications equipment
- Office equipment
- Other equipment

D.4. International Travel

Travel documents
For travellers departing from points other than OCHA headquarters, the ticket for international travel will normally be issued by the airline at the airport of departure. If, for any reason, the ticket should not be available, UNDAC members should contact OCHA immediately. Travellers should go to the airport as early as possible to have a margin for any problems with the departure arrangements. In addition to the ticket, the following documents should be carried by the traveller: national passport, international vaccination certificate and international drivers license.

An attestation will be faxed to all members of the mission
with the UNDAC dispatch message, stating that the traveller is travelling on an official United Nations relief mission and that visas, if required, will be issued on arrival through the local United Nations representative. The attestation also requests assistance in facilitating the journey of the team member.

Money
In UNDAC missions, subsistence allowance for all team members who do not depart from OCHA headquarters, will be carried by the team leader in the form of travellers cheques for hand-over at the marshalling point. In addition to the subsistence allowance, all travellers are strongly advised to carry sufficient means for the initial period of the mission. All travellers are also advised to carry cash in small denominations, to a limit acceptable for security reasons (determined by the traveller), in a currency acceptable in the affected country (usually U.S. dollars or other major international currencies). Travellers should bear in mind that in certain situations it is not possible to transform travellers cheques or credits in cash after arrival in the affected country and should therefore arrange for this before departure.

Marshalling
Whenever possible, OCHA will try to marshal the team at a point before arrival in the affected country. This will usually be a major international hub from which the members of the team will continue the journey to the affected country together. If it is not possible to marshal the team before arrival in the affected country, the first entry point will usually be used as the marshalling point.

Travel
When travelling, it is important that the team members take the opportunity to get as much rest as possible as they will be expected to take up work immediately upon arrival in the affected country. Should anything unforeseen occur during the journey, such as missing a flight connection, OCHA should be informed immediately.

Luggage
As the journey to the affected country may involve several
flight changes, members should pack their equipment in a way that they can carry on-board the most vital items to allow them to function after arrival. It is recommended that the normal entitlements for hand-luggage are used to the maximum.

D.5. Plan of Action

An UNDAC mission plan of action should be established as early as possible in the mission. The plan of action should reflect the information available on the emergency, the mission objectives and the planned activities of the UNDAC team given its constitution and means available. The UNDAC team leader is responsible for creating the plan of action. The team leader should use the competence of the members of the team in developing the plan. The team leader is also responsible for informing OCHA and the UN Resident/Humanitarian Coordinator of the plan of action and any changes to it as they occur.

All members of the team should be briefed on the plan of action at the first possible opportunity, e.g. at the team marshalling point, even if the plan at this stage only provides a brief mission operating envelope due to a lack of information on the emergency and in-country situation. All members of the team should be informed of any changes to the plan as it develops.

D.5.1 Content

The following points should be addressed in the plan of action:

- Situation
- Mission objectives
- In-country counterparts
- Team organization
- Programme of work
- Logistics and resources
- Mission support
- Communications
• Safety and security
• Dealing with the International/local Media

Situation should include known information on the disaster event, damage, national response, international response and projected developments in the emergency situation including secondary risks.

Mission Objectives should reflect the general UNDAC terms of reference and include the specific objectives of the mission based on the directions of the ERC, the emergency situation and in-country support requirements. The mission objectives should indicate the main focus of the mission e.g. assessment, coordination, information management, establishment of support structures (OSOCC), liaison, etc; and the expected base of the mission, e.g. in the capital with field trips, or at the emergency site with liaison in the capital. Mission objectives should also include an estimation of the duration of the mission.

In-country Counterparts should name the United Nations Resident/Humanitarian Coordinator, under whose authority the team will work in the affected country, as well as other important counterparts within the UN system e.g. in country Disaster Management Team (DMT) and the national emergency management authority. One of the first tasks of an UNDAC team would be to brief the UN Resident Coordinator/DMT on the team’s capabilities. An outline of points to be covered while briefing the DMT is at page

Team Organization should include the organization of the team in sub-components depending on the mission objectives and programme of work as well as the assignment of individual responsibilities amongst the team members. A basic team structure should include responsibilities for information (assessment and reporting), operations (liaison with disaster responders), logistics (transport, board and lodging) and support (administration and telecommunications). Team organization should also include the assignment of field and capital responsibilities as well as a decision on where the team will be based for its work (UNDP, hotel, field location, etc).
**Programme of Work** should include a description (in as much detail as possible) of the activities planned in order to achieve the mission objectives, the relation between these activities and the time frame for their execution (early in the mission, it may only be possible to indicate a desirable start time for the individual activities).

**Logistics and Resources** should include information on logistical arrangements in place for, or required by, the team such as accommodation and transport as well as resources available to the team such as telecommunications equipment and mission support kits e.g. office kit. Logistics and resources should also include financial resources available for relief activities, such as the OCHA emergency grant.

**Mission Support** should include information on measures in place to backstop the mission from OCHA headquarters as well as information on the OCHA desk/team managing the emergency at headquarters.

**Communications** should include instruction on reporting between the UNDAC team and OCHA headquarters (for the ERC) as well as between UNDAC field teams and the Resident/Humanitarian Coordinator in the capital. (The first report to OCHA headquarters should always be sent as early as possible after arrival in the affected country.) Thereafter, if circumstances permit, the team should send a daily Situation Report for the benefit of the Emergency Relief Coordinator. If the team is using radio communications equipment (VHF or HF) communications should also include frequencies to be used, individual call signs, times for contacts between the base and field teams and, when appropriate, communications restrictions due to security concerns. For further reference on reporting see chapter G.

**Safety and Security** should include information on safety and security concerns in the affected country and at the disaster site. Safety and security should also include instructions for team movements (e.g. buddy system, reporting) and identification. For further reference on safety and security see chapter D.9.
Dealing with the International/local Media In the current environment of instant communications/TV coverage, the UNDAC team must decide on their strategy to deal with international and national media. The team should nominate a spokesperson for the international media (normally the team leader). These may be a need to nominate a different spokesperson for the national media if the team leader is not fluent in the language spoken at the emergency site. This does not preclude any Team member answering media questions if the spokesperson is not available. At the daily operations briefing, the team should decide on the points to be made to the media. Normally it is best to be truthful, conservative and mindful of national sensitivities. See Section G.7.2 for further details.

D.5.2. Operations briefing

An operations briefing should be given to the team each day. The operations briefing should reflect changes in the Plan of Action and the immediate work planned for the day and coming period. The operations briefing should include:

- New developments in the situation
- Any changes to the objectives of the mission
- Daily work programme
- Any changes to team organization and individual assignments
- Team movements
- Resources available/needed
- Instructions on communications
- Update on safety and security

D.6. Arrival and First Steps

Immigration and Customs: Immediately upon arrival in the affected country, the team should proceed through the necessary immigration procedures and customs clearance. Depending on the situation in-country, some of the equipment such as satellite telecommunications may have to be declared at the entry. An instruction to this effect should normally
have been given to the team leader before departure after consultation with the Resident/Humanitarian Coordinator. If no instruction has been given, it is assumed that no customs clearance is required. The Resident/Humanitarian Coordinator is always informed of the communications equipment carried by the team and should normally make the necessary arrangements with the affected country for the equipment to be entered.

**First Contact:** If the team arrives in the capital, or at a point where the UN Resident/Humanitarian Coordinator is represented, the team should normally be met at the airport and taken to its first point of contact in the affected country. However, this may not always be the case. If the team is not met at the airport, depending on the situation, one of the following courses of action is recommended: 1) contact the Resident/Humanitarian Coordinator by telephone and ask for instructions; 2) arrange for local transport to the office of the Resident/Humanitarian Coordinator or, outside office hours, to a hotel where the team can establish base; 3) contact OCHA and ask for instructions. If the team arrives at a point where there is no representation of the UN Resident/Humanitarian Coordinator, the team should proceed immediately with establishing the team base. One of the first actions the team should undertake is to brief the UN Resident Coordinator/DMT on its capabilities. An outline briefing is at D.6.1.

**Establish Team Base:** In the capital the team base will normally be the office of the Resident/Humanitarian Coordinator. If this proves impractical, in consultation with the Coordinator and OCHA, the team may have to establish a base outside the office of the Resident/Humanitarian Coordinator. This could be at a hotel or in the office of a national authority. If the team arrives directly at an emergency site where the Resident/Humanitarian Coordinator is not represented, the team should proceed to identify a base such as a hotel, office or other location from which it can operate.

**First Report:** Immediately upon identifying the team base, the team should communicate its coordinates to OCHA.
together with known information on the emergency and planned activities.

Establish Priorities: Following the first contact with the Resident/Humanitarian Coordinator and reporting back to OCHA, the team should establish or alternatively revise its immediate priorities in the light of the information available on the emergency and the options open to the team. The Priorities should include action on:

Field Trip: If the team has arrived in the capital or outside the immediately affected area, a decision should be taken on how the team can proceed without delay to the affected area to commence its assessment and, if required, on-site coordination activities.

Identify Key Contacts - Capital: These include: 1) the UN Disaster Management Team; 2) the national authority in charge of the emergency response and 3) the national authority in charge of international relief if not the same as 2; 4) key diplomatic missions representing the countries most likely to respond to the emergency; 5) international humanitarian organizations including NGOs represented in the country; 6) national humanitarian organizations; and 7) international responders arriving in the country.

Identify Key Contacts - Field: These include: 1) United Nations Agencies represented at the site; 2) local authorities in charge of the emergency response; and 3) international organizations already present at the site; 4) national relief organizations represented at the site; and 5) international relief organizations/teams arriving in response to the emergency.

Identify Relief Entry Point: The team should identify the most likely arrival point of international relief and decide whether to establish a reception centre at this point.

Operations Briefing: At this time the Plan of Action should be revisited and the organization of the team, programme of work and individual assignments within the team be adjusted and communicated in an Operations Briefing (see Chapter
D.6.1 Initial Briefing by the UNDAC Team to the UN Resident Coordinator of DMT

General
1. The initial briefing by the UNDAC team to the UN Resident Coordinator/DMT is extremely important as it is the initial opportunity provided for the UNDAC team to establish its role, usefulness and credibility. Remember the UNDAC team is a team of specialist emergency managers not generalists.

Preparation for the Briefing
2. A well prepared briefing is an indication of professionalism. The following preparation should be made by the UNDAC team.
   - Decide on who is to give the briefing - normally the team leader
   - Decide on who will answer specialised questions - based on specialities of UNDAC team members
   - Prepare an outline briefing - short, relevant and to the point (see below)
   - Prepare sufficient copies of the following documents to hand out:
     - Brief Cvs of team members
     - Terms of Reference of the UNDAC team
     - A list of members/missions undertaken by the UNDAC team since 1993
     - An outline Plan of Action (if ready)
     - Business cards for UNDAC team members
   - Make the effort to find out as to who are the members of the DMT and what organisations they represent

Aspects to be covered during the Briefing
5. The following should be covered by the team during the briefing.
   - A short background of the UNDAC System.
     (hand over list of missions/member countries and standard Terms of Reference)
   - A short brief on each member’s experience
The value added tasks that the UNDAC team can undertake in support of the DMT include:

- Overall information management for DMT
- Establish link with NGOs
- Establish link with donors
- Establish functional relationship with Government emergency management body
- Establish coordination link with foreign military assets
- Establish a UN modal point for all disaster related operations on behalf of DMT
- Organise and conduct multisectoral assessment

If prepared, a short list outline of the Plan of Action prepared by the UNDAC team including how to establish a close working relationship with the local authorities.

(When meeting with DMT is not at beginning of mission)

- A short briefing on the SAR OSOCC if it is a sudden earthquake emergency
- A summary of funding/Appeal instruments the team can assist with

**Do's and Don'ts while briefing the DMT/Resident Coordinator**

**6. Do**

- Emphasise the fact that the UNDAC team is there to help the DMT by enhancing its capacity to deal with the emergency
- Emphasise that the UNDAC team is a specialist emergency management tool sent by the ERC to assist
- State the team is not itself involved in running relief programmes so is perceived to be neutral by donors and NGOs
- State the team will assist in credibility of fund raising at the international level
- Emphasise that the UNDAC team is self sufficient and will not divest resources from DMT members.

**7. Don’t**

- Have more than one team member talk simultaneously
- Show signs of impatience or irritation
- Make commitments on behalf of OCHA
- Discuss financing to be provided by OCHA unless you are sure of it.
D.7. Mission Support

Mission support will be provided mainly through the Office of the UN Resident/Humanitarian Coordinator and will include arrangements for entry to the affected country, accommodation, in-country transport and liaison with national and local officials. According to the UNDP administrative instruction 93/57 issued on 3 September 1993 regarding cooperation between UNDP and UN Department of Humanitarian Affairs “the resident coordinator will provide support to a OCHA team” sent to “strengthen and assist the resident coordinator and DMT and the local emergency management authorities in identifying needs for international disaster relief assistance, as well as, when necessary, coordinating the work of international relief teams arriving at the actual site of the disaster.” OCHA being the successor organisation to DHA, this still applies as has been confirmed by joint memo of 26 April 1999 issued by the Emergency Relief Coordinator and the UNDP Administrator (see Annex).

OCHA will normally authorize the Resident/Humanitarian Coordinator to incur expenditures up to a given limit on behalf of OCHA for inter alia the cost of in-country travel (including rental of vehicles if required) and hiring of local staff (drivers and interpreters as required). The UNDAC team leader will be informed of the amount authorized in each given case. Normally he/she should carry the authorisation letter from Geneva. Mission support will also be provided directly by OCHA as required.

D.8. Radio Communications Procedures

The following is an overview of radio communications procedures that, when followed, will minimize radio time, make radio time more effective, and reduce mis-interpretation of radio messages. These procedures should always be followed by the UNDAC team. It is important that all user of the radio net at all times keep a strict radio discipline.
D.8.1. Preparing the Set for Operation

- Make sure that there is a power source, that it is sufficient and ensure correct connection to the radio set.
- Check the antenna and all cable assemblies ensuring tight and correct connection to all sets.
- Connect the audio accessories, and check proper operation of function switches.

D.8.2. Transmitting

- Decide what you are going to say ensuring it will be clear and brief.
- Make sure no-one else is speaking on the net when you start.
- Remember to divide your message into sensible phrases, make pauses and maintain a natural rhythm to your speech.
- Avoid excessive calling and unofficial transmissions.
- When ready to transmit, push the transmission key and wait a second before speaking. When finishing transmitting, wait a second before releasing the key.
- Use standard pronunciation. Emphasize vowels sufficiently. Avoid extremes of high pitch, speak in a moderately strong voice, do not shout.
- Keep a distance of about 5 cm between the microphone and your lips. Shield your microphone from background noises.

**Phonetic Alphabet and Numbering**

*Phonetic Alphabet*

- A - ALPHA
- B - BRAVO
- C - CHARLIE
- D - DELTA
- E - ECHO
- F - FOXTROT
- G - GOLF
- H - HOTEL
- I - INDIA
- J - JULIET
- K - KILO
- L - LIMA
- M - MIKE
- N - NOVEMBER
- O - OSCAR
- P - PAPA
- Q - QUEBEC
- R - ROMEO
- S - SIERRA
- T - TANGO
- U - UNIFORM
V - VICTOR
x - X-RAY
y - YANKEE
z - ZULU

**Numbering**

0 - ZERO
1 - WUN
2 - TOO
3 - THUH-REE
4 - FO-WER
5 - FI-YIV
6 - SIX
7 - SEVEN
8 - ATE
9 - NINER

In general, numbers are transmitted digit by digit except that exact multiples of hundreds and thousands are spoken as such. Some examples of pronunciation of numbers can be seen below:

12 - TWELVE
44 - FO-WER FO-FOWER
90 - NINER ZERO
136 - WUN THU-REE SIX
500 - FI-YIV HUNDRED
7000 - SEVEN THOUSAND
16,000 - WUN SIX THOUSAND
1478 - WUN FO-WER SEVEN ATE
19A - WUN NINER ALFA

**Procedure Words**

The following is a list of the most common procedure words (pro-words) to be used and their meanings.

<table>
<thead>
<tr>
<th>PRO-WORD</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGE !</td>
<td>Confirm that you have received my message and will comply.</td>
</tr>
<tr>
<td>-AFFIRMATIVE</td>
<td>Yes/Correct.</td>
</tr>
<tr>
<td>-NEGATIVE</td>
<td>No/Incorrect.</td>
</tr>
<tr>
<td>Commands</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>-ALL AFTER</td>
<td>Everything that you (I) transmitted before...(Keyword).</td>
</tr>
<tr>
<td>-ALL BEFORE</td>
<td>Everything that you (I) transmitted before.. . (Keyword).</td>
</tr>
<tr>
<td>-CORRECT (THAT IS CORRECT)</td>
<td>What you have transmitted is correct.</td>
</tr>
<tr>
<td>-CORRECTION</td>
<td>a. An error has been made in this transmission. It will continue with the last word (group) correctly transmitted.</td>
</tr>
<tr>
<td></td>
<td>b. An error has been made in this transmission. Correct version is... .</td>
</tr>
<tr>
<td></td>
<td>c. That which follows is a correct version in answer to your request for verification.</td>
</tr>
<tr>
<td></td>
<td>Your last transmission was incorrect. The correct version is...</td>
</tr>
<tr>
<td>-WRONG</td>
<td></td>
</tr>
<tr>
<td>DISREGARD THIS TRANSMISSION OUT</td>
<td>This transmission is an error. Disregard it. This pro-word shall not be used to cancel any message that has already been completely transmitted and for which receipt or acknowledgement has been received.</td>
</tr>
<tr>
<td>DO NOT ANSWER OUT</td>
<td>Station(s) called are not to answer this call, acknowledge this message, or otherwise to transmit in connection with this transmission.</td>
</tr>
<tr>
<td>-SILENCE SILENCE SILENCE ! LIFTED</td>
<td>Cease all transmissions on this net immediately. Will be maintained until lifted.</td>
</tr>
<tr>
<td></td>
<td>Silence is lifted. The net is free for traffic.</td>
</tr>
<tr>
<td><strong>-END OF MESSAGE - END OF TEXT</strong></td>
<td>This concludes the message just transmitted (and the message instructions pertaining to a formal message). The textual part of a formal message ends. Stand by for the message instructions immediately following.</td>
</tr>
<tr>
<td><strong>-FETCH...! -...SPEAKING</strong></td>
<td>I wish to speak on the radio to that person. Requested person is now using the radio himself.</td>
</tr>
<tr>
<td><strong>FIGURES</strong></td>
<td>Numerals or numbers will follow. (This pro-word is not used with the call signs, time definitions, grid references, bearings, distances etc., especially in fixed-form reports).</td>
</tr>
<tr>
<td><strong>-FROM</strong></td>
<td>a. This is... b. The originator of this formal message is indicated by the address designation immediately following. The addressees whose designations will immediately follow are to take action on this formal message. This transmission is from the station whose designation immediately follows</td>
</tr>
<tr>
<td><strong>-TO</strong></td>
<td></td>
</tr>
<tr>
<td><strong>-This is...</strong></td>
<td></td>
</tr>
<tr>
<td><strong>OVER</strong></td>
<td>This is the end of my turn of transmitting. A message is expected. Go ahead.</td>
</tr>
<tr>
<td>Command</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>THROUGH ME</td>
<td>I am in contact with the station you are calling, I can act as a relay station.</td>
</tr>
<tr>
<td>MESSAGE</td>
<td>Your message has been passed to...</td>
</tr>
<tr>
<td>PASSED TO...</td>
<td></td>
</tr>
<tr>
<td>ROGER</td>
<td>I have received your last transmission satisfactorily.</td>
</tr>
<tr>
<td>ROGER SO</td>
<td>Have you received this part of my message satisfactorily.</td>
</tr>
<tr>
<td>FAR?</td>
<td>I have received your message, understand it, and will comply.</td>
</tr>
<tr>
<td></td>
<td>(To be used only by the addressee). ROGER and WILCO are never used together.</td>
</tr>
<tr>
<td>WILCO</td>
<td></td>
</tr>
<tr>
<td>UNKNOWN</td>
<td>The identity of the station calling or with whom I am attempting to establish communication is unknown.</td>
</tr>
<tr>
<td>STATION</td>
<td></td>
</tr>
<tr>
<td>VERIFY</td>
<td>Verify entire message (or portions indicated) with the originator and send correct version. To be used only at discretion of or by the addressee to which the questioned message was directed.</td>
</tr>
<tr>
<td>1 VERIFY</td>
<td>That which follows has been verified at your request and is repeated. To be used only as a reply to VERIFY.</td>
</tr>
<tr>
<td>WAIT (WAIT-</td>
<td>I must pause for a few seconds.</td>
</tr>
<tr>
<td>WAIT)</td>
<td></td>
</tr>
<tr>
<td>-WAIT • OUT</td>
<td>I must pause longer than some seconds, and will call you again when ready.</td>
</tr>
<tr>
<td>-WORD AFTER...</td>
<td>The word of the message to which I have reference is that which follows. . .</td>
</tr>
<tr>
<td>-WORD BEFORE...</td>
<td>The word of the message to which I have reference is that which precedes...</td>
</tr>
<tr>
<td>WORDS TWICE</td>
<td>Communication is difficult. Transmit(ting) each phrase (group) twice. This pro-word can be used as an order, request or as information.</td>
</tr>
<tr>
<td>-OUT</td>
<td>This is the end of my transmission to you. No answer or acknowledgement is expected. Do not answer, I have nothing more for you, I shall now call another station on the net.</td>
</tr>
<tr>
<td>-OUT TO YOU</td>
<td></td>
</tr>
<tr>
<td>-READ BACK !</td>
<td>Repeat the entire following transmission back to me exactly as received. The following is my reply to your request to read back.</td>
</tr>
<tr>
<td>-I READ BACK</td>
<td></td>
</tr>
<tr>
<td>-SAY AGAIN</td>
<td>a. Repeat all of your last transmission. b. Followed by ALL AFTER, ALL BEFORE, WORD AFTER, WORD BEFORE etc. means: Repeat. . . (portion indicated). I am repeating my transmission or portion indicated.</td>
</tr>
<tr>
<td>-I SAY AGAIN</td>
<td></td>
</tr>
<tr>
<td>-SEND !</td>
<td>Go ahead with your transmission.</td>
</tr>
<tr>
<td>-SEND YOUR MESSAGE !</td>
<td>Go ahead, transmit; I am ready to copy.</td>
</tr>
<tr>
<td>..SPEAK SLOWER!</td>
<td>Reduce the speed of your transmission.</td>
</tr>
<tr>
<td>I SPELL</td>
<td>I shall spell the next word, group or equivalent phonetically. (Not used when transmitting coded groups only).</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>-RELAY TO...</td>
<td>Transmit the following message to all addressees or to the address designation immediately following.</td>
</tr>
<tr>
<td>-RELAY THROUGH...</td>
<td>Send this message by way of call-sign...</td>
</tr>
</tbody>
</table>

**Example of Radio Conversation**

1). ALFA, THIS IS CHARLIE • MESSAGE, OVER

2). THIS IS ALFA • SEND, OVER

3). THIS IS CHARLIE • WATCH FOR FALLEN ROCKS ON ROAD BIRKET • I SPELL • BRAVO, INDIA, ROMEO, KILO, ECHO, TANGO • BIRISET, OVER

4). THIS IS ALFA • WILCO, OUT.

**Example of Formal Message**

Formal messages should be transmitted in the following order:

1). Preliminary call.
2). Pro-word MESSAGE FOLLOWS (SEND YOUR MESSAGE).
3). Abbreviated call with relay and transmission instructions, if any (READ BACK, RELAY ON etc.).
4). Message handling order = precedence (normally one of the following: FLASH, OPERATIONAL, IMMEDIATE, PRIORITY, or ROUTINE).
5). Date and time group (e.g. 1406302 AUG, which is 14 August, 1430 [2 PM] GMT).
6). Pro-word FROM followed by originators callsign.
7). Pro-word TO followed by action addressees callsign.
8). Pro-word INFO followed by info addressees callsign.
9). Pro-word TEXT BEGINS.
10). Security classification (normally one of the following:
Report of Reception

The following phrases are for use when initiating and answering queries concerning signal strength and readability.

- RADIO CHECK What is my signal strength and readability; how do you read me?
- YOU ARE (I READ YOU) Your signal strength and readability is as follows...

Report on signal strength.
- LOUD Your signal is strong.
- GOOD Your signal is good.
- WEAK I can only hear you with difficulty.
- VERY WEAK I can only hear you with great difficulty.
- NOTHING \(-\) HEARD I cannot hear you at all.

Report on readability.
- CLEAR Excellent quality.
- READABLE Good quality. No difficulties reading you.
- DISTORTED I have trouble reading you.
- WITH INTERFERENCE have trouble reading you due to interference.
- NOT READABLE I can hear that you transmit, but cannot read you at all.

Example of radio check
1). ALFA, THIS IS CHARLIE • RADIO CHECK, OVER
D.9. Safety and Security

This chapter will concentrate on safety and security in “hostile” environments, i.e. in areas where there are possibilities of armed conflicts, acts of terrorism, etc. These situations may at first seem connected only with complex emergencies, but a number of natural disaster-prone countries also have elements of this nature. Even though the following concerns safety and security in connection with violence, safety threats caused by natural disasters or by post-disaster situations must not be forgotten. These threats could be, for example, the danger of further landslides after floods or heavy rains, after-shocks in connection with earthquakes, un-safe housing after various disasters, leaking gas pipes and exposed electric cables after earthquakes, floods, etc. These threats and others must be taken into account when working in a disaster area.

To allow the establishment of safety and security precautions against violence it is necessary to identify the threats to safety and security. These threats apart from those posed by natural-disaster environments would be typically from banditry, unrest or civil strife/armed conflict and mines. The threats themselves may be anything from simple theft through kidnapping or being caught in cross-fire to actually being targeted. It all depends on the security situation in the country.

It must be made clear from the very beginning that 100% safety and security are unobtainable. Good safety and security, though, are not. Usually, there would have to be a balance between security requirements, available resources and the task at hand (e.g. security must not become “a prison” preventing completion of the task).

Of course, not every mission entails safety and security.
threats; far from it. This chapter therefore addresses those missions that do pose a safety or security risk to the team. The following suggestions on safety and security are ideal measures to be taken. In some situations some measures may be impossible to carry out, while some other situations do not warrant the use of all the measures. It all depends on conditions, and you are the one to decide (or co-decide) on the level of security. In general, the precautions that can be taken to alleviate risks are three-fold: the first are those to be taken as a team, while the second are those to be taken by the individual, and the third are those to be taken when protecting your essential resources, i.e. equipment, vehicles and fuel. The following will concentrate on these three categories. The UNDAC Team Leader is responsible for the safety of his UNDAC team.

D.9.1. United Nations Security

Since the UNDAC team works under the aegis of the UN in country, it is essential that team members understand the UN Security System. In each country the primary responsibility for the security and protection of UN staff members and dependants rests with the host government. In order to deal with security and protection factors, UN refers to three manuals: (a) UN Field Security Handbook; (b) UN Security Operations Manual; and (c) UN Security Directives. The UN Security Coordinator, appointed by the Secretary-General, reports directly to him and serves as his coordinator at UNHQ for formulating policy and recommendations, responding to emergency situations, coordinating inter-agency safety programmes and taking decisions relating to the relocation/evacuation of staff members. The Designated Official for Security and Resident Coordinator, has special responsibility for the security and protection of all staff members and dependants at the duty station. The Alternate Designated Official, acts in the absence of the Designated Official. S/he is nominated by the Designated Official and appointed by UNSECOORD. The Representative of Organizations at the country level assist the Designated Official on all matters concerning security and prepare updated lists of all staff members and their whereabouts. The
Field Security Officer: At duty stations where a full-time security officer is not warranted, one international staff member serves as the FSO. The Area Coordinators have responsibilities similar to those of the Designated Official in larger countries that have specific areas separated from the capital city. The Wardens and Deputy Wardens are appointed by the Designated Official to ensure the proper implementation of security arrangements in predetermined zones of a city. The Security Management Team is composed by representatives of UN agencies, programmes and funds at the duty station, and advises the Designated Official on all security-related matters. The Security Arrangements detailed in the Field Security Handbook apply to all persons employed by the organizations, (excepted those locally recruited), consultants, UN volunteers and UN fellows studying in the country. Security of personnel of the UN peacekeeping missions, lays under the jurisdiction of the SRSG and/or the Force Commander. The Security Plan is the primary tool for security preparedness at the duty station and is established by the Designated Official and the Security Management Team. It describes measures and arrangements to be followed in the event of emergency situations. The Five Security Phases describe security conditions in a given country or in parts of a country; are standard for all duty stations and are included in all security plans. Phases may be implemented in sequential order or as the situation dictates, and one part of a country could be under a different phase than the remainder of the country.

- Phase I: Precautionary
- Phase II: Restricted Movement
- Phase III: Relocation
- Phase IV: Programme Suspension
- Phase V: Evacuation

It is important to be aware that even though a specific country is, for example, in Security Phase IV, there may be pockets in the country where individual phases may be higher or lower. Also, it is important to know that changes in security phases may be behind the actual situation. Thus, it is conceivable that a security phase may be III when the current situation dictates Phase IV or (if the security situation has
changed in a positive direction) Phase II. The security plan - which includes the five phases - will be country-specific, i.e. taking specific country concerns into consideration.

During Phases I and II, travel clearance must be obtained from the Designated Official (who is normally the UN Resident / Humanitarian Coordinator). For subsequent phases, clearance must be obtained from the UN Security Coordinator in New York, on the recommendation of the Designated Official. Clearance signifies that the Designated Official is aware of the staff member’s presence in the country, and that he/she should be included in any evacuation plans or security arrangements. Clearance means also that there is no security reason why staff members cannot travel to the location. Upon arrival, staff members (in the case of an UNDAC team, the team leader, if it is not possible for the whole team to participate) should contact the Designated Official for a security briefing.

Phase I - Precautionary
Phase I is declared to warn staff members that the security situation in the country or parts of it warrants this declaration. The declaration includes a ban on the travel of missions, staff members and their families without prior clearance. Staff members should ensure that the office of the Designated Official is aware of their movements. In addition to this, the Designated Official takes other action, such as informing the Secretary-General, notifying the UN in nearby countries, convening various meetings, reminding all staff members of the measures to be taken, etc.

Phase II - Restricted Movement
When Phase II is declared, a high level of alert is imposed, consisting of major restrictions on the movement of all staff members and their families. During this phase all staff members and families will remain at home unless otherwise instructed. In addition, no in-coming or in-country travel should take place without specific authorization by the Designated Official. Again, as in Phase I, the Designated Official takes a number of actions, such as notifying the relevant people and Agencies that all travel to the affected area must be cleared, notifying international personnel that
they must withdraw children from schools, pack a suitcase, 
pack extra food, etc., and requesting, as appropriate, police or 
army assistance for road control and/or escort duty. Some 
other actions taken are equivalent to the ones in Phase I.

**Phase III - Relocation**

This phase will usually be recommended to the Secretary-
General by the Designated Official. All or some of the 
following actions will be taken: temporary concentration of 
all international staff and families; relocation of all 
international staff and families to alternative locations inside 
the country; relocation outside the country of all eligible 
groups of international staff and/or non-essential 
international staff. Other steps that will all be taken are, for 
example, notifying the UN in nearby countries of the 
implementation of Phase III; notifying the host government 
and requesting assistance if necessary; reviewing 
arrangements to be taken under Phases IV and V, etc. The 
fielding of any new staff must be authorized by the UN 
Security Coordinator.

**Phase IV - Programme Suspension**

This phase will usually be recommended to the Secretary-
General by the Designated Official. This phase is to allow 
relocation, outside the country, of all international staff not 
directly concerned with emergency or humanitarian relief 
operations or security matters. The following actions will all 
be taken by the Designated Official: notifying Designated 
Officials in nearby countries; notifying the host government 
and requesting assistance if necessary; designating a locally 
recruited senior staff member as Officer-in-Charge, who will 
them be in charge of local staff members’ security, the safety of 
the UN premises, the payment of salaries and other expenses, 
the maintenance of routine office operations, and the means of 
communicating with the Designated Official.

**Phase V - Evacuation**

As in Phases III and IV, this phase will also be ordered by the 
Secretary-General, usually on the recommendation of the 
Designated Official. Evacuation will be carried out according 
to plans prepared beforehand and in accordance with the
country-specific situation.

UNDAC Teams will normally be deployed only in Conditions of Phases I to III.

D.9.2. Team Safety/Security

While the UNDAC team leader is responsible for team security, it is important that everyone acknowledge his/her co-responsibility for the team’s safety and security; breaches in safety and security procedures may well endanger the team or the mission, for which reason it is essential that all contribute to the established security scheme. Secondly, it is important that the team leader be clear about his/her responsibility for the safety of the team. Ultimately, the team leader is responsible for laying down team safety and security procedures and rules and for enforcing them.

It is of utmost importance that it be completely clear that the team leader is always responsible for the team’s safety. Therefore, he/she is always mandated to refuse tasks that pose a threat to the team’s safety.

The level of the threat dictates the level of safety and security measures to be taken. It may therefore not be necessary to take all the precautions mentioned below. The measures taken will be on the grounds of information received from, among others, the Designated Official, the UN Resident/Humanitarian Coordinator, the authorities, and humanitarian organizations in the area together with military and police intelligence where appropriate. The following are a number of items that can help the team and team leader to establish realistic and relevant safety and security procedures:

General

- Safety and security measures should be realistic, not at a level higher than the situation warrants. On the other hand, it is often true that people (especially those coming from already safe and secure countries) do not take threats to security and safety seriously. However, it is essential that safety and security measures not be taken lightly.
• All team members must know the safety and security measures.
• With reference to local people working for the UN, procedures concerning their evacuation must be taken up with the Designated Official.
• Try not to build up daily routines: this makes it difficult for a potential aggressor to elaborate a plan of action.
• **During working hours, the team must at all times know the whereabouts of each member and the estimated time that he/she is expected to return, for example, to team headquarters. The production of route cards (on which the itinerary is written) will be of help.**
• It may be necessary either for the team to live in the same building or, if not, to check on team members that have time off (e.g. by radio, telephone, etc.). The employment of the “buddy system” (no unaccompanied persons) will enhance security.

**At Team Base**
The security situation in-country must be assessed. This should be done by the team leader, partly from available information before the mission and partly on arrival, through, for example, the Designated Official, the Field Security Officer, the UN Resident/Humanitarian Coordinator, the national authorities, the ICRC/IFRC, NGO's and other organizations in the area.

A set of safety and security rules must be set up. These rules should include the following:
• **UNDAC-base security, e.g. the need for guards (who could be either team members or locals, depending on the situation), admission procedures, etc.** If a form of ID is used, then change it from time to time.
• In case of armed conflict, it may be necessary to designate a cellar location as a shelter against shelling, air raids, etc., or dig holes for shelter. It may also be necessary to reinforce existing buildings with, for example, sandbags and to tape windows to reduce the effect of flying glass caused by explosions.
• Establish a procedure to check up on team members, e.g. by using radio calls, etc.
• Security measures concerning vehicles, equipment, etc.,
can be carried out by, e.g., keeping a list of equipment and regularly checking it against actual equipment, keeping equipment and vehicles (when not in use) under lock, always locking all vehicle doors, and assigning guards.

- For safety reasons, fuel should be stored away from living and working quarters as well as away from vehicles. It is important also to keep an eye on fuel quantities as well as locking the stocks up, since fuel may be seen as an asset worth stealing. There should also be a lower limit on fuel in the store: enough should always be kept for purposes of potential evacuation.

**In the Field**

When going into the field it is important to prepare the trip. There are a number of things that should be investigated and carried out before leaving and when in the field. The following will be of help in preparing and carrying out a field trip:

- Check the security situation with the Designated Official, the Field Security Officer, UN Resident/Humanitarian Coordinator, the authorities, and any organization in the area where the field trip will take place. Especially people just back from the area may have invaluable information.
- If authorization is needed for the trip, be sure to get it.
- Procedures concerning accidents and breakdowns must be agreed upon before a field trip. These procedures may differ depending on the situation, but make sure that the field team knows what to do and that the UNDAC base will be able to help when necessary; it is important to have telecommunications between the team and the base. If an accident occurs, especially one involving human casualties, it is important that the team must have established beforehand whether it would be safe to stop and give first aid, or whether one should drive on without stopping and contact the next police station, checkpoint, hospital, etc.
- The following must be taken on the trip: spare fuel, tool kit, spare tire (or two tires if it is a long trip), a shovel, an electric flashlight, spare batteries, towing rope, rations for 24 hours, water for 24 hours (the latter all in a pack, enabling quick “get away”), first-aid or trauma kit, cash, and necessary documents (e.g. driver’s license, vehicle registration papers, importation papers, radio transmission permit, insurance
papers, etc.). When driving in the winter season, you should take also warm clothes, anti-skid chains, an axe and shovel, and a primus stove together with fuel for 24 hours.

- Before the trip, check that the vehicle is in good order, that the fuel tank is full, and that all necessary equipment is present.
- If a country has problems with mines, try to get a map of where these may be. Be aware that these are not always accurate, and that there may be more than the ones shown.
- Establish how checkpoints should be negotiated.
- There should be radio contact between field teams and the UNDAC base, with frequent radio checks. This is one of the most important security measures to be taken and must not be overlooked. It can save lives if the team has radio contact *at all times* - with the base. The use of an easy system of situation codes will indicate if a team member(s) is in difficulty without arousing suspicion.
- When leaving for a field trip or an excursion, write a log with complete travel details (e.g. using route cards) prior to departure, and establish call-times for radio checks.
- If the field team uses more than one vehicle, there should be radio contact between them.
- A general rule is to make sure that it is obvious who you are, i.e. have big UN stickers on the vehicles, use flags on the vehicles, etc. There may be situations, though, where the UN might be targeted; this would, of course, change the above recommendation.
- Travelling by night should, as a general rule, be avoided. If it is essential to travel at night, there should be more than one person in the vehicle and there should be more than one vehicle. You should not stop unless, for example, at a checkpoint; you should know the checkpoint procedures for night travel; you should always have as much light turned on as possible; and always keep the doors locked (even when driving).
- After a field trip, it is important that the field team be debriefed on the security situation, the road conditions, mood of the local population, etc. in the areas visited and the roads taken. This data should be put on file so that others going to the same area will have the latest information.
D.9.3. Personal Safety/Security

Many things mentioned in Chapter D.9.2. are applicable also to individual team members. The following is a list of safety and security measures that may be of help in various situations of risk:

- Investigate both the national and local security situations and act accordingly, but do not overreact. Local authorities, UN personnel and NGOs in the area will usually be able to offer valuable information.
- Be aware of what is happening around you and react accordingly, before a potential situation becomes serious; learn to be “street wise”.
- Observe local behaviour as this may indicate imminent outbursts of major trouble, shelling, etc. It is important to observe changes in the normal habits of the local population.
- Do not carry large amounts of money. The money you do carry should be divided into smaller amounts and kept in separate places. Enough should be carried if the need arises to pay for various “services”.
- Do not arrange your days in routines, as this will make it easier for potential aggressors to elaborate plans against you.
- When at the UNDAC base, living quarters, hotels, etc., investigate possible escape routes in case the building is attacked. Observe the number of windows in each room and where they are situated, the best ways out of rooms, the best places to seek cover, etc. Know the fire escape plan (or create one for yourself). Make these things a habit.
- If you leave the team base, make sure that someone (preferably the team leader or someone appointed by him to manage security) knows where you are, how long it will take, and the estimated time that you will be back.
- If you regularly travel between two fixed places (e.g. between living quarters and the base) try not to travel at the same time each day and try to change the routes of travel.
- When outside the UNDAC base, always stay together with another team member or two if possible.
- When going into the field, ask people who have just been to the same place and travelled the same route about the security and safety situation.
- If you are equipped with a helmet and/or a flack jacket or bullet-proof vest, make sure you use them; they **do** work and
may save your life.

- If travelling by car, always lock the doors, both when driving and when parking (to prevent easy theft and for personal safety).

- When parking, be sure to park in a way that it will be fast and easy to drive away if necessary, i.e. do not park with the front of the vehicle against a wall or any other obstruction.

- Make it a rule that you never pick up people wanting a lift; you do not know who the person is and what his/her intentions are. Especially, do not pick up military personnel or police, as they may be dangerous or they may be targeted, which will then endanger you. Also, if you are stranded, e.g. because of breakdown, etc., do not accept rides from the police or military for the same reasons.

- If you should be the target of a robbery or hold-up, the following procedures should be followed: try to keep calm; do not be provocative; do not play the hero; be passive and talk only when spoken to; obey orders; be cooperative; avoid eye contact; and (in most situations) make it understood that you are a UN representative. BUT: Stand out from others only if appropriate.

- When driving, steer around potholes. They may not be ordinary potholes, but craters with unexploded artillery or mortar shells or holes with mines. Be especially aware of small holes, as these may be the entry hole of shells. Just because other vehicles have gone through a pothole does not mean that there is not an unexploded ordnance; it may survive 35 vehicles, while the 36th will trigger it.

- If you have a camera, be cautious where you use it. Photos should never be taken where there are soldiers, military activity or checkpoints.

- To be prepared for evacuation, you should always have a bag packed with private items, warm clothes, extra food and drink, a first-aid kit, helmet (if supplied) and flack jacket (if supplied).

- Always carry UN credentials and passport (a photocopy of the passport may be useful to hand out instead of the passport, if officials demand to have the passport). Even a duplicate passport may be useful.

Last but not least, it should be mentioned that local populations will usually take sides and have cultures that may
well be different from those of the UNDAC members. For these and other reasons, it is not advisable to enter into relations of a type that could affect security. Close relationships with the opposite sex should also be avoided, not only for the above reasons but also because of possible serious health consequences.

D.9.4. Mines Precautions

There are a number of countries (including also disaster-prone ones) that have mines left over from various forms of conflict. It is vital that UNDAC team members going to these countries have minimum knowledge on how to avoid mines and what to do if the worst happens. In this handbook it is not possible to go into detail concerning precautions to take against mines. It is therefore advisable to get further information from, for example, one of the NGO's that have been established in recent years to deal with this kind of threat to civilian populations. The following is a list of what to do and what not to do:

Avoiding Mines
First of all it is advisable to seek local information from the authorities, the UN and NGO's on where the mines might be. There may even be maps where dangerous areas have been marked. Even though information on the whereabouts of mines has been received, it should be used only as a guideline, as there could be mines elsewhere. Beware that a map with an overview of the minefield may lead to a false sense of security.

Never go into visible minefields; these may be visible by mines scattered on the surface or by the minefield being fenced or marked with signs warning of danger. Be aware that minefields that have been cleared may have been re-mined. It happens that mines are cleared during the daytime only to be re-mined the following night.

If an area has been fought over, it is likely that parts of it have been mined. Terrain around military positions (or former positions) and terrain which is seen to afford a defense for
enemy troops near military positions is most likely mined. Buildings in areas where there has been fighting may also be mined or booby-trapped. Booby traps may be in connection with doors, under carpets, under bodies, in connection with food as well as medical and first-aid equipment, in connection with objects that could be seen as mementos, etc. Do not go through gaps in hedges, as there may well be trip-wired mines.

**If there is any doubt at any time as to whether an area or a building has been mined, turn back.**

When travelling in places that are high-risk mine areas (and this should be done only if absolutely necessary), then (when travelling by car) use only roads and tracks that are well-used and (when walking) use only paths that are well-used. Avoid areas of fresh earth, whether on roads, tracks or paths. It is important to know also that even well-travelled areas may have been re-mined during the night. When in need to urinate or defecate, never go outside the road, track or path; either swallow your pride or wait. Areas full of fresh human excrement will usually be safe from mines.

Never approach mines, ammunition or suspicious objects, as this can be both dangerous and a bad example to the local community. Do not under any circumstances handle or touch unexploded ordnance (or anything else that looks suspicious), however harmless it may appear. If mines or unexploded ordnance is observed, make a note of the position and if possible the type (mine, shell, bomb, etc.) and report back.

The last important thing to remember is to be alert. Most mine injuries occur because people do not see the mines. This is understandable because the mines are usually buried, camouflaged or covered over by vegetation; or else the victim is simply looking in the wrong direction. Being alert and observant of certain signs will not make travelling in mined areas safe, but it will make it safer. There are certain clues that can be looked for in order to avoid mines. These are:

- Shapes that are unusual in nature (sharp edges, round or rectangular objects, etc.) and colours that are unusual in nature (rusty-coloured surfaces, metallic colours and plastic
surfaces). These may be mines, as mines are usually round (cylindric) or rectangular and are made from metal, plastic or wood.

- Thin, taut, partly buried or entangled wire as well as fishing line, etc. These can be connected to mines and must never be touched.
- Stakes, poles, etc., especially if they are connected with wire. These may be connected to mines.
- Signs of mines having been brought to detonation, e.g. animal remains, pieces of footwear, etc.
- Signs of battles having occurred in the area, such as bunkers, barbed wire, weapons, helmets, destroyed vehicles, ammunition, etc.
- Buildings that may have been occupied or used during fighting.
- After heavy rains, that have created landslides, mines may well have floated away or washed away; beware of areas near landslides.

**If the Worst Happens**
The two most usual ways in which you will discover that you are in a minefield are 1) if there is an explosion and 2) if you find a mine.

If an explosion occurs or a mine is found, the first thing to do is to stop all movement. Any movement may detonate one or more nearby mines. Anyone in the vicinity must be warned. If there is a casualty, it is most important that he/she does not move and that - at least initially - no-one goes into the minefield to help. People rushing in to help are very often either killed or maimed. First aid can be given only when a safe path has been found into the field.

Establishing a safe path into or out of a mine field is something that should be done only as a last resort. It is always best to get professional help, either from trained military personnel (usually from an engineering regiment) or from a de-mining NGO. If a safe path has to be found without professional help, the following must be done:

**If there is a safe path!**
- If possible, find out where the closest safe area is. This may
be the direction in which the path must go. The safest path, though, would usually be the route that was used on the way into the minefield.

- If there is more than one person in the minefield, only one person must be in charge, and only one person must move at a time. Keep a safe distance of at least 10-20 metres between each person.
- The original route into the minefield should be followed very closely, while the person moving must stay alert at all times. Panic must, as far as possible, be stopped immediately.

If there is no safe path!

- If you cannot remember your route into the minefield or if you find a mine on the route that you thought was safe, then the only way forward is by probing for mines. Probing is done with an instrument, e.g. a knife at least 8-10 cm long (remember to procure such an instrument before entering an area where there is a risk of mines). This is used to stick into the ground at an angle of 30 degrees. Every square cm of the path must be probed. If there is an obstruction, this is carefully exposed. If it is a mine, then warn the others, mark the spot (use stones, pieces of wood, etc.) and continue probing.
- When probing, it is important to decide the width of the path to probe: if it is too narrow, someone may tread outside; if it is too wide, an unnecessary amount of time may be used to probe and there will be further risk of detonating a mine. Be aware that probing is time-consuming, very tiring and nerve- racking especially for the untrained.

Rescuing a Mine Victim!

- If a path must be made to rescue a mine victim, this should be done only if the person is alive and when there is no professional help. When the person has been reached (by one of the above methods), an area around the person must be cleared, allowing room for the use of first aid. Be careful, as there may be untriggered mines under the casualty: probe under the person.
- If the casualty is hysterical, it is vital to calm him/her before getting close. Often, though, victims are unusually calm; this is because they have had a traumatic shock.
- When the above has been carried out, give first aid.
• When ready, the casualty must be extricated from the minefield. This can be done, for example, by using a fireman’s lift or by pulling the person along the path. It is important to be very careful so as not to get injured by mines yourself.

It is important to be aware that rescuing a casualty from a minefield is a very risky undertaking, and that no one is therefore obliged to carry this out. The use of helicopter evacuation (by winch) is a possibility that should be looked into, if possible.

D.9.5. Evacuation Plan

The team leader is usually responsible for establishing evacuation plans (which must coincide with the plans of the Designated Official). Evacuation plans may be divided into 1) semi-evacuation (in case it is necessary to reduce personnel down to a skeleton team); 2) full evacuation (when there is enough time for the whole team to evacuate in an orderly manner and take all the equipment, vehicles, etc., with them); and 3) emergency evacuation (when there is time for the team to take only the most necessary equipment and vehicles). Items that should be included in these plans are: always keep a sufficient amount of money for evacuation purposes; always keep a fuel reserve ready for vehicles to be used; pin-point vehicles to be used for emergency evacuation; find potential routes to be used out of the area; if possible, make agreements beforehand with authorities, border posts, NGO’s, etc. (it may be possible for the team and other organizations, that are evacuating, to evacuate together); and bring interpreters (be aware that this may endanger the interpreter if he/she is local).

D.10. Medical Evacuation

For each UNDAC mission, OCHA obtains “medical evacuation insurance” for all members participating in the mission. Each member is provided with an “SOS passport” number as proof of the insurance. This reference number should be used in all contacts with SOS Assistance S.A.
SOS Assistance has a worldwide network of Control, Service and Medical Centres accessible by telephone, fax or telex 24 hours a day, 7 days a week. In summary, the services include: referral to medical correspondents abroad; long-distance medical advice; evacuation and/or medical repatriation; dispatch of an SOS specialist physician; local treatment of patient under SOS supervision; guarantee of hospital deposits; dispatch of medicine.

The insurance provides travelling members assistance in case of medical emergency or travel incident as defined in the General Conditions of the SOS Service Programme. The insurance is valid immediately upon receipt of the OCHA request at SOS Assistance S.A. SOS passport numbers for each insured member of the mission are provided immediately or, outside office hours, on the following working day.

In case of medical emergency, the UNDAC member should:

- Call the nearest Regional Control Centre:

  Geneva: Tel: +41 22 785 0000  
  Fax: +41 22 785 64 24  
  Telex: 427 172 sosa ch

  Philadelphia: Tel: +1 215 245 4707 (USA)

  Singapore: Tel: +65 226 3936

- Be ready to provide the following information:

  Family name and first name  
  SOS passport number (including the letters)  
  Member’s present location, telephone number  
  The nature of the problem

- Inform OCHA-Geneva as soon as possible.
D.10.1. Injury or death of UNDAC Member

In the unfortunate event of injury or death of an UNDAC member on mission, the following action should be taken:

1. Inform the in country Resident/Humanitarian Coordinator of the incident immediately - request him to forward a report to OCHA Geneva (DRB) and UNSECOORD New York (if necessary.
2. Start of log of actions taken and response.
3. Notify OCHA Geneva (FCSU/Chief DRB/Desk DRB) along with information to in country Resident Coordinator.
4. OCHA Geneva to inform the UNDAC members country focal point for information to the relatives of the injured/deceased member.
5. Notify the Embassy of the casualty UNDAC member, if it exists in country.
6. Ask for OCHA Geneva to arrange aeromedical evacuation of injured UNDAC member.
7. Ensure local authorities kept informed - check if any formalities have to be done locally i.e. Police Report, death certificate etc as these may have legal implications later on.
8. Prepare a short press release giving the facts of the incident for the local/international media if needed.
9. Arrange for evacuation the casualty to the capital of the country or/nearest airfield/nearest medical facility as required.
10. Ensure arrangements made in country for either medical treatment of injured member or repatriation of deceased member.

11. Assess the circumstances of the incident and make a decision in consultation with team members Un Resident Coordinator and FCSU on modification, continuation or termination of the mission.

D.11. Mission End

D.11.1. Mission End - In-Country

Before ending a mission, the decision to exit must be taken.
This is done through agreement with the UN Resident/Humanitarian Coordinator and through agreement with OCHA-Geneva. After the decision is taken, the team should, before departure, debrief the UN Resident/Humanitarian Coordinator, if possible the DMT, and, when appropriate, the national authorities.

If the UN Resident Coordinator decides to request an extension of the UNDAC Team in-country, this request should be reviewed by FCSU for forward planning (i.e. availability of UNDAC members in-country to prolong their mission, rotation by sending out a new UNDAC alert).

### D.11.2. Mission End • OCHA-Geneva

At the mission end, all UNDAC members will return to their home countries via Geneva where they will be debriefed and, if applicable, participate in general information meetings with representatives of the international community and agencies represented in Geneva. If debriefing is not possible in Geneva because of large scale involvement of a national or Regional UNDAC Team, OCHA Geneva will organise its conduct within the region.

**Mission Debrief**

The mission debrief will take place with the Desk Officer for the emergency and FCSU staff. It will cover the following points, which are set out in the Briefing File provided to the Team on departure, and any others which may be relevant, in order to draw up lessons learned and to enrich the institutional memory:

- **Terms of reference:** were the TOR adequate, were they amended, and if so, for what reason.
- **Mobilization:** any difficulties, delays, misunderstandings, during the mobilization period should be mentioned.
- **Arrival in country:** was the team met by officials, UNDP representatives; were arrangements for visas, reception of luggage, equipment, etc. satisfactory.
- **Travel (international and in country):** mention should be made of initial team marshalling, the onward journey to the affected country; any travel in country for field trips.
• Administration: any issues regarding per diem, use of travellers cheques, other administrative matters should be mentioned.
• Personal and Team equipment: any changes or additions should be noted.
• Office Equipment: any changes or additions should be noted.
• Support from the Resident/Humanitarian Coordinator and UNDP: this item would cover support from personnel in the capital and in the field, provision of office space for the team.
• Backstopping from Geneva: any requirements felt during the mission and how they were dealt with should be noted.
• Organization of work and assessment process: this issue should be evaluated in the light of experience.
• Logistics: were arrangements for accommodation adequate; any tips on hotels used should be provided; mention should also be made of use of vehicles in the capital and in the field and any other issues arising.

**Administrative Matters**

All members should complete the United Nations travel claim form. To assist with this procedure, the following checklist of documents needed is also contained in the Briefing File provided to the Team on departure:
• Original of PT8 (UN Travel authorization)
• Originals of used air tickets plus photocopies of onward tickets
• Attachments for expenses (receipts for taxis, official phone calls, etc.) Please note that the United Nations is very restrictive with reimbursing expenses that are not explicitly authorized on the travel authorization. Therefore, consult with the team leader before incurring such expenses. If official calls are made from the hotel, a breakdown showing numbers called and dates should be requested from the hotel.
• Log of in-country travel (with notes on photos/slides taken), meetings attended and people met.

All documents, including Travel claim for terminal expenses, are photocopied for UNDAC member and OCHA UNDAC file.

The UN Certificate must be returned to UNDAC support
team.

**Information Meeting**
After relief missions to major emergencies, an information meeting may be held, with participation of interested countries and/or UN agencies, NGOs, OCHA staff, during which the team will provide a summary of the activities carried out, with achievements, using any visual aids available (slides, overheads, video).

**Mission Report**
A draft of the mission report, including any situation reports, list of meetings held, persons met, should be prepared, for finalization by OCHA team leader.

---

**D. 12. Mission Report**

**General**
The mission report is composed by the team and should be forwarded to OCHA as soon as possible after the end of the mission. The purpose of a mission report is to inform OCHA about the nature and scope of the mission undertaken. It also goes into OCHA's substantive file and administrative records. Furthermore, mission reports highlight follow-up actions to be taken after the mission. The report may contain an annex with brief minutes of meetings; reports received from local authorities, the UN Resident/Humanitarian Coordinator, other UN agencies, governmental organizations, NGO's, relief teams and others; pictures relating to the purpose of the mission; maps; and a list of persons met.

**The Format**

- Submitted by: *(Name Branch Date)*
- Co-travellers:
- Visit to: *(name/location of institute, organization, project, meeting, etc.)*
- Inclusive mission dates: Inter-Agency Mission:
(write yes or no)

• Purpose/Object of Mission:

• Summary:

• Recommendation(s)/Action to be taken:
Annex - Letter of 26 April 1999 issued by the Emergency Relief Coordinator and the UNDP Administrator

The following letter was sent to all Resident Coordinators from Mr. James Gustave Speth, Administrator, United Nations Development Programme, New York and Mr. Sergio Vieira de Mello, Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator.

“Dear Colleagues,

General Assembly resolution 46/182 and the Secretary-General’s Programme for Reform charge the Emergency Relief Coordinator (ERC) with providing leadership in coordinating the efforts of the international community to support countries affected by disasters. They also give him the responsibility of strengthening the system-wide capacity to respond to present and future humanitarian challenges. Humanitarian coordination arrangements at the field level are the key mechanisms to achieve this.

Furthermore, General Assembly resolution 52/12B and the Secretary-General’s Programme for Reform transferred the responsibilities of the ERC for operational activities for natural disaster mitigation, prevention, and preparedness to UNDP, in order to promote national capacity-building.

As you are aware, the job description of Resident Coordinators (RC) outlines responsibilities for leading the system-wide response to both humanitarian crises caused by conflict (complex emergencies) and natural and technological disasters, especially during the initial stages and up to such time as the Inter-Agency Standing Committee formally decides on a humanitarian coordination arrangement for a given country or region. When managing and coordinating responses to these situations, RCs are responsible and accountable to the ERC. When dealing with natural disaster mitigation, prevention, and preparedness, to ensure national capacity building, they will report to UNDP.

In 1998, natural disasters exacted a particularly heavy toll on developing countries, for which massive assistance was
required from the international community. The United Nations system, under the leadership at the country level of RCs and United Nations country teams played a major role in responding and thus alleviating the suffering of affected populations with the support of OCHA including the United Nations Disaster Assessment and Coordination (UNDAC) teams. Similarly, the Emergency Response Division (ERD) in UNDP has been giving support to the country teams especially in disaster mitigation, prevention, preparedness and capacity building.

To ensure the most rapid and efficient United Nations system approach at country level and the direct access of RCs to the specialist support and guidance available from OCHA, we wish to recall the arrangements outlined in the attached Guidelines for Cooperation agreed between UNDP and OCHA (then DHA) dated 3 September 1993. As indicated therein, when responding to complex emergencies and natural disasters, RCs will report to the ERC. When dealing with natural disaster mitigation, prevention, preparedness and capacity building, RCs will report to the Administrator. The ERC and the UNDP Administrator in turn will ensure that RCs are fully supported. For OCHA, the focal point in this regard is the Assistant Emergency Relief Coordinator in Geneva. Likewise for UNDP, the focal point is the Director, ERC at UNDP in New York and the Deputy Director of ERD in Geneva.

In this respect, please note that OCHA Geneva has a 24-hour, 7 days/week duty system with the following emergency number:

Disaster Response Branch (DRB): 0041 22 9 17 20 10
Complex Emergency Branch (CERB): 0041 79 217 3052
Finance and Administrative Section (FAS): 0041 79 217 3000

Regarding UNDP ERD the contact numbers are:

UNDP Emergency Response Division (ERD) New York Branch: 1 212 906 5193
UNDP Emergency Response Division (ERD) Geneva Branch: 00 41 22 917 8540
As leader of the United Nations country team, we look forward to your close collaboration with the ERC to ensure rapid and effective system-wide response to natural disasters and complex emergencies.

Regards.”
E. Disaster Assessment
E. DISASTER ASSESSMENT

E.1. Introduction (p.2)
   E.1.1. Scope of UNDAC Assessment (p.2)
   E.1.2. Assessment Recommendations and Their Impact on Recovery (p.4)

E.2. Methodology and Planning (p.5)
   E.2.1. Keys to Successful Assessment (p.5)
   E.2.2. Assessment Process (p.6)

E.3. Principles of Assessment and Response (p.10)
   E.3.1. General Principles by Sector (p.10)

E.4. Water and Sanitation (p.13)
   E.4.1. Displaced Population Situation (p.13)
   E.4.2. Water System Disruption (p.14)
   E.4.3. Sanitation - Displaced Population Situation (p.14)
   E.4.4. Sanitation - Non Displaced population situation (p.15)

E.5. Food and Nutrition (p.15)
   E.5.1. Food (p.15)
   E.5.2. Agriculture (p.17)
   E.5.3. Nutrition (p.20)

E.6. Shelter (p.20)
   E.6.1. Affected Population Profile (p.20)
   E.6.2. Materials (p.21)
   E.6.3. Distribution (p.22)

E.7. Health (p.22)

E.8. Infrastructure (p.25)
   E.8.1. Communications (p.25)
   E.8.2. Electric Power (p.26)
   E.8.3. Water/Sewage (p.27)
   E.8.4. Hydro Facilities (p.28)
   E.8.5. Roads and Bridges (p.29)

E.9. Assessment Checklists (p.30)
   E.9.1. Victims/Displaced Population Profile (p.31)
   E.9.2. General Assessment Checklist (p.31)
   E.9.3. Health Status (p.46)
   E.9.4. Capacities and Assets (p.46)
   E.9.5. UNDAC Standard Survey Form (p.48)
   E.9.6. Contact Points (p.50)

E.10. Tables (p.52)
   E.10.1. Emergency Indicators and Minimum
E.1. Introduction

Purpose of UNDAC Assessment
The overall purpose of an UNDAC assessment is to assist the government of an affected country and the UN Resident/Humanitarian Coordinator/UN-DMT in identifying needs for international disaster relief assistance and to facilitate a timely, appropriate response by the international community. In particular, the UNDAC team assists in an on-site assessment of:

- The nature of the disaster;
- Damage, including secondary threats;
- Effects on the population;
- Ongoing relief activities and local response capacity;
- Needs for international assistance;
- Means of delivering international assistance;
- Expected developments.

E.1.1. Scope of UNDAC Assessment

In order to delineate the scope of an UNDAC assessment, it is useful to distinguish between the following different types of assessment, as defined in the context of this handbook:

a. Initial or Rapid Assessment
Initial assessment comprises both situation and needs assessment in the early, critical stage of a disaster to determine the type of relief needed for immediate response. Initial
assessments aim to:

- Identify the impact a disaster has had on a society and its infrastructure, and the ability of that society to cope;
- Identify the most vulnerable segments of the population that need to be targeted for assistance;
- Identify the level of response by the affected country and its internal capacity to cope with the situation;
- Identify the level of response from the international community;
- Identify the most urgent relief needs and potential methods of providing them most effectively;
- Make recommendations which define and set priorities on the actions and resources needed for immediate response;
- Highlight special concerns regarding the development of the situation;
- Draw attention to geographical areas/substantive sectors needing in-depth assessment.

**b. Situation/Disaster Assessment**

Situation/disaster assessment refers to the process of collecting information on the magnitude of the disaster and the extent of its impact on both the population and infrastructure of the society. This type of information is usually first available to an assessment team.

**c. Needs Assessment**

Needs assessment aims to define the level and type of assistance required for the affected population. The initial needs assessment identifies resources and services for immediate emergency measures to save and sustain the lives of the affected population. It is conducted at the site of a disaster or at the location of a displaced population. It may also identify the need for continued monitoring and reassessment of the unfolding disaster.

**d. In-Depth or Sectoral Assessment**

In-depth assessment may refer to both situation and needs assessment. An in-depth assessment usually starts after the initial surveys and will cover critical sectors that have to be addressed for medium- and longer-term relief as well as rehabilitation and reconstruction assistance. In-depth assessments are carried out by specialists in the sectors
concerned. An UNDAC team does not replace a traditional inter-agency mission for an in-depth analysis of medium- and long-term rehabilitation/reconstruction needs emanating from an emergency.

The UNDAC team focuses on initial rapid assessment as soon as possible after the impact of a sudden-onset disaster. An UNDAC assessment should help determine the extent of a disaster and its impact on the population as well as needs for international assistance during the immediate relief or survival phase. During this phase, exceptional measures have to be taken to meet the basic needs of survivors with regard to search and rescue, medical assistance, water supply, immediate food needs, shelter and sanitation.

E.1.2. Assessment Recommendations and their Impact on Recovery

It is important that the recommendations of the UNDAC team do not have a counter-productive effect on the long-term recovery efforts of an affected country. Relief programs can set the stage for rapid recovery or prolong the length of the recovery period. Every action in an emergency response will have a direct effect on the manner and cost of reconstruction.

Many common relief programs can create dependencies and severely reduce the survivors' ability to cope with the next disaster. For example, food commodities brought into a disaster area without consideration for the local agricultural system can destroy the local market and cause future food shortages where self-sufficiency had been the norm. Another example is when relief supplies, equipment or technology are sent in that cannot be sustained by the survivors. When this assistance wears out or is used up, the survivors may be left in the same condition as immediately following the disaster.

Recommendations should be simple, support the use of local materials and systems and be sustainable by the affected country.
E.2. Methodology and Planning

E.2.1. Keys to Successful Assessment

Several factors contribute to the design of a successful and accurate assessment:

**Identify Information That is Vital for the Users**

The users of an UNDAC assessment are normally the government of an affected country, the UN Resident/Humanitarian Coordinator, the UN-DMT, OCHA-Geneva, the United Nations Emergency Relief Coordinator and decision-makers and emergency practitioners or providers of international relief assistance. The UNDAC assessment checklist serves as a general guide, however the team should determine what information is vital in the particular circumstances, what method is best to obtain this information, and how much detail is necessary for the information to be useful. Mistakes that are easily made are to collect information that is anecdotal rather than substantive; or to waste valuable time collecting detailed information when representative data would be just as useful. Thus, triangulating information is vital.

**Apply Standards/Indicators**

By applying indicators and standards to the presentation of data, key relationships can be quickly noted. For example, daily death rates in a displaced persons camp should be calculated and compared to the international standard of 1.0 deaths per 10,000 per day. Reference material of Minimum Standards in Disaster Response in various sectors is given in Section I.

**Timing of the Assessment**

Timing may affect the accuracy of an assessment. Remember situations and needs can change dramatically from day to day. Relief needs are always relative but, as a general rule, initial rapid assessments should be broad in scope and should determine overall patterns and trends. More detailed information can wait until emergency operations are well established.
Determine the Best Places to Obtain Accurate Information
If the information must be obtained from check lists, it is important that the areas being assessed provide an accurate picture of needs and priorities.

Distinguish Between Emergency and Chronic Needs
Virtually all developing countries have long-standing chronic needs in most, if not all, sectors. It is important to design an assessment that will distinguish between chronic and emergency needs. The surveyors must differentiate between what is normal for the location and what is occurring as a result of the disaster, so that emergency food aid, health care and other assistance can be provided at the appropriate level. Thus baseline information i.e. what was the situation prior to the disaster, is vital to be able to compare vulnerability before and after the disaster and to differentiate between chronic and emergency needs.

Use Recognized Terminology, Standards and Procedures
To provide a basis for evaluating the information, the UNDAC team should be careful to follow recognized survey and data collection methods as indicated in Chapter E.2.2, and use the terminology indicated in the glossary and standards provided in the reference materials by sector.

Consider Country-Specific Sensitivities
The assessment team must be sensitive to the situation in the affected country. The team needs to structure its assessment questions so that expectations are not created. It should be clear to the authorities at all levels what the role of UNDAC is. The assessment team must also be aware of the pressures it will feel from the affected country and others to “identify needs.” A recommendation of “no additional assistance is required,” may be a valid response, if an on-site visit reveals that the disaster is not so severe as indicated in third-hand reports and media coverage.

E.2.2. Assessment Process
The following information defines the elements of any assessment process. Assessments are generally comprised of
five basic elements or activities:

1. Planning

An accurate assessment depends on thorough planning, design and preparation. Most information needs can be identified in advance. A plan of action should be established as a result of the planning phase. Objectives it is intended to achieve must be enumerated.

In the planning stage, the following points have to be taken into consideration:

- Specific task of the team (adaptation of the terms of reference in discussion with the UN Resident/Humanitarian Coordinator)
- Initial size and composition of UNDAC team and therefore a consideration of its abilities and limitations
- Disaster situation
  - type/occurrence
  - timing of mission
  - possible future developments of the disaster
- Data and information available (reliability)
- Stricken area (size, topography, accessibility, population density, urban/rural, etc.)
- Weather / climatic conditions / season
- In-country logistics (means of transport, communication, mission support - food, medical, etc.). Access and Security levels to be checked with appropriate UN authorities.
  - Time available
  - Possible information sources in the area
  - Local cultural and other social factors
  - Political situation (security, freedom of movement, other restrictions)
- In country UN presence in the affected area (many UN Agencies have programmes with national staff who may be in the affected area. Consider using their help)
  - Presence of any other international relief teams e.g. DART or military

Based on consideration of the above factors, a plan of action should be developed with the following elements:

- Precise definition of the field survey
  - area(s) to survey
• itinerary  
• time frame  

• Team composition  
  • at least two team members should stay together in carrying out an assessment. Every attempt should be made to have a representative from the UNDP office or a UN Agency with a programme in the area and from the local/regional government accompany the team. Remember to take a translator.  

• Distribution of tasks  
  • the special expertise of individual team members should be taken into account when determining the distribution of responsibilities. If possible, a female UNDAC member should be a part of the team as it may ease access to women in some areas.  

• main tasks to be fulfilled:  
  • keeping a logbook of team activities  
  • recording assessment data  
  • photographic documentation (with record keeping)  
  • preferably digital camera  
  • communications  
  • reporting  
  • logistics and mission support (water supply and food, fuel, keeping of receipts, medical kits, maps, etc.).  

• Methods of data collection  
  • taking into account the different methods of data collection, a choice of appropriate methods and information sources has to be made: the participative tools and methods most frequently need are:  
    • Focus Groups  
    • Semi structured interviews  
    • Open questions  
    • Walk through a village  
    • Wealth ranking  
    • Gender activity profiles  
    • Time-line needs  

• use of rapid assessment checklist (see Chapter E.5.1) is usually the best way to ensure that all information is reported in a uniform way  

• UNDAC members may also study assessments conducted by others, try to inform themselves of the approach used
and then use this material, as appropriate, in their reporting. In this case, the source should always be indicated. IFRC in most countries is an extremely useful source because of the presence of local chapters in country.

- Equipment for the field trip
  - personal
  - team
- Announcement of itinerary and contact points
  - regional/local authorities
  - central government (letter of reference)
  - other UN agencies/missions in the area/NGO's, other international teams e.g. DART teams.

In an initial assessment, the gathering of information must proceed rapidly. Assessors should look for patterns and indicators of potential problems. Sources of all information should be identified. Examples include whether it was observed, reported by a key informant in a discussion, collected through a checklist, etc. The information will be more meaningful to those interpreting it (especially with conflicting reports) if a source is indicated.

The following list outlines some of the most common ways of collecting data in emergencies. As the UNDAC team carries out an initial assessment, it will not normally have an opportunity to use all of these methods in a truly scientific manner. The knowledge of these methods may, however, help to apply a more objective approach and may also be useful in judging the reliability and validity of assessments carried out by others.

1. Automatic, initial self-assessment and local assessment e.g. staff of “lifeline” systems. This can involve pre-planned damage reporting by emergency management authorities or authorities involved in the emergency response.

2. Visual inspection semi structured interviews and Focus groups by specialists. Methods can include overflight and checklists. Do remember to interview women to get a gender balanced review of the situation to achieve rapid appraisal of area damage.
3. You should take the following action while conducting a rapid assessment in the field:
   a) Meet with the local authority, state who you are.
   b) Walk through areas as much as you can.
   c) Visit markets, schools, community centres.
   d) Listen to people.
   e) Ask questions.
   f) Triangulate information with a different group of people.

4. “Sentinel” surveillance. This is a method widely used in emergency health monitoring, where professional staff establish a reporting system which detects early signs of particular problems at specific sites. The method can be applied to a variety of other problems where early warning is particularly important.

2. Monitoring
An UNDAC assessment should not be seen as an end in itself, but rather as one part of a continuing process of reassessing the needs and appropriateness of responses to the disaster situation. In general, monitoring following an UNDAC assessment should be carried out by the UN-DMT.

E.3. Principles for Assessment

E.3.1. General Principles by Sector

Health
- In sudden-onset disasters such as earthquakes, or during civil strife disasters, there can initially be a significant need for curative care, particularly trauma care within the population.
- Health services for displaced people should be based on the concept of primary health care. Priority should be given to preventive measures such as proper nutrition and public health services, rather than curative measures.
- Any detailed listing of medicaments that might be submitted to the UNDAC Team will have to be referred to WHO for guidance unless it is part of the Emergency Health kit.

Shelter and Personal Household Needs
Only the necessary minimum of time, effort and resources should be committed to temporary emergency shelter. Permanent reconstruction should be promoted as soon as possible. See recommended SPHERE project standards for household items, clothing and housing in the tables.

- Cash contributions for local/regional purchase of traditional housing material for temporary shelter are often preferable to contributions in kind, purchase of tents, prefabricated housing material or other solutions not adapted to the local context. If possible, materials should be provided which can be reused later in permanent reconstruction. Maximum use should also be made of material which can be salvaged from damaged buildings. Highest priority should be given to roofing.

- Individual family initiatives should be encouraged to the greatest possible degree in meeting shelter needs, e.g. through the provision of basic materials, guidance for self-help programmes, food-for-work programmes, etc. Shelter, including communal buildings, should be built by the victims themselves, provided material support is given. This will help ensure that the housing will meet their particular needs. It will also help reduce their sense of dependency and can cut costs considerably.

- “Temporary housing” (usually prefabricated) is to be avoided. In fact, it is rarely replaced. The units are often very expensive, absorbing resources which might be better directed towards permanent reconstruction. Such units and/or the sites chosen for them have often been found unsuitable for local patterns of family life and cultural traditions.

**Water and Sanitation**

- People can survive longer without food than without water: providing water demands immediate attention.
- An adequate quantity of reasonably safe water is preferable to a smaller quantity of pure water. Treatment should be avoided, if possible. Minimum quantities of reasonably safe water should be provided as close to homes as possible. Safe storage of water should be provided at the community and household levels.
- Availability will generally be the determining factor in organizing a supply of safe water. An assessment of available sources of water must be made by specialists. If these sources
are inadequate, new sources have to be developed or water has to be delivered.
- In an emergency situation, act first and improve later. Temporary systems to meet immediate needs can be improved or replaced later. The swift provision of a basic human waste disposal system is better than the delayed provision of an improved system. The simplest technologies should be applied.

**Food and Nutrition**
- Foods prepared locally with local ingredients are preferable to imported foods. In case unfamiliar foods or new methods of cooking and preparation have to be introduced to the population, simple nutrition education is important.
- If possible, organize dried food distribution to allow families to prepare their own meals.
- Infants, children, pregnant and lactating women, the sick and elderly are often most vulnerable to malnutrition and have special needs.
- Cereals should only be provided at the onset of an emergency.
- Do not include dried/skimmed milk into a general food distribution.
- MUAC (middle upper arm circumference) is used to give a rough idea of the malnutrition rate. However, weight for height indicators are used in an anthropometric nutritional survey.
- Prevalence of micronutrients deficiencies for population age less than 5 years.

**Displaced Persons Camps: Site Selection, Planning and Shelter**
- A suitable site and adequate shelter are critical during the early stages of emergencies involving displaced people. A lack of both can adversely affect the well-being of displaced people and, in some cases, their protection as well as the delivery of assistance to them.
- Avoid high-density camps. Plan for the long term, since so-called temporary arrangements often last much longer than expected.
- Camp planning should reflect a decentralized, small community approach, preserving past social arrangements.
Involve the displaced people (for whom the camp will be home) in planning and implementation.
- Expertise may be required in the fields of geology, settlement, planning, engineering and public health. A familiarity with local conditions in both the displaced population’s area of origin and at their present location is important, as is previous experience with similar emergency situations.

**Urban Search and Rescue (SAR)**
- International assistance with urban search and rescue might be required when:
  - a large urban area is affected
  - hospitals and other buildings of more than two stories have collapsed
  - when these buildings are constructed of reinforced concrete or other materials which will leave spaces where trapped victims could survive for several hours.
- The chance of survival of trapped victims declines rapidly after 24 to 36 hours. An UNDAC recommendation regarding the mobilization of international SAR teams should reach OCHA-Geneva as soon as possible after an earthquake has occurred.
- Spontaneous search and rescue is usually provided by the survivors and local relief teams and succeeds in rescuing those not requiring major resources of equipment and manpower. International assistance is therefore focused on intensive efforts to locate and extract trapped victims by using cutting and lifting equipment as well as sophisticated, intensive “heavy rescue” techniques.
- Expertise in disaster medicine is required to supervise and aid in victim extraction and provide immediate care.
- In earthquakes, the potential for damaging aftershocks is a continuing threat. When establishing a base for the UNDAC operation and for international relief teams, security and safety considerations are important factors.

**E.4. Water and Sanitation**

**E.4.1. Displaced Population Situation**
- Determine the amount of water available per person per
Determine the source and quality of the water.
Determine how long the daily amount has been available.
Determine the evidence of water-related diseases.
Determine the length of time users wait for water.
Determine whether there is safe access to water for vulnerable groups.
Determine the types of wells, transportation, and/or storage systems used.
Determine if there are problems with well repair/rehabilitation.
Determine if there is equipment/expertise onsite, on order, or available if needed.
Determine the availability of additional sources of safe water if required.
Determine the need for water engineers to assist with evaluating requirements.

E.4.2. Water System Disruption

- Describe the types of systems and sources that existed prior to the disaster in the affected areas.
- Specify how many people have been deprived of a functional water supply.
- Determine who is in charge of the local water system(s) (community group, committee, national authority).
- Determine whether the system is still functional or what the requirements for repair are.
- Determine the need for an engineering specialist to assist with evaluating requirements.

E.4.3. Sanitation - Displaced Population Situation

- Determine the placement, number, and cleanliness of latrines.
- Determine if the design and placement of latrines are affecting their use because of cultural taboos.
- Determine if there is a sanitation plan if the population increases.
- Determine if there is safe access to latrines for women and girls.
- Determine the evidence of water-related diseases.
- Determine the proximity of latrines and refuse areas to water sources, storage areas, and distribution points.
- Determine the placement and plan for the disposal of corpses.
- Determine if there is a plan for the collection and disposal of garbage.
- Determine if there is an insect- and rodent-control plan.
- Determine the need for a specialist to assist with evaluating requirements.

**E.4.4. Non displaced Population Situation**

- If the disaster occurs in a rural area, waste disposal is usually not a problem unless sewage “ponds” in a public area. Determine if this is occurring.
- If you are on an island affected by a hurricane or in an area affected by flooding, determine if the sewage drainage system is still open. (See also “Infrastructure.”)
- Determine the adequacy of sewage disposal facilities in any public buildings or other areas being used to temporarily shelter homeless people.

**ES. Food Aid and Nutrition**

**E.5.1. Food**

**Baseline Data**
- Describe the normal consumption pattern (food basket) of the affected population, any taboos, and acceptable substitutes.
- Describe the normal food marketing system (including government involvement, imports, subsistence).
- Indicate what food aid programs, if any, exist and describe them.
- Outline the indigenous food processing capacity.
Effect of the Event on Food

- Ascertain the disaster’s effect on actual food stocks and standing crops (damaged/destroyed).
- Determine if access to food (for example, roads, milling facilities) has been disputed and, if so, how long it is likely to remain disrupted.
- Check market indicators of food shortages, such as:
  - Absence or shortage of staple grains and other foods on the market.
  - Price differential.
  - Change in supplies on the market (for example, an increase in meat supplies may indicate that people are selling animals to get money).
  - Change in wholesale grain availability.
  - Unusual public assembly at a warehouse or dockside when grain is being unloaded.
  - Changes in warehouse stocks.
  - Black market price changes or increase in black market activities.
  - Commercial import changes or proposed changes.
  - Sale of land, tools, draft animals, etc.
- Check nutritional indicators of food shortages by sex, such as:
  - Signs of marasmus, kwashiorkor, or other signs of malnutrition.
  - Increased illness among children.
  - Change in diet (that is, quantity, quality, type).
- Check social indicators of food shortages, such as:
  - Increased begging/fighting/prostitution.
  - Migration from rural to urban areas.

Food Availability

- Determine how much food can be expected from future and/or specially planted, quick-maturing crops. Where in the production cycle was the affected area when the disaster struck?
- Estimate the local government stocks on hand and those scheduled to arrive. Is borrowing of stocks on hand a possibility?
- Estimate the local commercial stocks on hand and scheduled to arrive.
Estimate the local PVO/NGO/IO stocks on hand and scheduled to arrive. Is borrowing a possibility?
- Estimate local personal stocks on hand and those scheduled to arrive.
- Determine regional availabilities.
- Canvass other donors to find out what they expect to contribute.
- Estimate how much food aid would be required during specific time periods.

**Distribution Systems**
- Describe existing food aid distribution systems (for example, government rationing, PVO/NGO/IOs).
- Describe the effectiveness of the distribution system.
- Describe the role of women in the distribution system.
- Describe government marketing mechanisms.
- Judge the capacity of the above to expand/begin emergency aid. What is their record of accountability?
- Describe potential alternatives.
- Explain the country’s (agency’s) previous experience with mass feeding.
- Determine the availability of facilities and materials, including fuel.
- Determine whether repackaging facilities exist.

**Social and Market Impact of Food Aid**
- Analyze the likely price impact on normal food suppliers.
- Describe the suppliers.
- Decide whether food aid would free cash and labor for other aspects of relief, or divert labor and create a dependent attitude.

**Other**
Research any legal impediments to importation of certain foods.

**E.5.2. Agriculture**

**Baseline Data**
- Describe crops grown in the affected area following the
points listed below:
- Crop name.
- Average area planted (per data available).
- Average production (per data available).
- Planting season(s) (dates) and time to maturity.
- Are crops climate-specific? If so, identify the climatic requirements.
- Are hybrid seeds being used in the area? If so, identify them.
- Are they cash or subsistence crops?

- Describe domestic animals present in each affected area following the points listed below:
  - Approximate number of animals in the area.
  - Value of individual animals.
  - Use of animals for food.
  - Use of animals for work.
  - Use of animals for cash production.
  - Are bred stocks used in the area?

- Describe the agricultural system, including the following:
  - Main agriculturist in family units (male/female).
  - Land-use systems.
  - Agricultural labor system/land tenure.
  - Crop preferences.
  - Inputs.
  - Seeds (reserved or purchases): Is treated seed used?
    - Fertilizer.
    - Machinery/tools.
    - Pesticides.
  - Storage (farm, government, private).
  - Agrobusiness facilities, processing of local or imported commodities.

- Describe the local fishing industry.

**Effect of the Event on Agriculture**
- Effect of the event on agriculture/livestock/fisheries.
- Ascertain the extent of damage to crop/livestock/fisheries by area, noting at what point in the production cycle the event occurred. State the source of the information.
- Estimate the loss in production (tonnage/head) by crop/livestock/fisheries and by zone within the affected area.
• Analyze whether losses will increase over time and state why.
• Describe the damage to agricultural machinery.
• Describe the damage to irrigation systems.
• Describe the damage to seed, fertilizer, and pesticide stocks.
• Describe the damage to fishing gear.
• For a drought, compare the current rainfall to the normal or recent past precipitation.
• Identify any unusual or untimely grazing changes.
• Describe any threats from insects or disease that might follow the disaster.

Agricultural Production Capabilities

• Availability of inputs by type (for example, seed, fertilizer, pesticides, tools, machinery, veterinary medicines, fishing boats, nets, breeding stock).
• Estimate the local government stocks on hand and when they are scheduled to arrive.
• Estimate the local commercial stocks on hand and when they are scheduled to arrive.
• Estimate the local personal stocks on hand and when they are scheduled to arrive.
• Ask the victims how they plan to cope with losses.
• Determine regional availabilities and elasticity of supplies.
• Ascertain what other donors plan to supply.
• Outline what further inputs would be required to restore minimum productivity.
• Find out if repackaging facilities for seed, fertilizer, and pesticides exist.
• Distribution systems/technical infrastructure.
• Outline host government (Ministry of Agriculture) operations in the affected area. Does it provide:
  • Extension service?
  • Crop storage/silos?
  • Veterinary services?
  • Irrigation services?
  • Research facilities?
  • Hybrid seed?
  • Fertilizer?
Other plants (fruit trees)?
- Pesticides?

Other
- Describe any agricultural projects and inputs provided by foreign organizations/governments.
- Describe the operations of rural or agricultural credit organizations, cooperatives, or credit-sharing organizations that exist in the affected area.
- Judge the capacity of the above to incorporate rehabilitation disaster assistance.

E.5.3. Nutrition
- Determine the prevalence of protein energy malnutrition (PEM) in population less than 5 years of age.
- Ascertain the prior nutritional status.
- Determine the prevalence of micro nutrient deficiencies in the population less than 5 years of age (for example, scurvy, anemia, pellagra).
- Determine the percentage of children under 5 years of age with:
  - Either moderate or severe acute malnutrition.
  - Determine the average daily ration (food basket and calories/person/day) and method and intervals of distribution (for example, wet/dry on a daily/weekly/monthly basis).
- Determine the length of time the above ration level has been available.
- Determine the attendance and effectiveness of supplementary and therapeutic feeding programs.
- Determine the incidence of low birth weight.
- Determine rate of weight gain or loss of children registered in Mother-Child Health (MCH) clinics.
- Determine oral rehydration salt (ORS) needs and distribution system.

E.6. Shelter

E.6.1. Affected Population Profile
• Determine the number of people requiring shelter and whether the need for shelter is temporary (a few weeks), or if it is a displaced population requiring shelter for an indeterminate time.
• Determine the average number of people in an individual dwelling.
• Identify obstacles that prevent victims from meeting their own needs, both for temporary and permanent shelter.
• Determine the area affected (for example, portion of city, several villages, large area of a country).
• Approximate the number of private dwellings (single-family, attached, low-rise and high-rise multiple family) and public buildings (schools, churches, hospitals) damaged or destroyed by city, village, or region.
• Determine the number of damaged dwellings that are habitable without immediate repair, that are habitable only after repair, and that are not habitable and must be destroyed.
• Inventory existing structures and public facilities that can be used as temporary shelters, giving careful consideration to access to sanitation and water.

E.6.2. Materials
• Identify the construction styles and materials normally used in the affected structures.
• Determine the availability and costs of indigenous materials to meet both cultural and disaster-resistance requirements.
• Identify any suitable material substitutes, locally or externally available, that would meet the cultural and disaster-resistance requirements.
• Identify the type and quantity of building materials that the victims can provide for themselves for temporary or permanent shelter.
• Identify the type and quantity of building materials that the affected government can provide for the victims for temporary or permanent shelter.
• Determine the type and quantity of materials needed from
external sources for temporary or permanent shelter.

- Assess the suitability (that is, infrastructure support) of available sites for both temporary and permanent shelters, including, where necessary, mass sheltering.
- Determine if relocation is necessary due to the nature of the disaster. Identify the problems this may cause with the local population.
- Assess the potential hazard and security vulnerabilities of available sites for both temporary and permanent shelters.
- Assess the environmental conditions that would impose constraints on temporary shelters or camps, such as all-season accessibility, proximity to sources of essential supplies (shelter materials, cooking fuel, water, etc.), soil, topography, drainage, and vegetation.
- Identify any problems related to land use, such as grazing, cultivating, sanitation, and land tenure issues.

E.6.3. Distribution

- Determine the accessibility to the affected areas for both assessment and delivery.
- Determine the availability of a distribution mechanism (local, regional, national, international) to distribute shelter materials (temporary or permanent) to the victims.
- Identify committees, credit unions, government agencies, or co-ops that can mobilize forces to help implement a shelter program.
- Determine if an equitable means of allocation and an appropriate medium of exchange for the building materials can be implemented.

E.7. Health

Health

- Ascertain demographic information:
  - Total number affected.
  - Age-sex breakdown (under 5, 5-14, 15 and over).
  - Identification of at-risk population (that is, children under 5 years of age, pregnant and lactating women, disabled and wounded persons, and unaccompanied minors).
- Average family or household size, and number of female-headed households.
- Rate of new arrivals and departures.

- Determine background health information:
  - Main health problems in home area.
  - Previous sources of health care (for example, traditional healers).
  - Important health beliefs and traditions (for example, food taboos during pregnancy).
  - Social structure (for example, whether the displaced are grouped in their traditional villages and what type of social or political organization exists).
  - Strength and coverage of public health programs in home area (immunization, reproductive health, etc.).

- Mortality rate:
  - Determine the crude mortality rates.

- Morbidity rate:
  - Determine the age- (under and over age 5) and sex specific incidence rates of diseases that have public health importance. Document the method of diagnosis (clinical judgment, laboratory test, or rumors).

- Immunization programs:
  - Determine the need for immunization programs or the effectiveness and coverage (percent of children under age 5 and between ages 5-14) of those in place, especially measles vaccinations.
  - Dates of vaccinations.
  - Determine the capability of relief officials to begin or sustain a program (for example, logistics, infrastructure, and cold chain availability).

- Determine or estimate the number of major injuries and the rate for each type of injury. Specify traumatic injuries requiring surgery or hospitalization (for example, fractures, head injuries, internal injuries).

- Determine the number and locations of health facilities that existed prior to the disaster.
- Determine the number of facilities that are still functioning and the total number of usable beds.
- Determine the number of indigenous health personnel who are available.
- Determine the amount and type of medical supplies and drugs that are available onsite or in-country.
. Determine additional amounts and types of medical supplies and drugs needed immediately from sources outside the stricken area.
. Determine what additional medical equipment is needed and can be readily obtained to deal with major injuries.

Suggested data sources:
- National/provincial health officers.
- Hospitals.
- Clinics.
- Traditional healers.
- Local leaders.
- Fly-over.
- Walk-through surveys.

. Environmental conditions:
- Determine climatic conditions.
- Identify geographic features and influences.
- Identify water sources.
- Ascertain the local disease epidemiology.
- Identify local disease vector.
- Assess local availability of materials for shelter and fuel.
- Assess existing shelters and sanitation arrangements.

. Determine if a health information system is in place to monitor the affected population and provide surveillance and intermittent population-based sample surveys that should:
- Follow trends in the health status of the population and establish health care priorities.
- Detect and respond to epidemics.
- Evaluate program effectiveness and coverage.
- Ensure that resources go to the areas of greatest need.
- Evaluate the quality of care delivered.

. Determine if the affected country has in place or plans to begin programs in:
- Health information systems.
- Diarrhea disease control.
- Expanded programs on immunization (EPIs).
- Control of endemic diseases.
- Reproductive health programs.
- Nutrition programs.
- Continuing education programs for health workers.
- Vector control.
E.8. Infrastructure

- Determine the predisaster condition of the infrastructure.
- Ascertain from the affected government the minimum needs for infrastructure recovery.

E.8.1. Communications

- Describe where the system’s facilities are located.
- Determine the broadcast/reception area or zone of influence (for example, towns serviced by the system).
- Identify the organization/firm that is responsible for operation and maintenance of the system. Is there a disaster response plan with identification of priority facilities, material supply, and priority screening of messages?
- Obtain technical information, such as:
  - Broadcast power.
  - Operating frequencies, call signs.
  - Relay/transmission points.
  - Hours of operation.
  - Standby power sources.
  - Mobile capability.
  - Repair/maintenance facilities, including capabilities of manufacturer’s local agent.
  - Language of transmission.
- Identify key personnel (owners, management, operations, maintenance).
- Determine the degree of integration of military and civilian communications networks.
- Note the source(s) of the above information.
- Determine what communications facilities exist that are operable or easily repaired and could be used to pass on assessment information and assist in coordination of life-saving responses.
- Identify the type of system assessed:
  - Radio.
  - Private ownership.
  - Commercial.
  - Broadcast.
- 2-way.
- Amateur.
- Citizens band.
- Public systems.
- Police.
- Armed forces.
- Government agencies (which ministries have communications facilities?).
- Telephone.
- Cable and wireless.
- Television.
- Newspaper.
- Other.

* Describe specific reasons why a system is not operating.
  - Unavailability of
    - Personnel.
    - Power.
    - Fuel.
    - Access to facilities.
  - Damage to system:
    - Broadcast/transmission equipment.
    - Antennae.
    - Buildings.
    - Transmission lines.
    - Relay facilities.
    - Power source.
    - Other.

* Note source(s) of the above information.
* Outline options for restoring minimum essential services.
* Identify local/regional suppliers of communications equipment and materials available for repair. Check cost and availability.
* Determine the local/regional availability of technical services available for repair.

**E.8.2. Electric Power**

* Describe the power system, including:
  - Baseload facility.
- Peaking facility.
- Number of units.
- Fuel source.
- Plant controls.
- Output capability (specify voltage and cycle).
- Mobile plants.
- Other standby capability.
- Switching facilities.
- Transmission facilities.
- Distribution facilities (number of substations).
- Interconnections.
- Inventory auxiliary equipment that may be available locally (for example, from construction companies).
- Determine why power is not available (that is, at what point the system has been damaged).
- Ascertain the condition of generating units.
- Check the integrity of the fuel system.
- Determine whether towers, lines, and/or grounding lines are down.
- Assess the condition of substations.
- Outline the impact of power loss on key facilities, such as hospitals and water pumping stations.
- Describe the options for restoring minimum essential services.
- Ascertain whether load shedding and/or switching to another grid can restore minimal services.
- Identify local/regional suppliers of equipment and materials. Check the cost and availability.
- Determine the local/regional availability of technical services available for repair.

E.8.3. Water/Sewage

- Describe the preexisting systems: that is, for water, the source, treatment facilities, mains, pump stations, and distribution network; for sewage, the treatment facilities and pump stations.
- Estimate the number of people who depend on the water sources by type (for example, river, city water system).
- Determine why water (especially potable water) is not available (that is, at what point the system has been damaged).
- Check the integrity of the water source.
- Assess the condition of water and sewage treatment facilities and of the distribution network. Are pump stations operational?
- Determine whether water mains are broken. Are leaks in the sewage system contaminating the water supply?
- Outline the impact of water loss on key facilities and on individual users. How quickly can the responsible ministries be expected to restore services?
- Describe options for restoring minimum essential services.
- Evaluate the possible alternative water sources.
- Identify local/regional suppliers of equipment and materials. Check cost and availability.
- Determine the local/regional availability of technical services available for repair.

E.8.4. Hydro Facilities (Hydroelectric, Irrigation)

- Describe the function of the facilities, their proximity to the stricken area, and their relationship to the disaster itself.
- Identify the host country organization that controls and operates the facilities.
- Identify the suppliers, contractors, and/or donors that built the facilities (that is, what were the equipment and technical sources?).
- Describe any damage to systems.
- Check the soundness of the structures and outlet works. Are the reservoirs watertight?
- Identify any immediate or near-term safety risks (generating and control machinery, structural defects, power to operate gates, etc.).
- Assess the condition of canals or downstream channels.
- Identify any changes in watershed conditions (for example, saturation, ground cover, streambed loading, new impoundments).
- Determine whether water is being contaminated.
- Evaluate the management of the facilities.
- Determine whether storage and outflow quantities are being managed in accordance with prescribed curves.
- Identify preparations for follow-on storm conditions (for example, emergency drawdown of reservoirs).
- Describe the probable impact of discharging on downstream damage and/or relief efforts (for example, depth at river crossings, releases into damaged canals). Is there a need to impound water until downstream works can be repaired?
- Outline the options for restoring minimum essential services.
- Outline the repair plans of the responsible host country officials.
- Check on any proposed assistance from the original donors of the facilities.
- Identify local/regional sources of equipment and technical expertise.

E.8.5. Roads and Bridges

- Describe the road networks in the affected area by type. What is the load capacity of the bridges?
- Identify the responsible ministries and district offices and constraints on their operations.
- Describe any damage to the network.
- Determine which segments are undamaged, which can be traveled on with delays, and which are impassable.
- Describe any damage by type:
  - Blockage by landslides, fallen trees, etc.
  - Embankments.
  - Drainage structures.
  - Bridges/tunnels.
  - Road surfaces.
- Identify alternate crossings and/or routes.
- Evaluate the importance of the road network to the relief effort and rehabilitation.
- Outline the options for restoring minimum essential service.
- Determine which elements must be restored first.
• Describe the need for traffic control (police, military, other) on damaged or one-way segments.
• Determine how long the emergency repairs can accommodate relief traffic (size, weight, volume?). Will emergency maintenance and fuel points be needed in remote areas?
• Identify the host country agencies, military, and/or civilian forces that are available to make repairs. Do they have equipment, spare parts, and maintenance support?
• Check whether local or expatriate construction companies can loan equipment and/or expertise.
• Check regional sources of equipment and/or expertise that are available for repair.
• Ascertain that arrangements can be made for standby forces at damaged sections to keep roads open.

E.9. Assessment Checklists

The following assessment checklists are intended to assist the Assessment Team in planning, formatting, and conducting a complete initial assessment. The answers to the checklist questions will provide the information needed to complete the disaster cable formats outlined in the previous section on cable formats. These assessment checklists are divided into major sectorial areas. They are meant to be as inclusive as possible of the types of questions that need to be answered in initial assessments of various disasters. To be answered completely, some of the questions would require extensive assessment work to gather primary or secondary data, work, which the team may or may not have the capacity to perform. However, the information may already exist i.e. secondary data and the task of the team may be only to gather assessment information assembled by others and evaluate the information for accuracy, timeliness, and completeness. An Assessment Team may also find it necessary to develop new or expanded questions to gather the required information for specific disasters.
E.9.1. Victims/Displaced Population Profile

General Characteristics
. Determine the approximate number of displaced people.
. Determine their locations. Are they moving? To where? How many?
. Determine how many are arriving per week. How many more could come?
. Determine how they are arriving. Are they scattered individuals or families, or clans, tribal, ethnic, or village groups? By what means are they traveling? How did those already there arrive? What is the average family size?
. Determine the approximate numbers and ages of men, women, and children (ages 0-5, 6-14, 15 and over).
. Identify ethnic/geographic origin (urban or rural).
  - Sedentary or nomadic background?
  - What is the average family/household size?
  - How many households are headed by females?
  - What are their customary skills?
  - What is the language(s) used?
  - What is the customary basic diet?
  - What is the customary shelter?
  - What are the customary sanitation practices?
  - What is the general distribution of socioeconomic statuses—(poor, middle class, wealthy)—within the population?

E.9.2. General Assessment Checklist

Nature of Disaster
1. Main event
   - date
   - local time of onset
   - GMT time of onset
   - duration
   - strength

2. Subsequent events
   - aftershocks
   - weather conditions
   - other
3. Current conditions

4. Expected development
   ☑ weather forecast
   ☐ water level rising/falling
   ☐ flooding expected to spread/recede
   ☑ other

Affected Area
A. Name of affected provinces/districts
   (indicate names found on international maps, reference points)

B. Major cities/urban centres/villages affected

C. Approximate size of affected area in sq. km.

D. Estimated total population in affected area
   (i.e. the estimated no. of people living in the disaster-affected area, including those who do not belong to the primary affected population - specify source)

5. Topography
   ☑ mountainous
   ☐ flat
   ☐ low-lying coastal
   ☐ other

F. Type of area affected and socio-economic characteristics (sources of livelihood) of population
   ☑ urban
   ☑ rural
   ☑ low-income
   ☑ agricultural
   ☑ industrial
   ☐ nomadic
   ☑ other

G. Worst-affected areas (identify by geographical names)

H. Possibility of access to affected area(s)

I. Any affected areas on which no data presently available
J. Special considerations that may affect the disaster situation or relief operations

- political considerations
- civil strife or conflict
- problems of ethnic, religious or cultural minorities
- population movements (to/from affected area(s))
- special security problems
- other

National Authorities

A. National authority in charge of coordinating domestic response to emergency. List:

- name of authority
- name of official in charge
- his/her title
- office telephone, facsimile, telex nos.
- office hours
- emergency 24-hour telephone no.
- street address

B. National authority (if separate from above) in charge of coordinating/focal point for international response. List:

- name of authority
- name of official in charge
- his/her title
- office telephone, facsimile, telex nos.
- office hours
- emergency 24-hour telephone no.
- street address

Damage

A. Buildings

1. Predominant building type and construction material

- type of structure
- wattle-and-daub buildings
- masonry buildings (adobe, brick, concrete blocks, stone masonry)
- reinforced concrete structures (r.c. frames with brick infill, r.c. frames with load-
bearing masonry walls, r.c. bearing walls, prefabricated structures

- steel structures (multi-story steel structures, steel frames filled in with reinforced concrete)
- timber structures
- other

- type of roof (reinforced concrete, steel, wood, grass, etc.)
- roof covering (tiles, lightweight asbestos cement, metal sheets, etc.)

1. Indicate percentage (and, if possible, number) of buildings damaged or destroyed, by affected area, according to the following categories:
   - no significant damage
   - minor damage (repairs required, but structure is habitable)
   - major damage (structure is not habitable, major repairs required)
   - destruction (structure is not habitable and irreparable)

2. Describe extent of damage to the following types of building
   - public buildings (religious facilities, schools, community centres, etc.)
   - multi-family tenement housing - any buildings with more than two stories destroyed
   - low-income traditional housing (adobe, wattle-and-daub, stone, etc.)
   - residential houses
   - industrial buildings
   - other

B. Lifelines and critical facilities (LCF)
   (Primarily roads and means of communications to affected area)

Use the following categories to assess the status of lcf listed below:
   - intact
level of operations adequate for relief activities
use limited or operations totally disrupted

If operations totally disrupted or use limited:

- describe damage and negative consequences per area, as applicable, e.g. key areas or installations that cannot be reached by road
- specify current level of operations, e.g. indicate capacity a damaged bridge/airport can still handle; functions that can still be performed by a hospital

1. Road network and related facilities (urban roads, main inter-city roads, access roads, bridges, tunnels, etc.)
   - describe how affected areas can be reached:
   - type of road
   - road capacity

2. Secondary transportation facilities (airports, harbours/ports, railways) - see Logistics Chapter for checklist on airport capacities

3. Telecommunications network (telephone, telex, radio: public - police, armed forces, government - and private - commercial (broadcasting), amateur)

4. Medical facilities (hospitals, clinics, health posts, laboratories) - relate damage to number of facilities normally operational in affected area

5. Electric power generation and distribution (transmission lines, pylons, generators, power stations, etc.)

6. Nuclear power plants

7. Gas/oil/fuel distribution and availability

8. Water supply systems
specify systems normally available:
- water pipes to house
- water pipes to village/street
- communal wells
- individual wells
- towers/storage tanks, pumping stations, etc.
- water treatment facilities
- other

describe type of damage/problems:
- salination
- broken water pipes
- contamination with sewage
- damaged pumping stations
- other

9. Sanitary sewer systems (treatment facilities, pumps, sewage pipes)

10. Police stations/fire fighting facilities

11. Government buildings
- emergency operation centres
- government administrative buildings

C. Agriculture and fisheries

1. If there has been damage to crops, specify:
- types of crops cultivated and stage in the crop cycle
  - recently sown crops
  - standing crops
  - due for harvest in xx (month)
  - crops ready to be harvested
- whether crops serve mainly as subsistence crop or for export from disaster area (cash crop)

2. Describe the extent of damage to crops by type and affected area, indicating percentage of crop (in relation to crop production area):
- destroyed (unsalvageable)
- damaged (salvageable)
3. What is the estimated loss of stored food (produced and imported)? (indicate percentage or absolute numbers in tonnes), explain

☐ type of food lost
☐ why it is lost
c数控 whether part is salvageable

4. Assess extent of damage to agricultural infrastructure, only if relevant for the relief phase, e.g. destruction of equipment or loss of agricultural tools required to harvest mature crops, damage to storage facilities leading to the loss of stocks required in the short term

5. Indicate livestock losses, only if livestock is a main source of subsistence for the primary affected population:

☐ livestock type
☐ percentage (and, if possible, number) of dead or missing

6. Assess extent of damage to fisheries, only if fisheries are a main source of subsistence for the primary affected population:

☐ percentage of fishing boats (where possible, give number) damaged/destroyed
c数控 type and percentage of fishing equipment damaged/destroyed

☐ estimated loss of fishing catch (in percent)

Secondary Threats

A. Identify potentially hazardous sites (dams, installations with toxic/hazardous/nuclear substances), indicating those which have been damaged and pose a potential threat. Indicate also if there is any known presence of landmines in the area.

B. Indicate existence of secondary threats:
C. Specify population and key points at risk, indicating location(s)

D. Specify areas where landmines are known to be present or suspected.

Effects on Population

A. Primary affected population

1. Estimated no. of primary affected persons (breakdown by population categories and identify groups at risk)

2. Reported no. of casualties (indicate source and area(s) covered):
   - dead
   - missing
   - injured (including sick)

3. Re-estimated no. of homeless (including evacuated), indicate, if possible
   - estimated no. of persons/families whose homes are permanently not habitable
   - estimated no. of persons/families whose homes are temporarily not habitable

4. Average size of family
5. Have any vulnerable segments of the population been specifically affected, e.g.
   □ population already displaced before the disaster
   □ refugees
   □ children, pregnant and lactating mothers
   □ other

6. If yes, describe in which way

B. Health

1. Can the surviving facilities in the disaster area cope with the caseload of injured patients, or is there an overload of patients?

2. Has there been any damage to specific medical equipment or installation of key importance for treating disaster victims (e.g. x-ray facilities following an earthquake)?

3. Is any action being taken to evacuate injured patients to emergency medical centres outside the disaster area? If yes, provide details.

4. Have arrangements been made, or are they required, to bring specific types of equipment/services/medicaments to the disaster area from other medical centres?

5. Are any problems being encountered due to an inadequate power or water supply to medical facilities?

6. Was a system of epidemiological surveillance in place prior to the disaster and, if so, is it still operational after the disaster?
C. Shelter and personal/household utensils

1. Estimate no. of homeless or evacuated accommodated in public shelters or evacuation centres

2. Specify locations and conditions of shelters/evacuation centres
   - □ type of shelter (tents, tarpaulins, makeshift shelters, public buildings)
   - □ concentration of population in shelters
   - □ services provided (distribution of food, water supply, sanitation, etc.)
   - □ services urgently required but not currently provided
   - □ safety of location
   - □ other

3. Describe actions people are taking to provide shelter for themselves

4. Is survival threatened by a lack of adequate shelter (exposure to rough climatic conditions)?
   - if yes, estimate no. of persons concerned

5. Is survival threatened by a lack of blankets, clothing, etc.?
   - if yes, estimate no. of persons concerned
   - if applicable, indicate appropriate type of clothing and age/sex groups

6. Which essential household (cooking, cleaning, etc.)
storage, etc.) utensils are in critical shortage? Is there enough storage capacity for food aid?

D. Water and sanitation

1. Are at least minimum quantities of drinking water available to all communities? Also refer to SPHERE standards tables in annex

2. If not, estimate how many people have been deprived of drinking water supply

12 Describe any evidence of sanitation problems
   - stagnant water
   - poor hygienic conditions
   - sewage disposal problems
   - overcrowding in shelters
   - reports of pollution/contamination
   - areas with escaping/overflowing sewage
   - water pipes running in the same conduits as sewer lines
   - other

E. Food

1. Describe the normal food consumption pattern of the affected population, specify unacceptable food (maize, rice, beef, pork)

2. Indicate whether food is available
   - with people (stocks, purchasing power and food on the market)
   - with government or agencies for free distribution
   - on the market for bulk purchases

3. If immediate food shortages have been observed/are likely to occur during the relief phase, indicate:
   - nature of shortages (which basic items affected groups are unable to obtain/provide for themselves)
☐ seriousness
☐ time frame
☐ estimated no. of affected people
☐ reasons for food shortages:
  ☐ loss of stocks seeds or crops ready to be harvested
  ☐ loss of storage or processing capacity
  ☐ lack of purchasing power
  ☐ breakdown of transport facilities, roads, tractors
  ☐ other

4. Are households able to prepare food for family meals and for small children? If not, specify reasons
☐ What are the sharing habits in households? Do women/girls eat last?
☐ Who controls good within the family?
☐ no cooking utensils
☐ no energy supply
☐ other

Describe local coping mechanisms to deal with problems encountered in the food sector

On-site level international response

A. International resources arrived on-site/mobilized

1. has specific expertise/technical assistance been made available by
  ☐ UN agencies
  ☐ international non-governmental organizations
  ☐ inter-governmental organizations, such as EC
  ☐ bilateral donors
  ☐ other international actors?

2. if yes, specify and indicate whether this expertise is used for any detailed sectoral assessment of relief needs in certain areas/sectors

3. indicate communication/transport/logistics support
provided by international actors

4. describe main items of relief goods distributed in the disaster area

5. list any contributions/pledges of relief goods or cash as announced to the UNDAC team in the field by NGOs, bilateral donors, etc.
   - source of information
   - type and value of assistance
   - time frame for implementation
   - no. of beneficiaries / target group(s)

6. have any international teams arrived in disaster area? if yes, indicate:
   - name of team
   - approximate number of members
   - dispatching country/organization
   - brief description of functions:
     - medical assistance
     - logistics support
     - assessment
     - other

B. Coordination

describe mechanisms for coordination of international assistance at local level:
   - relevant meetings
   - decisions on distribution of tasks
   - coordination of operational teams / establishment of an OSOCC

   - communication flow: central - local level

C. Constraints

have any problems been encountered with international assistance provided so far, e.g.
   - coordination
   - provision of relief goods that are not required
   - provision of non-sorted unlabelled relief goods
   - congestion at certain logistical points
1. logistical problems created by international elements (transport, control, etc.)
   □ inadequate storage
   □ inadequate distribution
   □ other

Assistance requirements

G. priority relief needs

1. describe immediate corrective action required to mitigate effects on population as indicated in section 3.2 (in addition to relief measures already under way)

2. list the priority needs that have been identified as a result of the initial assessment of the affected area under sub-headings as follows:
   □ search and rescue
   □ medical teams and supplies
   □ shelter, blankets and clothing, household utensils
   □ water and sanitation
   □ food items
   □ logistics (in-country transport, storage and handling of relief supplies)
   □ communications
   □ repairs to infrastructure
   □ expertise for detailed sectoral assessment and/or restoration of critical facilities, coordination
   □ other

3. in each case describe as far as possible:
   □ whether contributions in kind or in cash are recommended
   □ whether items of acceptable quality can be obtained locally, and estimated purchase and delivery costs
   □ the precise type, specifications and quantities of supplies, equipment and services needed
   □ numbers and expertise of any personnel
required

4. when applicable, specify whether relevant data have been checked with personnel of specialized UN agency concerned (WHO, UNICEF, WFP, FAO)

5. where possible, indicate relative priorities of the various items

6. if items are quantified, specify whether this is:
   □ the total requirement
   □ the requirement after deduction of pledges/contributions. In this case, indicate which pledges/contributions have been taken into account

7. are there any assistance items which donors may intend to provide, but which are not needed? if yes, explain why.

8. do you recommend any specific assistance measures to be provided by/through DHA

*Means of delivery of international assistance*

E. **Logistics and distribution system**

1. describe logistics system for receipt and transportation of international relief goods arriving in disaster area:
   □ recommended airport(s) or other points of entry
   □ if required, indicate characteristics (see logistics chapter for checklist of airports)
   □ transport facilities from airport/points of entry to disaster area/distribution points
   □ availability of storage space, handling equipment, manpower

*F. Possible channels for contributions*
list service(s)/organization(s) operational on-site with capacity to receive and manage international donations

Other information

1. describe trends in the development of the situation, e.g.
   - are there signs that life is returning to normal?
   - are there any particular events or actions which might either accelerate or retard the re-establishment of self-reliance?

2. did early warning / disaster preparedness measures in the affected area help to reduce the impact of the disaster?

E.9.3. Health Status

- Determine how many deaths occurred in the past week.
- Determine how many children under 5 died in the same period, desegregated by sex.
- Determine the main cause of death for each group.
- Determine the crude mortality rate.
- Determine whether measles vaccinations have been or will be provided. If provided, give dates of vaccinations.
- Determine the percentage of children vaccinated.
- Determine the incidence of diarrhea among adults and children.
- Determine the most common diseases among children and adults.

E.9.4. Capacities and Assets

Capacities

- What percentage of male and female population is literate?
- What emergency-related skills (for example, health workers, individuals with logistics/organizational relief skills) are represented within the population that could be drawn upon by relief organizations?

Assets
. Determine what the displaced population has as personal property and what was lost as a result of the disaster.
. Estimate the number and types of blankets needed (according to climatic conditions).
. Identify what blankets are available within the country from personal, commercial, UN/PVO/NGO/IO, or government stocks.
. Determine what is needed from external sources for blankets.
. Describe the clothing traditionally worn, by season and area.
. If clothing is needed, estimate the amount by age group and sex. Determine if used clothing is acceptable, and if so, for which groups.
. Describe normal heating/cooking practices.
. Determine whether heating equipment and/or fuel is required.
. Estimate the types and quantities of heating equipment and fuel needed over a specific time period.
. Determine appropriate fuel storage and distribution mechanisms.
. Identify what fuel is available locally.
. Identify what is needed from external sources.
. Determine if other personal effects, such as cooking utensils, soap, and small storage containers, are needed.
. Determine if livestock was brought along.
. Determine if shelter materials were brought along.
. Determine if other possessions, such as cars, bicycles, or boats, were brought along.
### E.9.5. UNDAC Standard Survey Form

<table>
<thead>
<tr>
<th>Name of Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Unit and Division</td>
</tr>
<tr>
<td>Local Authority(ies) Interviewed (name title)</td>
</tr>
<tr>
<td>Estimated Total Population</td>
</tr>
<tr>
<td>Worst-Affected Area(s)</td>
</tr>
<tr>
<td>Area(s) Currently Inaccessible</td>
</tr>
</tbody>
</table>

#### Buildings:

**Major Damage/Destruction**

**Minor Damage**

#### LCF:

**Roads Damaged / Destroyed** (km)

**Bridges**

**Communications Network**

**Health Facilities**

**Electricity Network**

**Water Supply Systems**

**Agriculture/Fisheries**
| Name of Location | ................................. |
| Crops Damaged: Type/ha/% | ................................. |
| Livestock Losses | ................................. |

| Effects on Population | ................................. |
| Primary Affected Population | ................................. |
| Dead / Missing / Injured | ................................. |
| Homeless | ................................. |
| Evacuated / In Public Shelters | ................................. |

| Secondary Threats | ................................. |
| Potentially Hazardous Sites | ................................. |

| Local/National/International Response | ................................. |
| Type of Assistance Provided By National/Local Services | ................................. |
| List Non-Governmental / International Organizations | ................................. |

| Operational and Type of Assistance | ................................. |

| Logistics and Distribution System (availability of storage facilities means of transport and fuel; distribution criteria) | ................................. |

| Priority Relief Needs: Item / Quantities / Specifications | ................................. |
## Information Sources:

(a) 

(b) 

(c) 

(d) 

Remarks:

E.9.6. Contact Points

<table>
<thead>
<tr>
<th>Name of Authority/ Organization</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Official-in-Charge</td>
<td>*</td>
</tr>
<tr>
<td>His/Her Title</td>
<td>*</td>
</tr>
<tr>
<td>Office Telephone No.</td>
<td>*</td>
</tr>
<tr>
<td>Office Facsimile No.</td>
<td>*</td>
</tr>
<tr>
<td>Office Telex No.</td>
<td>*</td>
</tr>
<tr>
<td>Emergency 24-hr. Tel. No.</td>
<td>*</td>
</tr>
<tr>
<td>Street Address</td>
<td>*</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Cl Coordinating domestic response at national level.</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>□ Focal point for international response.</td>
</tr>
<tr>
<td></td>
<td>Cl Coordinating arrival of relief goods/distribution.</td>
</tr>
<tr>
<td></td>
<td>□ Coordinating response at local level.</td>
</tr>
<tr>
<td></td>
<td>□ Relief/response action.</td>
</tr>
<tr>
<td></td>
<td>□ Scientific monitoring.</td>
</tr>
<tr>
<td></td>
<td>□ Other.</td>
</tr>
</tbody>
</table>
E.10. Tables

E.10.1. Emergency Indicators and Minimum Standards

<table>
<thead>
<tr>
<th>Malnutrition Emergency Indicators</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;10% of &lt;5 age group moderately malnourished with nutritional diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe malnutrition for &lt;5 age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUAC &lt;1 1.0 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate malnutrition for &lt;5 age group</td>
<td>MUAC &gt;11.0 and &lt;13.5 cm Z-Score &gt;-3 and &lt;-2</td>
<td></td>
</tr>
</tbody>
</table>

Mortality Rate Emergency Indicators

Crude Mortality Rate (CMR): Single most important indicator of serious stress in DPs

CMR = deaths/10,000/day: emergency phase

- <1 = Under control
- >1 = Serious condition
- >2 = Out of control
- >4 = Major catastrophe

Mortality rate for <5 age group

- 1 = Normal in a developing country
- <2 = Emergency phase: under control
- >2 = Emergency phase: in serious trouble
- >4 = Emergency Phase: out of control

Minimum Water Requirements

- Minimum maintenance = 15-20 litres/person/day
- Feeding centre = 20-30 litres/person/day
- Health centre = 40-60 litres/person/day

A large quantity of reasonably safe water is preferable to small amount of pure water

Minimum Food Requirements

- Minimum maintenance = 2,100 Gal/person/day

Minimum Shelter/Space Requirements

- Minimum shelter space = 3.5 m² /person
- Minimum total site area = 30 m² /person

Minimum Sanitation Requirements

- At least 1 toilet for every 20 persons
- Maximum of 1-min. walk from dwelling to toilet (>5m and <51m)
<table>
<thead>
<tr>
<th>Population</th>
<th>500</th>
<th>1,000</th>
<th>5,000</th>
<th>10,000</th>
<th>20,000</th>
<th>50,000</th>
<th>100,000</th>
<th>500,000</th>
<th>1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (Days)</td>
<td>1</td>
<td>30</td>
<td>60</td>
<td>90</td>
<td>120</td>
<td>180</td>
<td>365</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0075</td>
<td>0.0150</td>
<td>0.0750</td>
<td>0.1500</td>
<td>0.3000</td>
<td>0.7500</td>
<td>1.5000</td>
<td>7.5000</td>
<td>15.0000</td>
</tr>
<tr>
<td></td>
<td>0.225</td>
<td>0.45</td>
<td>2.250</td>
<td>4.50</td>
<td>9.00</td>
<td>22.50</td>
<td>45.00</td>
<td>225.00</td>
<td>450.00</td>
</tr>
<tr>
<td></td>
<td>0.45</td>
<td>1.35</td>
<td>4.50</td>
<td>13.50</td>
<td>27.00</td>
<td>67.50</td>
<td>135.00</td>
<td>675.00</td>
<td>1,350.00</td>
</tr>
<tr>
<td></td>
<td>0.675</td>
<td>1.35</td>
<td>6.750</td>
<td>18.00</td>
<td>36.00</td>
<td>90.00</td>
<td>180.00</td>
<td>900.00</td>
<td>1,800.00</td>
</tr>
<tr>
<td></td>
<td>0.9</td>
<td>2.70</td>
<td>9.00</td>
<td>27.00</td>
<td>54.00</td>
<td>135.00</td>
<td>270.00</td>
<td>1,350.00</td>
<td>2,700.00</td>
</tr>
<tr>
<td></td>
<td>1.35</td>
<td>5.475</td>
<td>13.50</td>
<td>27.00</td>
<td>54.750</td>
<td>1,350.00</td>
<td>2,737.50</td>
<td>5,475.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.738</td>
<td>5.475</td>
<td>27.380</td>
<td>54.750</td>
<td>108.600</td>
<td>2,737.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Formula: 15 liters x no. of people x days = liters/day.
E.10.3. Weight-for-Height Expressed as a Percentage of Median Weight

<table>
<thead>
<tr>
<th>Height (cm)</th>
<th>Median Wt. (kg)</th>
<th>80%</th>
<th>75%</th>
<th>70%</th>
<th>60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>12</td>
<td>9.5</td>
<td>9</td>
<td>8.4</td>
<td>7.2</td>
</tr>
<tr>
<td>86</td>
<td>12.2</td>
<td>9.8</td>
<td>9.1</td>
<td>8.5</td>
<td>7.32</td>
</tr>
<tr>
<td>87</td>
<td>12.4</td>
<td>9.9</td>
<td>9.3</td>
<td>8.7</td>
<td>7.44</td>
</tr>
<tr>
<td>88</td>
<td>12.6</td>
<td>10.1</td>
<td>9.5</td>
<td>8.8</td>
<td>7.56</td>
</tr>
<tr>
<td>89</td>
<td>12.9</td>
<td>10.3</td>
<td>9.7</td>
<td>9</td>
<td>7.74</td>
</tr>
<tr>
<td>90</td>
<td>13.1</td>
<td>10.5</td>
<td>9.8</td>
<td>9.2</td>
<td>7.86</td>
</tr>
<tr>
<td>91</td>
<td>13.3</td>
<td>10.7</td>
<td>10</td>
<td>9.3</td>
<td>7.98</td>
</tr>
<tr>
<td>92</td>
<td>13.6</td>
<td>10.8</td>
<td>10.2</td>
<td>9.5</td>
<td>8.16</td>
</tr>
<tr>
<td>93</td>
<td>13.8</td>
<td>11</td>
<td>10.3</td>
<td>9.7</td>
<td>8.28</td>
</tr>
<tr>
<td>94</td>
<td>14</td>
<td>11.2</td>
<td>10.5</td>
<td>9.8</td>
<td>8.4</td>
</tr>
<tr>
<td>95</td>
<td>14.3</td>
<td>11.4</td>
<td>10.7</td>
<td>10</td>
<td>8.58</td>
</tr>
<tr>
<td>96</td>
<td>14.5</td>
<td>11.6</td>
<td>10.9</td>
<td>10.2</td>
<td>8.7</td>
</tr>
<tr>
<td>97</td>
<td>14.8</td>
<td>11.8</td>
<td>11.1</td>
<td>10.3</td>
<td>8.88</td>
</tr>
<tr>
<td>98</td>
<td>15</td>
<td>12</td>
<td>11.3</td>
<td>10.5</td>
<td>9</td>
</tr>
<tr>
<td>99</td>
<td>15.3</td>
<td>12.2</td>
<td>11.5</td>
<td>10.7</td>
<td>9.18</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>Median Wt. (kg)</td>
<td>80%</td>
<td>75%</td>
<td>70%</td>
<td>60%</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>100</td>
<td>15.6</td>
<td>12.4</td>
<td>11.7</td>
<td>10.9</td>
<td>9.34</td>
</tr>
<tr>
<td>101</td>
<td>15.8</td>
<td>12.7</td>
<td>11.9</td>
<td>11.1</td>
<td>9.48</td>
</tr>
<tr>
<td>102</td>
<td>16.1</td>
<td>12.9</td>
<td>12.1</td>
<td>11.3</td>
<td>9.66</td>
</tr>
<tr>
<td>103</td>
<td>16.4</td>
<td>13.1</td>
<td>12.3</td>
<td>11.5</td>
<td>9.84</td>
</tr>
<tr>
<td>104</td>
<td>16.7</td>
<td>13.3</td>
<td>12.5</td>
<td>11.7</td>
<td>10.02</td>
</tr>
<tr>
<td>105</td>
<td>16.9</td>
<td>13.6</td>
<td>12.7</td>
<td>11.9</td>
<td>10.14</td>
</tr>
<tr>
<td>106</td>
<td>17.2</td>
<td>13.8</td>
<td>12.9</td>
<td>12.1</td>
<td>10.32</td>
</tr>
<tr>
<td>107</td>
<td>17.5</td>
<td>14</td>
<td>13.1</td>
<td>12.3</td>
<td>10.5</td>
</tr>
<tr>
<td>108</td>
<td>17.8</td>
<td>14.3</td>
<td>13.4</td>
<td>12.5</td>
<td>10.68</td>
</tr>
<tr>
<td>109</td>
<td>18.1</td>
<td>14.5</td>
<td>13.6</td>
<td>12.7</td>
<td>11.86</td>
</tr>
<tr>
<td>110</td>
<td>18.4</td>
<td>14.8</td>
<td>13.8</td>
<td>12.9</td>
<td>11.04</td>
</tr>
</tbody>
</table>

E.10.4. Examples of survival Food Rations

<table>
<thead>
<tr>
<th>Commodities</th>
<th>Ration Option 1</th>
<th>Ration Option 2</th>
<th>Ration Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice/wheat flour/</td>
<td>430</td>
<td>430</td>
<td>430</td>
</tr>
<tr>
<td>cornmeal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulses (beans/peas)</td>
<td>45</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pulses (lentils)</td>
<td>0</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Vegetable oil</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Commodities</td>
<td>Ration Option 1</td>
<td>Ration Option 2</td>
<td>Ration Option 3</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Corn-soya blend</td>
<td>35</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>Wheat-soya blend</td>
<td>0</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>Canned fish</td>
<td>0</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Sugar</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Salt (iodized)</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total grams:</td>
<td>540</td>
<td>540</td>
<td>540</td>
</tr>
</tbody>
</table>

Approximate food value

<table>
<thead>
<tr>
<th></th>
<th>Ration Option 1</th>
<th>Ration Option 2</th>
<th>Ration Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (kcal)</td>
<td>2100</td>
<td>2100</td>
<td>2100</td>
</tr>
<tr>
<td>Protein (g)</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Fat (g)</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

1. Note: Fresh fruits and vegetables, cereals and legumes, and condiments or spices should be made available whenever possible. Fortified cereal blends, such as wheat-soya blend and corn-soya blend, are good sources of micro nutrients. The addition of quantities of various micro nutrients, through the inclusion of such fortified cereals and local fresh foods, is highly desirable.
<table>
<thead>
<tr>
<th>Population</th>
<th>1</th>
<th>30</th>
<th>60</th>
<th>90</th>
<th>120</th>
<th>180</th>
<th>365</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>0.133</td>
<td>4.05</td>
<td>8.1</td>
<td>12.15</td>
<td>16.2</td>
<td>24.3</td>
<td>49.275</td>
</tr>
<tr>
<td>500</td>
<td>0.270</td>
<td>8.10</td>
<td>16.2</td>
<td>24.30</td>
<td>32.4</td>
<td>48.6</td>
<td>98.550</td>
</tr>
<tr>
<td>1,000</td>
<td>0.540</td>
<td>16.20</td>
<td>32.4</td>
<td>48.60</td>
<td>64.8</td>
<td>97.2</td>
<td>197.100</td>
</tr>
<tr>
<td>5,000</td>
<td>2.700</td>
<td>81.00</td>
<td>162.0</td>
<td>243.00</td>
<td>324.0</td>
<td>486.0</td>
<td>985.500</td>
</tr>
<tr>
<td>10,000</td>
<td>5.400</td>
<td>162.00</td>
<td>324.0</td>
<td>486.00</td>
<td>648.0</td>
<td>972.0</td>
<td>1971.000</td>
</tr>
<tr>
<td>20,000</td>
<td>10.800</td>
<td>324.00</td>
<td>648.0</td>
<td>972.00</td>
<td>1296.0</td>
<td>1944.0</td>
<td>3942.000</td>
</tr>
<tr>
<td>50,000</td>
<td>27.000</td>
<td>810.00</td>
<td>1620.0</td>
<td>2430.0</td>
<td>3240.0</td>
<td>4860.0</td>
<td>9855.000</td>
</tr>
<tr>
<td>100,000</td>
<td>54.000</td>
<td>1620.00</td>
<td>3240.0</td>
<td>4860.00</td>
<td>6480.0</td>
<td>9720.0</td>
<td>19710.000</td>
</tr>
<tr>
<td>500,000</td>
<td>270.000</td>
<td>8100.00</td>
<td>16200.0</td>
<td>24300.00</td>
<td>32400.0</td>
<td>48600.00</td>
<td>98550.000</td>
</tr>
<tr>
<td>1,000,000</td>
<td>540.000</td>
<td>16200.00</td>
<td>32400.00</td>
<td>48600.000</td>
<td>64800.000</td>
<td>97200.000</td>
<td>197100.000</td>
</tr>
</tbody>
</table>
## E.10.6. Approximate Nutritional Values of Commodities

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Energy (Kcal)</th>
<th>Protein (g)</th>
<th>Fat (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cereals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>330</td>
<td>12.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Wheat flour</td>
<td>350</td>
<td>11.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Bulgur wheat</td>
<td>350</td>
<td>11.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Maize</td>
<td>350</td>
<td>10.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Maize meal</td>
<td>360</td>
<td>9.0</td>
<td>3.5</td>
</tr>
<tr>
<td>Sorghum</td>
<td>335</td>
<td>11.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Rice</td>
<td>360</td>
<td>7.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Rolled oats</td>
<td>380</td>
<td>13.0</td>
<td>7.0</td>
</tr>
<tr>
<td><strong>Blended Foods</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instant corn-soya blend</td>
<td>365</td>
<td>12.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Corn-soya blend</td>
<td>380</td>
<td>18.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Wheat-soya blend</td>
<td>370</td>
<td>20.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Soya-fortified bulgur wheat</td>
<td>350</td>
<td>117.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Soya-fortified corn meal</td>
<td>360</td>
<td>13.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Soya-fortified rolled oats</td>
<td>375</td>
<td>21.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Soya-fortified wheat flour</td>
<td>360</td>
<td>16.0</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Pulses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dried peas and beans</td>
<td>335</td>
<td>22.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Ground nuts</td>
<td>330</td>
<td>15.0</td>
<td>25.0</td>
</tr>
<tr>
<td><strong>Milk, Cheese, and Eggs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dried skim milk</td>
<td>360</td>
<td>36.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Dried whole milk</td>
<td>500</td>
<td>26.0</td>
<td>27.0</td>
</tr>
<tr>
<td>Cheese</td>
<td>355</td>
<td>22.5</td>
<td>28.0</td>
</tr>
<tr>
<td>Dried eggs</td>
<td>575</td>
<td>45.5</td>
<td>43.5</td>
</tr>
</tbody>
</table>
## Approximate Nutritional Values of Commodities (contd.)

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Energy (Kcal)</th>
<th>Protein (g)</th>
<th>Fat (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meat and Fish</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canned meat</td>
<td>220</td>
<td>21.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Dried salted fish</td>
<td>270</td>
<td>47.0</td>
<td>7.5</td>
</tr>
<tr>
<td>Canned fish in oil</td>
<td>305</td>
<td>22.0</td>
<td>24.0</td>
</tr>
<tr>
<td>Fish protein concentrate</td>
<td>390</td>
<td>75.0</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Oils and Fats</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable oil</td>
<td>885</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>Butter oil</td>
<td>860</td>
<td>0</td>
<td>98.0</td>
</tr>
<tr>
<td>Margarine</td>
<td>735</td>
<td>0</td>
<td>82.0</td>
</tr>
<tr>
<td>Edible fat</td>
<td>900</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Fruits and Beverages</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dried fruit</td>
<td>270</td>
<td>4.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Dates</td>
<td>245</td>
<td>2.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Jam</td>
<td>205</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tea</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Coffee</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td>400</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Iodized salt</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pasta</td>
<td>365</td>
<td>12.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Freeze-dried meat</td>
<td>480</td>
<td>65.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Minestrone</td>
<td>500</td>
<td>22.5</td>
<td>27.0</td>
</tr>
<tr>
<td>Protein-enriched ration</td>
<td>450</td>
<td>16.7</td>
<td>15.5</td>
</tr>
<tr>
<td>Milk biscuits (skim mil)</td>
<td>375</td>
<td>24.0</td>
<td>1.5</td>
</tr>
<tr>
<td>High-energy protein biscuit</td>
<td>450</td>
<td>15.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>
F. Coordination in the Field
F. COORDINATION IN THE FIELD

F.1. Establishing a Coordination Centre (p. 1)
   F.1.1. Structure and Staffing (p. 1)
   F.1.2. Site Selection and Support Requirements (p. 2)
   F.1.3. An OSOCC in an earthquake (p. 4)
   F.1.4. Coordination Without a Centre (p. 4)

F.2. Coordination Techniques/Trouble Shooting’ (p. 5)
   F.2.1. Techniques (p. 5)
   F.2.2. Coordination Barriers (p. 10)
   F.2.3. OCHA Coordination Functions Checklist (p. 11)
   F.2.4. Example of Coordination Centre established during the floods in Mozambique 2000 (p. 16)

F.3. Structure and Establishment of and On Site Operations Coordination Centre (p. 18)
   F.3.1. Introduction (p. 18)
   F.3.2. OSOCC Structure (p. 19)
   F.3.3. Common Mistakes during the set-up of the OSOCC (p. 28)
   F.3.4. Example for the assignment of task for OSOCC staff (p. 34)

F.4. Working with the Military in the Field (p. 33)

F. 1. Establishing a Coordination Centre

F.1.1. Structure and Staffing

Structure
OCHA’s field presence may be structurally organized in a number of ways depending on the functions (from above) performed and may occur, for example, within the Coordinator’s office, a Field Coordination Unit, or an Operations Coordination Centre. Hereafter, the coordination entity will be referred to as the Centre.
Experience has shown that no single structure is appropriate to all circumstances. In a simple structure all of the functions mentioned above would be performed in the same cell. In a more complicated situation, it may be desirable and necessary to create separate organizational cells for the reporting function and the liaising function. If auxiliary functions are also being performed they would normally require separate cells as well.

**Staffing**

A Coordination Centre established by OCHA (preferably jointly with the National Government) will be staffed by drawing on a variety of sources including staff of UN agencies in-country, OCHA internal staff (a Field Coordination Unit), the UNDAC Team, and seconded personnel from organizations such as Danish Refugee Council, Norwegian Refugee Council, Danish Emergency Management Agency, Swedish Rescue Services Agency and the Emergency Logistics Management Team of ODA/UK. In sudden onset natural disasters the Centre should recruit personnel from arriving international teams to provide staff services.

**F.1.2. Site Selection and Support Requirements**

**Site Selection**

When choosing a site for a Centre, several important points must be kept in mind. First, the general location of the Centre should be in close proximity to the national Government’s emergency management department and other agencies providing humanitarian assistance. If the Resident Representative of the United Nations Development Programme (UNDP) is serving as the Resident/Humanitarian Coordinator, then the Centre should be in the same building as the UNDP offices, if at all possible.

The physical location should maximize the possibilities of effectively utilizing communication equipment, e.g., on higher ground and not surrounded by hills or other natural obstructions. The site should facilitate proper security
procedures including ease of access and evacuation; a perimeter easily guarded; and distance from actual or potential armed conflict.

The building housing the Centre should be structurally sound and not damaged during the emergency. The offices should have several separate rooms. There should be a general area for receiving and registering visitors, preferably with some pleasant ambiance such as a coffee machine. There should also be a general situation room with tables and chairs sufficient for meeting of 12-15 people (larger if possible). There should be some private offices where confidential discussions can take place. The building should be large enough to accommodate the co-location of staff from the National Government and other agencies that wish to operate within the Centre structure. Communication equipment should be in a secure communications room. Office equipment like copiers should be accessible but not in general meeting space areas.

**Support Requirements**

A large Coordination Centre will need logistical and administrative support to satisfactorily perform its functions. Logistical and infrastructural support includes:

- Personal subsistence such as rations, accommodations, water, cooking equipment, and sanitation equipment;
- Office equipment such as electrical equipment, desks, computers, copiers, and fax machines;
- Telecommunications support such as satellite, HF, and VHF equipment;
- Transport support such as regular and heavy transport vehicles;
- Medical support such as medicines, first aid equipment; and
- Security support such as flak jackets, wire fencing, and barbed wire.

Staff requirements to provide this support may include: support team leader, camp manager, telecommunications officer and technician, electrician, plumber/water purification technician; registered nurse, paramedic, mechanic, and
Administrative support, normally provided through an agreement with an existing in-country UN agency such as UNDP, will include:

- Financial management;
- Personnel services;
- Record keeping and file maintenance;
- Routine supply procurement; and
- Secretarial support.

F.1.3. An OSOCC in an earthquake

The immediate aftermath of an earthquake presents a unique coordination challenge as there is an overwhelming necessity to rescue people trapped under rubble within 3-4 days. They are unlikely to survive longer. This means that many national and international Search and Rescue (SAR) teams would in all likelihood be working on the site. Their actions need to be Coordinated with the local authority and each other. For this purpose a small OSOCC has to be established on site in the same time frame as SAR teams arrive. An UNDAC team may be tasked to do so. Such an OSOCC will not be elaborate - perhaps composed of just 3-4 people. But it has to be established in time. For duties of such an OSOCC see Chapter H.4.

F.1.4. Coordination Without a Centre

In some situations, an UNDAC or other OCHA field coordination team will be called upon to aid coordination efforts without the benefit of a Coordination Centre. Indeed, in the case of a moderate intensity emergency an OSOCC may not need to be established. In such cases, the Team should seek to accomplish the same objectives as if there were a Centre.
F.2. Coordination Techniques and Trouble Shooting

A Centre needs more than a mandate. It must have something that others want and need including information, facilities, skills, equipment, credibility, and other amenities – ideally a combination of all these things set in an attracting setting that includes a place to meet with others who also come there.

Practicing certain skills of coordination will help facilitate the coordination process. Following are techniques which are useful in achieving coordination and common coordination barriers likely to be encountered.

F.2.1. Techniques

Promote an Understanding of Collaborating Organizations
The Centre staff must first get to know the players. Only by understanding the mandates of various organizations, their intentions, and their capacities (resources both material and personnel), can the Centre involve them appropriately and have reasonable expectations of their performance variations. Centre staff should, as soon as feasible, interview the representatives of the various humanitarian agencies active in the emergency situation. The interview should be conducted following a standard interview procedure and the results made available in a reference file at the Centre. Obviously sensitive information cannot be included on this form but, in principle, a person should be able to walk into the Centre and have, easily accessible, a file of descriptive information on all operating agencies and the particulars of their operations. Such files will need to be regularly updated. In a longer term operation it will be important to develop a “Who’s Who in-country” for use in briefing new arrivals and visiting missions.

Make the Linkages
When interviewing the organizations, it will be important to identify who, in particular, the organization should liaise with. This may be determined by any number of variables such as
sector, geographical area of operation, government or opposition coordinating agent, etc. The Centre should ensure that the linkage has been made. In many cases this will involve contacting the parties, organizing a meeting, escorting one of the parties and facilitating the introductions of the organizational representatives.

Some important and helpful linkages may already be operating. The emergency relief community is, relatively, small and the likelihood of people knowing each other or having worked with one another in a previous emergency is quite high. These pre-existing relationships can greatly aid the linkage process. Of course, the opposite may also be true where an unsatisfactory prior relationship will impede the current effort.

**Promote Transparency**

When an organization’s actions are transparent, it is possible to see how and why decisions are being made. The disinclination to transparency resides in various fears — fears of disapproval; that ideas will be stolen or resources monopolized; or that freedom of action or the ability to change course circumscribed. By promoting transparency without negative consequences the Centre may be able to reduce the natural tendency to hide organizational decision-making processes. And, of course, transparency begins at home. Thus, the Centre must model transparency in its own processes. One way to do this is to periodically evaluate how the coordination process is going and how it can be improved. Clarifying how the Centre can do its job better and then making those changes will improve operations at the same time that transparency is increased.

**Start with the Needs of Others**

In promoting coordination it is tempting to say, “as OCHA we need this information to be able to coordinate”. Thus, the need for coordination resides in OCHA not in the coordinatees. This is the wrong approach. The Centre should first ask how they can help the agencies. By starting at and meeting some of the agencies’ needs, the Centre is committing to service first
and earning significant credibility. As part of the effort of identifying the needs of others it will become clearer not only what coordination should seek to accomplish but also how organizations can be induced to participate. Adopt a marketing approach where you try to find out their needs and meet them, as opposed to selling them what you have to offer.

**Clarify Coordination Parameters and Activities**

Taking a little bit of the mystery out of coordination will go a long way in ensuring that it happens. Coordination will be avoided if organizations feel that it will be just a waste of time in endless meetings or that the coordination effort will result in a veto of their plans and activities. The best way to clarify the coordination parameters is to have frank and open discussions on the goals expected to be reached through coordination efforts and the needs of the various organizations, including OCHA, for coordination.

**Secure Commitment of Staff and Other Resources for Coordination**

Once the coordination parameters have been determined, a commitment of resources for coordination must be forthcoming. This may take the form of staff or equipment, but also publicly stated intentions to attend meetings and share information, and, if possible, a stated intention to adapt organizational activities to issues raised out of the coordination process.

**Write It Down**

Some of the results of the coordination process, both from large group and bi-lateral discussions will be concrete enough to be developed into a formal document. Such items might include a preparedness plan or plan of operations. A signed document can serve as a point of reference for resolving or heading-off disputes as well as a useful mechanism for securing continuity when staff rotate over. Certainly all such agreements will require updating and, even in the best of cases, represent an intention to act or an agreement, in principle, subject to change as situations change.
**Involve the Right People and Organizations in Appropriate Roles**

All the members of the IASC, if operating in-country, must be involved. Also major NGOs and NGOs with significant donor ties are important members. However, not everyone should be or needs to be involved in the coordination process. Smaller organizations with limited operations and resources or organizations whose mandate and values are at odds with the goals of the coordination body may not add to the workings of coordination and may, in fact, even impede the process. Too many persons are likely to result in too much talk and difficulty achieving consensus. Consider a large general membership for purposes such as information sharing and a steering or executive committee for strategic decision-making. New organizations or staff must be briefed as soon as feasible upon arrival in-country, not only in regard to the situation and other players but also to the coordination process and obligations inherent as a participant in the coordination process.

**Keep the Ball Rolling**

Momentum in coordination is essential to maintain interest and commitment. One way to do this is to ensure rapid reporting of new or updated information. Decisions made in the coordination process must be documented in the form of minutes or aide de memoire(s) and distributed. Even more important is to ensure follow-up and follow-through on decisions. Failure to implement conclusions will cause cynicism about the process to develop and ultimately destroy the Centre’s credibility. Part of keeping momentum is keeping people in touch with one another and keeping channels of communication open. This may involve going out of your way to make the right connections.

**Respect People’s Time and Schedules**

Don’t let the coordination meetings get to be just another meeting. Ensure that the meetings need to occur and that there is vital and important work to be done. Don’t be afraid to cancel a standing meeting if the agenda is not compelling enough. Publish an agenda for the meeting and stick to the
schedule. Try to begin and end meetings on time. Practice good meeting facilitation skills, ensuring that everyone has a chance to say what’s on their mind and that a small group or individual don’t dominate the conversation.

**Attack Small Problems before they Grow**

A small problem, be it a misunderstanding, a hurt feeling, or a perception of insensitivity can grow and fester resulting in a much bigger barrier to communication. Therefore, as part of your role in facilitating productive relationships you may need to engage in active conflict management or relationship confidence building, usually outside the formal coordination process. Starting small is generally a good idea in any situation as you build confidence in the coordination process.

**Provide Useful Information and Services**

In part this will occur if you practice the technique of asking others what they need. Even so, some types of information will always be useful to almost everyone. If the Centre is the repository of useful information, people will want to come to it. Maps, for instance, always seem to be in short supply. If you maintain accurate maps, updated on the basis of operation information, people will beat a path to your door. Further, the Centre should be a good place to get a copy made; get a weather report; check-out what might be going on somewhere; get a security update; or just see a smiling and congenial coordinator willing to take a few moments to listen.

**Build on Strengths**

It is important to ask people to do things they can do. Too often people agree to a task that they can’t or won’t perform under the threat of consensus or just part of wanting to be a team player. This is a deadly problem because if people are unable to accomplish what they agreed to this may result in avoidance of you or the Centre. Therefore, ask people to do things they can easily accomplish, especially at first. And don’t be afraid to ask them over and over, whether they are sure they want to take on the task. Once your relationship is strong you may be able to ask them to engage in more difficult tasks.
**No Surprises**
Nobody likes to go to a meeting and be embarrassed because they don’t know something they should or that other people know. Therefore, the coordination team will need to meet and brief people outside of the formal meeting process to keep them updated on current or fast changing events, shifts in resources or important visitors.

**Train Others to Take Over Functions**
It’s an old cliche, but try to work yourself out of a job. If a Centre is going to need to function for a long time period, it will be best if as many functions as possible can be handled either by the other agencies or by local staff of the Centre. If someone else can and is willing to do your job, give them the chance. In almost every situation there is more to do than can be done. Giving jobs to others can only help in freeing you up to take on another task.

**Thank People and Acknowledge Their Contribution**
Rewarding participation is an important technique in building commitment to the coordination process. When organizations have done good work, changed their program or otherwise gone out of their way to put other’s needs ahead of their own they need to be thanked and acknowledged, publicly. Few things will inspire more participation in coordination than the feeling of being a valued contributor.

**Have a Party**
It’s a good idea to have a social gathering periodically. Non-work related gatherings sponsored by the Centre will promote the Centre as a place to “let down your hair”. Much useful information will be shared at a social gathering and relationships will be made and strengthened. In general, it should be a common practice to celebrate successes and mourn failures.

**F.2.2. Coordination Barriers**
Recognizing and naming/identifying barriers to coordination is the first step in overcoming them. Some common barriers to
coordination include:

- The perception that coordination will limit autonomy and that the freedom to make decisions and run programmes as desired will be circumscribed;
- Too many decision-makers or too many organizations involved which will complicate the process and make consensus, or at least agreement, too difficult to achieve;
- Different expectations or beliefs about what is important, a priority, or the “right” thing to do in a given situation;
- Lack of resources to devote to coordination or coordination seen as a low priority given limited time and resources;
- Limited “field-based” decision-making authority such that no decisions can be made without HQ approval thus resulting in delays or “loss of face”;
- Staff turnover where new staff lack a commitment to coordination or are unaware of coordination agreements;
- Unilateral actions that ignore established coordination mechanisms of the coordination body whether by donors or member organizations; and
- Ineffectual or inappropriate coordination leadership, for example, when the coordination body exercises autocratic leadership and imposes decisions on others without a transparent process of involvement.

F.2.3. OCHA Coordination Functions Checklists

Operations/Programme Coordination

Objective: Responsibility for facilitating a coordinated, comprehensive, and coherent operation/programme of assistance to meet the humanitarian needs in the emergency situation.

Tasks:

- In the immediate response phase, identify priority areas for deploying resources, direct relief providers to high need areas, track progress, and adjust the response as needed
- Serve as secretariat for coordination body; provide internal briefings
Serve as focal point for policy issues, developing background analysis, coordinating inputs, adopting and updating formulated policies.

Facilitate strategic/contingency/operational planning and adaptation of plans to changing conditions.

Coordinate the development and implementation of joint assessments surveys, questionnaires and other information gathering activities.

In cooperation with other humanitarian partners, monitor, analyze and evaluate population-at-risk by extent and type of vulnerability, humanitarian assistance needs, resources, and emerging trends to determine priorities, requirements and areas for action.

Facilitate/coordinate an assessment of national and international organization roles, resources, capability, and comparative strengths, identify gaps, overlaps, and bottlenecks by sector/area/programme.

Coordinate and produce a unified Plan of Action (POA).

Identify, and if necessary facilitate development of, common policies, standards and protocols in services and practices.

Monitor and facilitate inter-agency coordination efforts within sectors.

Facilitate consultation/communication between providers and national authorities.

Facilitate preparation of flash and consolidated appeals; work to fill resource shortfalls.

Monitor and evaluate the efficiency, effectiveness, and impact of operations/programmes and recommend follow-up.

Promote relief which contributes to rehabilitation and development and development assistance that reduces vulnerability.

When appropriate, define and implement policies, strategies, and programmes for humanitarian social aspects of demobilization, de-mining, and reintegration issues.

Facilitate and monitor provision of services to
special groups (e.g. internally displaced persons, demobilized soldiers, etc.)

Identify lessons learned and promulgate to ensure institutional memory

**Liaison**

Note: The liaison function, as described below, will normally be included in the functional areas of information and programme/operations. In a highly complex and intense situation it may be desirable to establish a special cell.

Objective: Responsibility for the establishment of mechanisms which facilitate ongoing and effective communication and cooperation between UN agencies and key players especially NGOs

Tasks:

- Communicate regularly with NGOs, donors, media, UN agencies and other international relief providers and provide them with information needed to implement their programmes.
- Collect, collate and disseminate information on all activities of NGOs, donors, media, UN agencies, and other international and national relief actors.
- Facilitate regular individual and group meetings on request for planning, coordination and information exchange both in headquarters and in the field.
- Serve as clearinghouse for all newly arriving organizations and facilitate their registration and recognition by national/local authorities, set up, and operations.
- Develop and maintain a central registry of organizations include information on capacity and operations.
- Support donor visitation and fact-finding missions.
- Assist in the development of project proposals and facilitate expanded NGO presence; support NGOs in delivering assistance.
- Help build indigenous capacity through facilitating international/national partnerships.
Liaise with international military contingent in the area to assist humanitarian operations.

**Telecommunications**

Objective: Responsibility to ensure the creation, effective implementation and coordination of the necessary communication systems (planning, supervision of installation, and the management of communication networks among the UN agencies and, to the extent possible, the humanitarian assistance community in-country such as are required for humanitarian coordination purposes).

**Tasks:**

- Assess existing telecommunications capacity
- Provide necessary telecommunications equipment not currently available and, if necessary, transport to the country
- Liaise with host country communications officials and other parties for radio, telephone, and satellite communications, licenses and other permits
- Ensure compatibility/unity of security communications system with other UN agencies, NGOs, and implementing partners
- Confirm and coordinate distribution of call signs and frequencies among agencies in coordination with UN Telecommunications Control Centre - Geneva
- Ensure the inter-operability of security related networks for local areas, convoy control, and regional emergency networks
- Coordinate alternate routing for communications as a joint agency capability
- Designate specific agency responsibilities, based on capabilities and assets, for the implementation of systems/networks for shared use
- Maintain 24 hour security network for in-country, regional, and international organizations operation including designation of Net Control Station, frequencies and call signs, and procedures for emergency response for PKO, SAR, medical,
military, and police
• Provide updates on GPS positioning for key locations or missions
• Coordinate communication aspects of contingency planning for evacuation including frequencies, alternate/emergency repeater sites, and rapidly redeployable equipment packages
• Provide ongoing training and technical assistance on the installation, operations and maintenance of telecommunications equipment

Logistics
Objective: Responsibility for facilitating sufficient logistical support to enable humanitarian assistance to be delivered in the most appropriate manner possible. Coordinates and provides, when necessary, logistical support services.

Tasks:
• Establish liaison with national and local authorities
• Set up logistics coordination group
• Assess damage to logistics infrastructure
• Establish route availability and security
• Identify critical commodity shortages
• Identify local logistic resources such as transport, fuel, and services and secure, as required
• Identify capability gaps in equipment and facilities
• Formulate solutions and submit proposals to the Coordinator for transmission to government and donors
• Arrange provision of common services such as fuel airfield handling, vehicle maintenance, light air operations, and airfield management
• Coordinate vital common services such as airlift, medevac, and airhead operations
• Facilitate acquisition and utilization of government service packages, e.g. bridge building, field kitchens, field hospitals and other military and civil defence assets
• Ascertained, if necessary establish, and publish procedures for customs clearance, local
documentation, and taxes

- Facilitate cooperation and sharing of facilities, supplies, equipment and information
- With local authorities, monitor and prioritize incoming relief shipments to ensure vital consignments are expeditiously handled and unsuitable or unimportant items are dealt with appropriately
- Oversee logistical support for the Centre

**Security**

Objective: Responsibility for supporting adequate preparedness and response to changing security situations, protection of personnel and assets under the authority of UNSECOORD and the Designated Official.

Task:

- Establish a security plan for its staff and update as required
- Monitor the security situation and UN security phases
- Communicate security procedures to all affected parties
- Assist and ensure preparedness plans and measures
- Facilitate security implementation procedures
- If necessary, facilitate evacuation

F.2.4. Example of Coordination Centre established during the floods in Mozambique

**Structure**

The Government of Mozambique has set up a coordination centre at the INGC, whose aim is to ensure co-ordination between the Government, the UN System, international organisations and NGOs. Six coordination desks have been set up at the INGC to facilitate this. A UN agency, an International organisation or NGO has kindly agreed to be assigned to each of these desks to support the responsible government department. One representative each of the
national Government departments concerned and the sectoral lead agencies mentioned below are manning the sectoral desks every day from 1530 hours to 1730 hours.

1. Food (WFP)
2. Health (WHO)
3. Shelter/accommodation centres/non food (IFRCS)
4. Water & sanitation/infrastructure (UNICEF)
5. Transport/customs/communications (DFID)
6. Information (UNDP)

Office hours of the coordination centre 0800-1 800 hrs seven days per week (until further notice).

**Daily 1100 hrs Coordination briefing**

The daily coordination briefing at 1100 hrs (duration 30 minutes) will outline strategy and report on progress. Each of the desks will hold their own sector coordination meetings as appropriate with all organizations involved in that sector. Dates and timing of sector meetings will be posted on the Coordination Centre notice board. Information provided to the Centre will be shared and made available to all concerned and will be integrated into the daily situation reports.

National Government departments invite the humanitarian community (UN, Red Cross, NGOs) as well as international cooperation partners to attend this meeting. The purpose will be to:

- Give an information update
- Provide sector briefings on priorities and latest developments

**Daily Agenda**

1. Weather forecast
2. Information update on status of flooding/dam situation
3. Update on national relief efforts (Mr. Zamissa, Head of Coordination Centre, INGC)
4. Sector briefings
5. Announcements of financial and/or in-kind donations

**Function of the sector desks**

It is important that both the government departments and designated international organizations are represented at the INGC coordination centre:

- To develop a clear strategy for the sector
- To identify priorities
- To resolve problems as they arise
- To attract donors for specific projects within the sector

There will be a working meeting for heads of desks every evening at 1700 hrs at the coordination centre.

---

**F.3. Structure and Establishment of an On Site Operations Coordination Centre (OSOCC)**

**F.3.1. Introduction**

Establishing an On Site Operations Coordination Centre (OSOCC) is one of the functions an UNDAC team will frequently be asked to perform. The size and functions of the OSOCC will vary in each emergency. However, its basic structure would be as given below. The UNDAC team should modify this to suit the requirements of the situation.

An OSOCC has four main objectives:
1. To provide a system for coordinating and directing the activities of an international relief effort at the site of a disaster/emergency;
2. To provide a framework for cooperation and coordination among the international humanitarian entities at a disaster/emergency site; and
3. To act as a link between such entities and the affected country’s authorities.
4. In an earthquake scenario, to coordinate the activities of
international SAR teams.

**General**

An OSOCC is designed to facilitate the coordination of the international relief community in a disaster/emergency. The OSOCC concept was originally developed by the International Search and Rescue Advisory Group (INSARAG) and the then United Nations Department of Humanitarian Affairs (DHA) to assist affected countries in coordinating international search and rescue teams in the aftermath of a catastrophic earthquake. However, the emergency management principles behind the OSOCC's scope, structure and procedures make the OSOCC a valid tool in any sudden-onset disaster involving international relief resources at a disaster scene.

The OSOCC system is designed as a rapid response tool. To be effective, it should be initiated in the immediate aftermath of a disaster/emergency and before, or simultaneously with, the arrival of international relief resources. It is expected that an OSOCC in some form would be operational during the first, relief phase of an emergency until the national/local authorities and/or the traditional UN structure can cope with the coordination of international resources or until the international relief resources meeting emergency requirements have been withdrawn.

Each international relief team present at the disaster site has a responsibility towards the effective functioning of the OSOCC and the efficient coordination of its operation with those of local and national relief resources as well as with other international teams.

**F.3.2. OSOCC Structure**

The OSOCC can be structured into five functional areas. Not all are needed in every emergency.

- **Primary Coordination Functions**
  - 1. Operations/Programme Coordination
    - a. Current Operations
    - b. Planning
2. Information Collection/Dissemination
   a. Collection
   b. Analysis and MIS
   c. Reporting

• Auxiliary Coordination Functions:
  • 3. Telecommunications Coordination
     a. Coordination
     b. Network Management
  • 4. Logistics Support and Coordination
     a. Coordinate
  • 5. Security
     a. Support the Designated Official and his/her staff
     b. Facilitate Security Coordination when necessary

OSOCC Management
The management consists of the OSOCC Manager, who has overall responsibility of the efficient running and management of all functions. He works closely together with the heads of each function. If an UNDAC team is providing the core OSOCC staff, the UNDAC team leader will normally be the OSOCC manager.

OSOCC Support
In many cases, support in the form of technical and human resources is necessary for the OSOCC to function effectively. When needed, these resources would, as far as possible, be provided by OCHA's external resource partners (see Chapter G), in the form of a support team with the necessary equipment. The main areas of support are: administration and IT, telecommunications, transport, and accommodations.
An OSOCC should be established with enough flexibility to adjust to the magnitude and complexity of a disaster. Depending on the size of the area affected, the OSOCC will need to expand or to provide the appropriate level of coordination linked to the organization of the national emergency management structure.

In establishing the OSOCC, the OSOCC management contacts the local authorities or the Resident/Humanitarian Coordinator to receive direction, establish local priorities and identify the current state of relief work and points of contact. Contact is established with OCHA in Geneva and other relief organizations in the affected area. An initial Situation Report is prepared, based on information gathered on the area.
affected by the disaster, the damage sustained and the population affected. If needed, the OSOCC identifies possible points of entry to the disaster/emergency area by international relief teams and establishes a Reception Centre(s), to start receiving and registering international teams. This is the level an UNDAC team would normally function in.

As the OSOCC becomes fully engaged in coordination its role and activities are expanded to meet the requirements dictated by the situation, the authorities and/or the UN. The OSOCC, together with the local authorities, the Resident/Humanitarian Coordinator, international teams and relief agencies present, will develop an operational plan of action, upgrade its communications and assessments, and introduce systems and procedures to sustain a prolonged commitment. This is the level which a UNDAC team may occasionally function.

Then will be occasions when the OSOCC will need to expand in a specific area(s) within its functional or structural responsibilities to meet additional operational demands requested of it by the authorities, the Resident/Humanitarian Coordinator, and/or the international relief resources present on site.

To meet these specific needs, the OSOCC will require additional resources and specialized staff to manage the special requirements of the emergency situation. These requirements may be pertinent to sectoral response such as medical needs, sanitation and shelter or to the expanded support of an emergency operation in such areas as logistics and communications.

The expansion of OSOCC functions should be made within the basic structure of the OSOCC so as not to upset its general operational procedures or lines of command. This level is normally applicable to a complex emergency and will not be discussed in detail in this handbook.

To execute the OSOCC Management and Support two primary functions and the three auxiliary functions, the
OSOCC has a Management and Support structure as shown below:

**Management**

OSOCC Management is responsible for providing overall direction for OSOCC activities and coordination among international relief resources present at the disaster site, insuring smooth, continuous liaison with the authorities and OCHA. OSOCC Management is situated within OSOCC headquarters.

OSOCC Management is led by the Coordination Manager, who has overall responsibility for the efficient running and management of all OSOCC functions.

Operational conditions and demands will dictate the functions the OSOCC Management needs to address, for example:

- Establish contact with the authorities and the Resident/Humanitarian Coordinator.
- Establish contact with other relief agencies.
- Receive the authorities and/or Resident/Humanitarian Coordinator’s approval to initiate the OSOCC.
- Agree on what information is required from the OSOCC, in what form and how often it should be presented.
- Receive priorities for relief activities.
- Receive a scope of activities for the OSOCC.
- Identify individuals to staff the OSOCC and their main areas of responsibility.
- Conduct OSOCC internal meetings and briefings.
- Provide the necessary leadership, advice and guidance to guarantee a smooth, efficient emergency operation.
- Conduct coordination meetings with the authorities and representatives of international relief resources as appropriate.
- Design, implement, monitor, revise and set priorities for the OSOCC’s overall plan of action.
- Liaise closely with the authorities.
Establish guidelines for contacts with the media.

Support
Support is responsible for supporting all OSOCC functions and the administration, telecommunications, transport and accommodation for the OSOCC.

Support is situated within OSOCC headquarters and is led by the OSOCC Support Manager. The Support Manager reports to the OSOCC Coordination Manager.

Information Collection/Dissemination
For action on information collection and dissemination refer to chapter G of the handbook especially Section G.3.4.

1. Administration

- Set up an Administration Cell.
- Plan administrative requirements.
- Document and file incoming and outgoing messages.
- Introduce administrative systems and procedures, including logging and filing.
- Manage financial support for OSOCC activities.
- Procure and manage interpretation services.
- Organize OSOCC staffing patterns and status.
- Procure maps, boards, stationery and other support materials necessary for the OSOCC.
- Arrange meetings, briefings, etc., at the request of the OSOCC Coordination Manager.
- Prepare final documentation package for appropriate officials.
- Arrange for administrative support personnel and equipment as appropriate.
- Establish a mail reception/distribution/information focal point for relief agencies.

2. Telecommunications

The OSOCC basic telecommunications activities should
include:

- Establish and maintain a LAN with sufficient number of computers.
- Establish international communications.
- Establish communications with the OSOCC Reception Centre.
- Maintain a log of incoming and outgoing communications.

These activities may also include:

- Provide and maintain telecommunications equipment for the OSOCC and Reception Centre.
- Set up a Communications Cell.
- Coordinate with the affected country’s telecommunications officials to ensure proper telecommunication system design.
- Develop and implement an OSOCC communications plan.
- Sustain the communication requirements for the duration of the mission.
- Ensure that the Communications Cell is manned at all times.
- Monitor, analyze and assess all communications traffic.

3. Transport

Transport is a key issue for the successful operation of the OSOCC. To ensure an effective, efficient and safe transport management system the following points should be taken into account:

- Ensure adequate transportation to meet the needs of the OSOCC functions.
- Establish a tracking system of all vehicles.
- Establish a service and maintenance schedule.
- Ensure access to workshop for service.
4. Accommodations, OSOCC Maintenance, and Board

☐ Ensure adequate accommodations for OSOCC staff.

☐ Ensure/establish/maintain the necessary technical needs (e.g. electricity, lighting etc.) to run and sustain the OSOCC.

☐ Ensure that board is available when necessary.

**OSOCC Staffing**

Staffing for the OSOCC will come from the affected country and OCHA. Other sources of staffing may include UN agencies, embassies, NGO's and IGO's.

Each international relief team (whether it provides staff to the OSOCC or not) should identify an individual from its team to act as a liaison with the OSOCC, to ensure that all teams contribute to the coordination of the disaster response.

The number of staff needed to fulfil OSOCC functions will depend on the volume and complexity of activities at the OSOCC and Reception Centre, as well as on the number of work periods per day that the OSOCC will be functioning. Depending on the magnitude of the disaster/emergency and staff resources available, some functions within each main area of responsibility may require more than one person, while several other functions may be managed simultaneously by one person.

When an OSOCC is initially activated, the workload may require a 24-hour-per-day commitment. Therefore, when considering the number of individuals needed from a relief team or teams to staff the OSOCC, a minimum of two work shifts to cover 24 hours should be taken into account. This could mean at least a doubling of the staff and number of individuals filling different OSOCC functions.

The minimum OSOCC staffing should include:

- OSOCC Management
- OSOCC Support/Telecomms
- OSOCC Operations/Programme
Staffing of the OSOCC should be complemented with additional staff as they become available, i.e. when qualified personnel arrive at the disaster site. The agreement and willingness to commit personnel and equipment to an OSOCC may be a significant undertaking for a relief team. Planning for this possibility may involve additional training for relief team members and the procurement of additional equipment. It is crucial that, as more international relief teams arrive, they must be willing to support the personnel and equipment needs of the OSOCC. It must always be remembered that an OSOCC is the responsibility of all international relief teams and designed for their efficient integration into the rescue operation.

All personnel working in an OSOCC should fulfil the following requirements:

- I Be well-experienced in operational emergency management.
- I Be able to improvise and use personal resourcefulness under conditions of limited access to facilities, equipment, supplies and personnel.
- I Be physically fit and able to work under adverse conditions.
- I Have good coordinating skills and demonstrated ability to be a team player.
- I Be able to communicate effectively, both orally and in writing.
- I Have appropriate foreign language skills.
- I Have previous overseas working experience.

**OSOCC Equipment**

OSOCC requirements for equipment will vary depending on the disaster situation and the level at which the OSOCC will operate.

International relief teams which accept the OSOCC concept must realize that it entails a commitment to assist in equipping
and supplying a Centre from their team’s own equipment and supplies. The first relief team to arrive (which may set up the Centre and the Reception Centre) may have to share some of its resources to enable the OSOCC to function.

F.3.3. Common Mistakes during the set-up of the OSOCC

Planning for the OSOCC

OSOCC Chief is not clearly appointed: One person (not the UNDAC team leader) has to be appointed chief of the OSOCC before the OSOCC setup. His/her task is to plan for the OSOCC setup and to supervise/support activities of OSOCC staff in organizing their work.

The planning phase for the OSOCC set-up is skipped: It is essential to spend enough time for the planning of the OSOCC set-up. The roles, tasks and expected results of the work of its members and interaction between its members have to be clearly defined. It has to be clear to all OSOCC members how the OSOCC will function, who plays what role, and what its output will be.

OSOCC members have no clearly appointed tasks. Every OSOCC staff member has to know very clearly his/her tasks and what the expected result of his/her work should be. Each OSOCC member also has to have a clear understanding of the tasks of other members, and how own activities relate to others.

Setup of OSOCC

Information management cell is exposed to public interaction: The Information Management cell of the OSOCC has to be in a quiet place, which is not accessible to public. In the Information Management cell, all information from reception centres, sectoral desks, assessment missions, and any other sources are compiled and analyzed and put into the necessary format for output (Databases, Sitreps, charts, e-mails, fact-sheets). The Information Management Cell is the
core element of the OSOCC. An effective information exchange with all other OSOCC elements (e.g. Sectoral Desks) has to be established.

UNDAC Support Module staff is not integrated in the OSOCC: Personnel from UNDAC support modules are usually very experienced and should be formally included in the planning process of the OSOCC. They should be assigned concrete tasks according to their background, even beyond the physical establishment of the OSOCC (e.g. assessment, information management, logistics).

Lacking crowd management: the OSOCC should establish some sort of crowd management (e.g. reception desk at the entrance) to avoid uncontrolled public interaction.

---

**Relation with National/local authorities**

**Contact with national/local authorities is established too late:** Local (civil/military) authorities, who are involved in the relief operation, have to be contacted by the UNDAC Team leader as soon as possible. They should be briefed on the role of the UNDAC/OSOCC and arrangements for mutual information exchange and liaison at all levels should be made.

**Visits to national/local authorities (civil/military) are too informal:** Visits to national/local authorities should be aimed at the highest possible level (Governor, General) with a formal delegation of the UNDAC Team or OSOCC. A concept for the meeting should be prepared in advance (how do we present ourselves, what topics do we cover, what do we offer, what do we request, etc.).

---

**Relation with international Relief Actors**

**Humanitarian Actors learn too late about the existence/role of the OSOCC:** it is important to approach international relief actors early and arrange informal meetings. To contact international actors it is sometimes useful to use national entities/infrastructure...
(customs, military, warehouses, etc.) to make those actors aware of OSOCC activities (e.g. announce daily meeting and contact details).

**Liaison Officers**

*Liaison Officers are not integrated in the OSOCC structure:* liaison officers, who are made available by national/local authorities or other humanitarian actors: have to be formally integrated into the OSOCC structure. This requires a firm agreement on kind and duration of their use with their sending organization. Liaison persons have to be assigned concrete tasks within the context of the OSOCC activities. They have to clearly understand the results they are expected to deliver.

**Information Exchange**

*Information is not updated and maintained:* information on planned activities (assessment missions), OSOCC staffing (liaison persons, volunteers, translators), contact persons in government and relief agencies, locations, scheduled meetings, etc. is not systematically updated/maintained in the OSOCC at an early stage. Therefore OSOCC staff might not be updated on the current status the operation. To coordinate this effort could be a critical task of the Administration Cell.
F.3.4. Example for the assignment of tasks for OSOCC staff

**UNDAC Team leader:**

**Task:** as official OCHA representative, he/she should make contacts at highest possible level with national authorities, the UN Resident Coordinator and relief agencies, to ensure acceptance and support for the OSOCC.

**Expected Result:** Effective support by all counterparts

**OSOCC-Chief**

**Task:** develop the Mission Statement, Plan of Action and an Assignment Plan for the OSOCC and supervise the work of OSOCC personnel. In cooperation with the UNDAC Team Leader, the OSOCC-Chief should facilitate the organization of resources to enhance the effectiveness of the OSOCC.

**Expected Result:** ensures that OSOCC staff is most effectively used and that the OSOCC produces the expected output

**Administration Officer:**

**Task:** organizes the internal work-flow of the OSOCC and ensures that OSOCC staff is constantly updated on the current information (activities, personnel, contacts, meetings, etc.). Establishes a reception desk, name-tags, etc. for effective crowd management.

**Expected Result:** Internal organization of the OSOCC

**Information Management Officer:**

**Task:** compile and analyze the information input from outside sources (reception centres, assessment reports, situation reports, media, etc.) and convert it into appropriate output format for stakeholders (Sitreps, databases, charts, etc.). The Information Management Officer works in close cooperation with all other OSOCC elements.

**Expected Result:** Provision of timely output of analyzed information in appropriate format
Communications Officer:

**Task:** establish and maintain technical communication links through e-mail, sat-phone and manage all technical internal communication issues (VHF radios), maintain contact list and communications plan of OSOCC staff and relief actors.

**Expected Result:** Physical set-up of internal and external communication and maintenance of contacts list and communications plan.

Operations Officer:

**Task:** maintain an overview of ongoing relief activities and develop an integrated plan for assessment in cooperation with national authorities and international relief actors. Works in close cooperation with the Information Management Officer.

**Expected Result:** Plan of Action for assessment and relief activities.

Media Officer:

**Task:** handle all media-interaction and prepare media-fact sheet about the OSOCC as well as an update of statistics for distribution to media.

**Expected Result:** a constructive relationship with national/local and international media.

Logistics Officer:

**Task:** provide logistics support to the OSOCC and establish links with local/national logistics entities and in other relief organizations.

**Expected Result:** logistics support for the OSOCC and formal links to all logistics entities of the relief operation.

Liaison Officer:

**Task:** establish formal information exchange between the OSOCC and respective organization and participate in related meetings.

**Expected Result:** systematic information exchange between the OSOCC and respective organization.
Security Officer:
Task: monitor the security situation and establish regular information exchange with the UN Security Officer (Designated Official) and security officers from other relief actors. Update OSOCC staff and relief actors on the security information. Develop a security plan for the OSOCC (including evacuation plan, if necessary)
Expected Result: security plan and periodic update on the security information

F.4. Working with the Military in the Field

Disaster Relief
When the military is involved in disaster relief activities, military assets are provided primarily to supplement or complement the relief efforts of the affected country’s civil authorities or of the humanitarian relief community. This support may include providing logistics, transportation, airfield management, communications, medical support, distribution of relief commodities, or security.

Characteristics of Military Culture
1. Organizational Culture
Most organizations have a distinct organizational culture, an often unwritten set of rules, regulations, viewpoints, perspectives, and operating procedures. This culture is based on the unique history, mission, structure, and leadership of the organization. The military’s distinct organizational culture is reflected in the characteristics listed below. These characteristics, which make the military very effective in combat, may frustrate relief organization personnel, who may find the military inflexible. UNDAC members who are more aware of the military environment and culture will be more prepared to deal with the frustrations of relief community members who have not dealt with the military.

Here are some of the main characteristics:
- Highly structured, hierarchical, chain-of-command.
Authoritarian, “Who’s in charge?”

Goal oriented, “What’s the mission?” (both explicit and implied).

Rules and regulations run the organization.

Process and scheduling are adhered to, “daily battle rhythm.”

Work ethic, “work hard, play hard.”

Highly competitive.

Respect for tradition.

Respect for physical and mental toughness.

Respect for age.

Training priority is on combat readiness.

Emphasis on battle skills.

Emphasis on physical fitness.

Emphasis on equipment maintenance.

Trained to be insensitive for battlefield survival.

Trained to be secretive for operational security.

Leaders are taught to be assertive, decisive, tenacious, and confident. “Make a decision and make it now!”

Concepts such as cooperation, collaboration, and non-conformity are avoided.

The following section describes how the military’s cultural norms may be displayed to the relief community during an operation.

2. Meetings

Military personnel expect meetings to be highly structured and efficiently managed. A leader is expected to listen to succinct presentations, usually consisting of overheads or slides of the issues, and to make clear decisions without hesitation. They will come to meetings expecting everyone to leave with their “marching orders.” Meetings attended by autonomous agencies expecting a consensus approach to issue resolution may be viewed by the military as lacking a leader. Some military personnel will judge such meetings as weak in leadership and inefficient and may attempt to assert leadership intending to help. Others may become very frustrated, lose interest, and not participate.

3. Coordination

Concern for operational security will likely result in a reluctance
to share information about planned activities, although the military can be expected to want in-depth information about civilian activities. The military will respond well to clearly stated missions, efficient processes, organization, responsibility, and competence. It will judge harshly any operation weak in these areas and may show insensitivity when expressing that judgment.

4. Operational View of the Mission
Some military leaders may be concerned that humanitarian operations degrade combat readiness. Sensitivity to suffering may not be viewed as a virtue on the battlefield. This may result in a desire to minimize participation in some operations. Although humanitarian operations may be viewed with mixed feelings organizationally, the military is excellent at dutifully executing national direction. If that direction is clearly to support humanitarian operations, the response can be delivered effectively with a single-minded purpose.

5. Deployment
The military deploys with a comparatively high standard of support, and the number of personnel, support packages, and “baggage” may seem excessive. This support is designed to make the military as self-sustaining and self-reliant as possible. The military support systems can be used to assist displaced civilians. However, the military standard of support differs from humanitarian relief agency standards.

What the military will be constantly trying to avoid is mission creep, which occurs when armed forces take on broader or additional missions than those for which they initially planned.

Overriding all other priorities will be internal force protection. Force protection is the security program designed to emphasize the protection of soldiers, civilian employees, facilities, and equipment that are part of the military organization. How force protection is implemented may have an effect on how, where, and when the military will become involved in relief activities.

Each military operation will have rules of engagement (ROE),
which delineate the circumstances and limitations under which the military will initiate or continue combat engagement. The ROE in turn, will have significant impacts on disaster relief operations, affecting freedom of movement, security, logistics, and the perception of neutrality of the relief community in the eyes of competing factions.
G. Information Management
A major responsibility of the UNDAC Team is to collect, compile, analyze, and report on the emergency. This
information should involve general information on the humanitarian effects of the emergency resource needs and availability, the response activities, the achievements, the constraints, the gaps, and the unmet needs.

The UNDAC Team’s Information Management responsibilities may include all or some of the following types of activities.

1. Apply UN strategies and policies on information management including confidentiality; format and frequency of sit reps and other reporting requirements; information handling procedures such as registering, filing and retrieval, and dissemination; and media relations

2. Serve as the focal point for all information on humanitarian activities; develop and maintain a relationship with other information points such as agency information officers and military information liaison officers; classify information on its credibility and reliability

3. Establish rapid and effective reporting networks, develop electronic communication systems, facilitate internal communication systems

4. Compile and maintain an up-to-date picture of the humanitarian situation by sector / organization / geographic area - facilitate the flow of information from and to field offices, provide real-time monitoring and plotting of humanitarian incidents

5. Collect, collate, analyze and disseminate information regarding the plans, operations, stockpiles, information needs, and ongoing resource needs of assistance providers

6. Monitor donor contributions and resources provided through the Appeal

7. Establish and maintain an ongoing information system/data base on the emergency to serve as the institutional memory

8. Prepare and submit periodic humanitarian situation reports and other reports as decided in the Plan of
Action

- Provide information to the media and news agencies, monitor media reports, organize and convene press conferences, liaise with OCHA spokespersons.
- Provide briefings for senior level staff, visiting dignitaries, and donor missions
- Provide a briefing pack and brief visiting personnel, new staff, etc. including issue summaries, addresses, maps, and overview of UN, IO, and NGO activities
- At the onset of the missions the UNDAC Team will need to determine with the UN Resident Coordinator, the extent of the Team’s information management responsibilities

G.2. UNDAC Reporting and Sitreps

G.2.1. Policy

Reporting is one of the most important functions of an UNDAC team. It should be clear, concise, accurate and professional. All reporting by an UNDAC Team should be addressed to the United Nations Resident/Humanitarian coordinator in the capital of the affected country with a copy to the Emergency Relief Coordinator (through, OCHA Geneva). All reporting should be cleared with the team leader.

For contacts outside the above channel of reporting, it must be made clear that all information should be verified with the relevant authority of the affected country, the United Nations Disaster Management Team or OCHA. Reports should, as far as possible, be written in English.

G.2.2. The Reporting System

**UNDAC Situation Reports**
The UNDAC situation reports (UNDAC sitrep) are to be sent to the United Nations Resident Coordinator with a copy to the
ERC (through, OCHA Geneva). The UN Resident/Humanitarian Coordinator uses this report, together with all other information that he/she has available, to compile a Field Situation Report.

Field Situation Reports
The UN Resident/Humanitarian Coordinator compiles a Field sitrep from the information that he/she has gathered from sources such as national authorities, UN agencies, the UNDAC sitrep, NGO's and others. The Field sitrep is then sent to the ERC through OCHA Geneva where it is used, together with other available information, to form either OCHA Information Reports or OCHA Situation Reports which provide information required by the International community.

They are based largely on information provided from the field by or through the UN Resident/Humanitarian Coordinator. They also include and take into account information received by OCHA from other sources, including the appeals issued by the ICRC and IFRC for the national Red Cross and Red Crescent Societies. The UNDAC team is a very important source of information for the Sitreps. In the immediate aftermath of a disaster, frequent OCHA Sitreps are issued from Geneva, providing the international community with the best possible information as it becomes available. OCHA cross-checks the information with the headquarters of the other UN agencies and donors, to the extent feasible.

The reports are sent directly to the capitals of donor countries and the headquarters of the UN agencies, inter-governmental organisations (e.g. the European Union), and major NGO's, as well as the New York and Geneva missions to the UN of the affected region. They are typically distributed to over 300 addresses involved in making decisions on providing international disaster relief and related assistance.

End of Mission Report
An end of mission report is to be submitted by the UNDAC team to FCSU, OCHA Geneva headquarters as soon as possible after a mission and at the latest one week after completion of the mission. The purpose of the report is to
inform OCHA of the nature and scope of the mission and to highlight the follow-up actions to be taken after the mission. See also Chapter D. 12.

G.2.3. UNDAC Situation Report

General

Send the first UNDAC sitrep as early as possible upon arrival at the disaster site, and send subsequent UNDAC sitreps daily with whatever information is available at the time. Do not delay because certain information is lacking; send it next time. An UNDAC sitrep should be sent once a day unless specified otherwise. Remember, an UNDAC sitrep is processed information and carries considerable credibility. It should be informative, authoritative and timely especially in the current age of instant media access to disaster sites.

Either provide a complete list of unmet needs in each report, or specifically state which items remain unchanged from the previous report while providing new information for other items. Indicate if needs can be met locally or require international assistance.

When writing the report, imagine yourself at the receiving end, and try to write what you would want to know as well as how you would want it presented. Be explicit and precise and double check figures. Try to anticipate a potential donor's likely questions, and answer them in the report. Do not repeat information that has already been sent, and if there is no new information under a specific heading, state this clearly.

Avoid vague and ambiguous words and phrases. A statement such as “5,000 people are affected” does not give any indication on, e.g. how they are affected, to which degree, what is already being done, and how many people there are in the area altogether. “5,000 houses damaged” conveys little information. The “damage” may be minimal or total. Use the guidelines given in the assessment checklist (see Chapter D). Describing people as being “homeless” also lacks the precision needed to plan appropriate responses. At a minimum make the following distinctions:
- People homeless before the disaster (chronic homeless).
- Those temporarily evacuated due to repairable damage to dwellings.
- People whose dwellings have been destroyed or irreparably damaged.

When reporting damage or assessed needs, specify the source of the information. Take care to check the final text before sending ask another person to check it.

G.2.4. Format of UNDAC Situation Report

Format
The format of the UNDAC Situation Report given below should be followed by using the parts that are relevant for the specific assessment mission. The UNDAC Sitrep should consist of all the items mentioned below; if there is no information on one or more of the items then state it explicitly (i.e. “Nothing new”).

UNDAC Situation Report

I. SITUATION
1. Nature of the disaster
2. Area affected
3. Impact
4. Projected evolution/secondary threats

II. IN COUNTRY RESPONSE
5. Organisation: national and local authorities
6. Administrative measures
7. Operations
8. Constraints

III. ON-SITE LEVEL INTERNATIONAL RESPONSE
9. International resources arrived on-site/mobilised
10. Coordination
11. Constraints
IV. ASSISTANCE
   12. Priority relief needs

V. MEANS OF DELIVERY OF INTERNATIONAL ASSISTANCE
   13. Logistics and distribution system
   14. Possible channels for contributions

VI. OTHER INFORMATION

The structure of the above UNDAC Sitrep corresponds to the Field Sitrep provided by the UN Resident/Humanitarian Coordinator to the ERC, and to that of OCHA sitreps which are sent out from Geneva to in the disaster management community world wide. Please refer to Annex for detailed checklist of items which may be included under various heads of the sitrep.

G.3. Information Gathering and Analysis

G.3.1. General

It is useful to distinguish between the terms “data” and “information.” Data is simply a collection of words, numbers and other characters with a structure. Information is “useful data.” Data becomes information when it is useful, meaningful, relevant and understandable to particular people at particular times and places, for particular purposes.

G.3.2. Information Sources

Interviews with / information from key informants in the government and PVO/NGO's/IO's and within particular groups of affected people. Useful sources of information may be:

At District/Local Level
@District/local authorities

At Capital Level
@National authorities/responsible ministries
**Principles for Assessment**

**Involvement of UN Agencies**

Within the UN system, a number of specialized agencies have the responsibility and/or capability for a detailed sectoral assessment of needs in accordance with their mandate and operational experience. The UNDAC Team should cooperate closely with the representative or project staff of these agencies. The sectors covered by individual agencies are indicated below:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Competent UN Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>WHO, UNICEF</td>
</tr>
<tr>
<td>Food and nutrition</td>
<td>WFP</td>
</tr>
<tr>
<td>Supplementary feeding</td>
<td>UNICEF</td>
</tr>
</tbody>
</table>

Detailed critical-sector assessments by specialist(s). This involves technical inspections and assessments by experts. It is required particularly in sectors such as health and nutrition, food, water supply, electric power and other infrastructure systems.
<table>
<thead>
<tr>
<th>Sector</th>
<th>UN agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>UNICEF</td>
</tr>
<tr>
<td>Sanitation and environmental services</td>
<td>UNICEF</td>
</tr>
<tr>
<td>Camp planning, Refugees</td>
<td>UNHCR</td>
</tr>
<tr>
<td>Agriculture and fisheries</td>
<td>FAO</td>
</tr>
<tr>
<td>Infrastructure, Rehabilitation</td>
<td>UNDP</td>
</tr>
</tbody>
</table>

**Collaboration with National/Local Authorities**
Close coordination should be maintained with the national services and local authorities. Existing equipment, resources and organizational structures should be used to the extent possible.

**Expert Advice**
To the extent possible, advice should be sought from experienced experts with local knowledge. Nevertheless, any information provided should always be double checked with the competent UN agencies.

**Cultural Acceptance and Community Participation**
Assistance must be culturally acceptable and appropriate to the needs of the affected population. Community participation in the development and implementation of response measures is essential. Systems must be operated with minimal external involvement.

**Reliability and Credibility of Information Sources**
There is a need for appreciating the reliability of the source of information and the credibility of the information collected. The consistent application of the following tried-and-tested system might help you. It was developed by the military. The fact that it is well tested and in widespread current use means it is not only useful for UNDAC but means that meaningful discussions can be had with peacekeepers etc when in the field.
The system identifies the reliability of the source providing the information and then, separately, the credibility of the information being provided. By consistently applying this approach, team members can identify the significance of reports received with some degree of confidence.

<table>
<thead>
<tr>
<th>Reliability of Source</th>
<th>Credibility of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Completely Reliable</td>
<td>1. Confirmed by other sources</td>
</tr>
<tr>
<td>B. Usually Reliable</td>
<td>2. Probably True</td>
</tr>
<tr>
<td>C. Fairly Reliable</td>
<td>3. Possibly True</td>
</tr>
<tr>
<td>D. Not Usually Reliable</td>
<td>4. Doubtful</td>
</tr>
<tr>
<td>E. Unreliable</td>
<td>5. Improbable</td>
</tr>
<tr>
<td>F. Truth cannot be judged</td>
<td>6. Truth cannot be judged</td>
</tr>
</tbody>
</table>

This can be further expanded:

**Reliability of Source**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Completely Reliable refers to a tried and tested source which can be depended upon with confidence. These are extremely rare in my opinion. I usually keep this one for special occasions.</td>
</tr>
<tr>
<td>B</td>
<td>Usually Reliable refers to a source which has been successful in the past but for which there is still some element of doubt in a particular case. I use this one for those of known integrity such as UN agencies, military imagery, some major NGOs etc.</td>
</tr>
</tbody>
</table>
5

| 5 | Improbable is applicable is an item of information positively contradicts previously reported and validated information. |

6

| 6 | Truth cannot be judged is applicable if any freshly reported item of information cannot be compared with any other categories source. It is used when 1-5 cannot be applied. It is preferred to use a rating of 6 rather than a inaccurate 1-5 rating. |

The scales are not progressive degrees of accuracy; it only helps to formalise the credibility of information received. Therefore it is not foolproof. The letters and numerals are independent of each other and give an overall evaluation of the information. For example, a source known to be unreliable (E) might provide accurate information which is confirmed by other sources and therefore given the rating of E1. Additionally, a report evaluated as F6 maybe totally accurate and should not be arbitrarily thrown out.

G.3.3. Interpretation and Forecasting

Thorough analysis of the information gathered is a critical step in the assessment process. The UNDAC team should be careful to record and report the factual information as objectively as possible. In performing the analysis, the information has to be linked to the country-specific situation (such as disaster history, traditional coping mechanisms, etc.) and possible future developments. The UNDAC team should try to detect and recognize trends and indicators of problems, and to link the information to recommendations for action to be taken.

G.3.4. Presentation of Information in the OSOCC

An OSOCC must be able to present information available with it in a clear and easily understandable manner to all visitors. This will save the UNDAC team members time in
answering the same questions again and again as well as make the OSOCC a useful place for relief workers to visit regularly thus enhancing coordination. To collate and present information it is suggested that the following tools be employed.

1. **A Log Book**
   The OSOCC should maintain a log book into which all telephone and radio messages received or sent are logged with action taken. This should be a simple log with the columns “Serial number”, “Time Received/Sent”, “From/To”, “Message Contents”, “Action taken” and “Initials” on it. Anyone receiving or sending a message should log it into the book. This will enable OSOCC staff to derive the following benefits
   - A running record of all information/actions is kept. Thus enabling staff coming to the OSOCC after an absence to update themselves.
   - A basis for briefings and sitreps is available at all times.

2. **An Information Map**
   On a wall of the OSOCC display an information map which covers the area of relief operations. On this map (which you should cover with talc or plastic) mark on the talc the following information:
   - Location of various relief organisation. In SAR operations also mark sectors of operation of each operation.
     - Location of key LEMA organisations such as tire brigade, police station, hospitals, communication centres, military headquarters.
     - Location of the OSOCC.
   - Location of key logistics features such as airfields or railway stations.
     - Any security incidents.

   On the margins of the map list out the telephone numbers of major partners in the relief operation. Encourage visitors to visit the OSOCC to update information on the information map concerning their organisations. If kept updated, you will soon find that there are very few places where all the above information is displayed and this Information Map will become a magnet for relief workers.
3. Pigeon holes
Pigeon holes or a central location for photocopies of other organisation’s sitreps, and other information from humanitarian partners. The more information from a variety of sources you make available, the more “worthwhile” it will be for relief worker to visit the OSOCC.

4. A Notice Board
Next to the information map in the OSOCC, make available a blank notice board on which relief organisations can leave notices regarding relief operations, coordination meetings, assessment missions etc. This facility allows needs and resources of relief organisations to be matched besides acting as a facilitator of information flow.

5. Coordination/Information Meetings
Information Management by the UNDAC Team includes the following steps:

- Information collection (including assessment)
- Evaluation/analysis of the information
- Information Dissemination.

The information sources with whom the UNDAC Team needs to be in contact range from the UN Resident Coordination and the United Nations Disaster Management Team to other humanitarian organisations, national/local authorities, military forces, media, as well as OCHA headquarters. These various sources will also constitute the main stakeholders for dissemination of information.

Hold regular cross sectoral coordination and information sharing meetings at least once a day in which all partners i.e. LEMA, NGOs (local and international), Military and international relief organisations are invited. Encourage leading relief organisations to hold sectoral meetings e.g. UNICEF for women/children issues, WFP for food, IFRC for health etc. The result of these meetings will provide you with an important information base for the UNDAC sitreps.
6. Contact with OCHA Headquarters

a. FCSU and the Regional Desk

Once the decision is taken to mobilise an UNDAC Team, FCSU nominates a mission focal point for all issues relating to support to the UNDAC mission. In addition, OCHA’s Desk for the concerned country/region will be the focal point for all substantive information regarding the emergency and related follow-up actions required at OCHA Headquarters level, as well as with the headquarters of external partners (e.g. donors and agencies).

Besides the report writing requirements mentioned above, daily teleconferences should also be organised between the Team Leader (and any additional member of the team, as may be determined by the Team Leader) and these two focal points (both of whom should be present during the teleconferences). The mode/responsibility for recording these teleconferences should be determined from the beginning of the mission. There are two basic options: audio recording with a dictaphone (to be provided as part of the office kit) or written records of the conversation. There should always be a record of follow-up actions requested/agreed.

b. Other parts of OCHA

The Desk and FCSU are responsible for ensuring follow-up in case of actions or information requested by the UNDAC Team. However, direct contact may occur with other parts of OCHA, as follows:

- the team may be contacted by other parts of OCHA for information, in particular by the Military-Civil Defence Unit (MCDU), the OCHA-UNEP Joint Environmental Unit and the OCHA Spokespeople in Geneva and New York.
- the team will be in direct contact with OCHA’s information systems to expedite dissemination of information to donors, agencies and the public as a complement to the OCHA Situation Reports. These systems are:
Reliefweb, OCHA’s humanitarian information Internet web page, which posts information from all humanitarian partners in addition to OCHA’s own information.

The Integrated Regional Information Network (IRIN), which is based in three locations in Africa (Nairobi, Johannesburg and Abdijan) and serves as a humanitarian news agency through free-of-charge e-mail subscription. IRIN reports are also posted on Reliefweb.

G.4. Contacts with Media

G.4.1. General

Whenever there is a newsworthy situation, the media will be there. Thus, an UNDAC team member may be approached by the media at any time. UNDAC team members can play a vital role in giving assistance to the media in a disaster situation, as good press can help fund-raising. It is therefore important for UNDAC teams to help keep the media informed. Keeping good relations with the media has frequently resulted in sympathetic coverage as well as help being given by journalists when help was not readily accessible by other means. UNDAC team members must, however, be aware that discrepancies may exist between the media presentation of a disaster and the reality.

G.4.2. Policy

The team leader sets the guidelines for relations with the media. Normally, one team member (usually the team leader) should be appointed as focal point for contact with the media, after which media relations concerning the UNDAC mission as a whole should go through this person. It should be borne in mind, though, that information given to the media should match that being provided by the UN Resident/Humanitarian Coordinator and that a media policy should be agreed upon between the UNDAC team leader and the UN Resident/Humanitarian Coordinator. If an individual team
member is approached by the media, he/she should be allowed to give information concerning the specific work that he/she is currently carrying out.

G.4.3. Rules Regarding Media

Preparation

- Make an UNDAC Press Pack to provide media representatives with background information on OCHA, UNDAC and the current situation.
- Try to be the first to supply information, thereby establishing the team as a useful source for the media.
- Try to have an up-to-date description of UN/UNDP/OCHA emergency-related activities, which you can give to the media.
- If possible, know the main points you want to make clear, before you carry out an interview.
- Know what you want to say - and what you do not - want to say - before you start talking.
- Do not favour one media - all are entitled to similar treatment.
- Know who you are talking to. Make a media log (journalist’s name; the newspaper, magazine, or radio/TV station he/she represents; local address and telephone number).
- If there is an OSOCC, it can be the central media centre where journalists know where and from whom to obtain information.
- Provide full and accurate information on a regular basis.

Rules for dealing with Reporters

- Never pick a fight with the news media:
  - They air or print every day and you don’t.
- There are no secrets:
  - Assume what you say and do will get on the air or the printed page.
  - While you can say Things “off the record”, that doesn’t mean the media won’t print it and give you attribution.
- Don’t assume anything:
  - Reporters may not be well informed or technically proficient about your profession.
  - Explain terms to ensure they are understood.
- Keep it simple:
- Simplify and summarize your major points.
- Write facts and data down to hand out.
- Use English. Talk in a relaxed style that is aimed at laypersons, not subject experts. Avoid acronyms.
- Remember that the audience is the general public.
- Give reporters a good story to write...or they may find one you don’t like and write it:
  - Listen for trends in the questions. Is the reporter asking leading questions? Are there obvious misconceptions? Offer to clarify or redirect.
- Treat reporters professionally:
  - Treat them with respect.
  - Initiate background conversations.
  - Always answer their calls immediately.
  - Leave word in your office where you will be so you can answer calls immediately.
- Don’t lie:
  - Make sure your information is accurate.
    - It doesn’t have to be all-encompassing. You don’t have to tell a reporter your views on everything.
- Before you do an interview, decide what you can discuss and what you can’t and stick to it.
- Use humor to defuse confrontational situations.
- Choose your words carefully and well:
  - They will likely be reported as you say them.
- If a critical or controversial story is going to be written anyway, your point of view should be in the story:
  - Silence is not always golden.
- Repetition is the essence of retention:
  - The public will remember what they see, hear, and read repeatedly in the media.
- Once the story is out that you don’t like, it is usually too late and fruitless to try to correct it.
- Use objective and authoritative sources of information to back up your statements to reporters, if you can:
  - Don’t make charges you can’t back up or make stick.
- Try to anticipate questions. If you can’t or you don’t know the answer, get back to the reporter after you are asked such questions so you can give a considered response.

Follow-up
- Inform the UN Resident/Humanitarian Coordinator (if you
are the team leader) or the team leader (if you are the team’s media focal point or a team member) when an interview has taken place.

- If a team member has been misquoted, the UN Resident/Humanitarian Coordinator should be contacted immediately, so that representations can be made to the media. Once a story is out, though, it is usually too late to correct it for the public, but the media should nevertheless be informed of the mistake.

G.5. Information outputs

The UNDAC Team should consider using the following tools to facilitate availability, dissemination and sharing of information. The following tools will be particularly useful, e.g. as part of the output of a Coordination Centre established by the UNDAC Team:

- Situation Reports
- Appeals for international assistance
- Assessment reports
- Minutes of coordination meetings
- Telephone conferences, e-mail/fax correspondence
- Briefings to visiting delegations/representatives
- Maps, charts, contact lists, photographs, video material
- Logbook of actions requested/completed
- Media interviews and press conferences
- records of these events
- Press communiques, fact sheets for the press, arriving organisations, visitors, VIPs
- Pigeon holes for local distribution of photocopied information

G.6. Preparation of Appeals

G.6.1 Mobilising the International Community.

When the Government of the affected country requests the international community to provide assistance in an emergency
situation, OCHA may launch an Appeal for international assistance and the UNDAC team in situ may be tasked to assist in preparing it. The Appeal normally covers the needs of the UN system and its humanitarian partners for emergency assistance. In case of severe or widespread natural disasters, it may also cover the needs of several countries in a region. The UNDAC team will normally be involved in preparing Appeals related to natural disasters and not normally in preparing complex emergency Appeals as the Consolidated Appeals Process (CAP) for complex emergencies is a programming process which covers a longer period and requires more detailed knowledge of programmes than the UNDAC team is likely to have.

G.6.2 Appeals related to natural disasters.

The Appeals for natural disaster response which the UNDAC team may have to assist in the preparation of are for a short time frame, normally 3 months, and may also cover transitional needs to bridge the gap in flow of funds between emergency needs and rehabilitation and reconstruction. While there is no mandated format for the Appeal, it will cover the following broad areas:

1. An Overview of the Situation
   a) Objective of the Appeal
   b) Impact of the Disaster
   c) Strategy and Priorities of Humanitarian Relief Operations
   d) Infrastructure and Logistics

2. Priority Emergency Needs and Requirements by Sector (cover only those sectors relevant to the situation you are dealing with)
   a) Water and Sanitation
   b) Food and Nutrition
   c) Shelter
   d) Health
   e) Infrastructure
f) Education

g) Coordination and Management

For each individual Sector you may need to cover the following:

a) Objective
b) Strategy
c) Responsibility for Implementation
d) Budget

3. Summary table of Funding Needs

G.6.3 Examples of Natural Disaster Appeals

In order for UNDAC members to be able to refer to actual natural disaster Appeals which have been prepared with the assistance of the UNDAC team, given below are examples of Appeals prepared after the floods in China in 1998 and in Mozambique in 1999.


CHINA

FLOODS

United Nations Inter-Agency Appeal for Emergency Relief and Initial Rehabilitation

(End of September 1998 to the end of January 1999)

23rd September 1998
1. Objective
The objective of the appeal issued by the United Nations is to solicit contributions for emergency relief and initial rehabilitation in nine provinces and autonomous regions of China devastated by the floods. It is also to facilitate a coordinated international response. The appeal concentrates on the most severely affected provinces (along the Yangtze river and in the North of China) and the most vulnerable groups in those provinces.

The flood disaster is of a magnitude unprecedented over the last decades. The Government of China has experience in dealing with floods but not on this scale and for so long. The 2.9 million people seeking refuge on the dykes along the Yangtze river basin have already been there for two months and it will take as much as three months until they return to their devastated villages. They survive in overcrowded, insufficient shelters with increasingly dangerous sanitation. There is a major threat to public health. Shelter materials are urgently required. In the northern provinces floods have put a huge burden on a region recovering from last year’s drought. In northern China, the severe winter weather is only six weeks away (minus 30 degrees C) and there is a desperate need for emergency shelter.

2. Summary of the appeal
The United Nations appeal to foreign governmental, intergovernmental, non-governmental and private donors to make their contribution quickly, to strengthen the relief efforts mounted by the Chinese Government and the Red Cross.

This appeal is made upon request from the Chinese Government to OCHA. It has been prepared by the United Nations Disaster Management Team in Beijing under the leadership of the United Nations Resident Coordinator with the assistance of OCHA's
United Nations Disaster Assessment and Coordination (UNDAC) Team.

The appeal is based on field assessments undertaken by humanitarian agencies, as well as on the findings of the UNDAC/Inter-agency field missions (UNDP, WFP, WHO, FAO) which were able to verify the scale of the disaster and the urgent need for shelter, food, medical care, and potable water. The latter were made to the three most affected provinces in the Yangtze river basin (Hubei, Jiangxi and Hunan) and Jilin and Heilongjiang provinces in the north-east (8 to 16 September, 1998).

The programme will have more than 5.8 million beneficiaries and a total of US $ 139 million will be required for emergency shelter, food, health, water and sanitation, and emergency repairs to schools and health centres. The duration of the appeal is four months, from the end of September 1998 to the end of January 1999. It will include coordination and management of the international disaster response. Requirements are broken down by the United Nations office or agency responsible.

**Table 1. Summary table on requirements by UN agency**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAO</td>
<td>us $90,000</td>
</tr>
<tr>
<td>OCHA</td>
<td>us $ 100,000</td>
</tr>
<tr>
<td>UNDP</td>
<td>us $ 34,150,000</td>
</tr>
<tr>
<td>UNESCO</td>
<td>US $ 4,600,000</td>
</tr>
<tr>
<td>UNICEF</td>
<td>us $ 5,400,000</td>
</tr>
<tr>
<td>WFP</td>
<td>US $ 87,700,000</td>
</tr>
<tr>
<td>WHO</td>
<td>us $ 7,000,000</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>US$ 139,040,000</strong></td>
</tr>
</tbody>
</table>

Given the scale of the disaster, this is only a small fraction of the total needs. By far, the larger part of the burden is expected to continue to fall on the Chinese Government, with the support of the Red Cross, and the Chinese people both in China and abroad.
The International Federation of Red Cross and Red Crescent Societies has appealed to the internal community for CHF 13.6 million to purchase and distribute food, water, purification tablets, medicine, sanitation supplies, quilts and winter coats. The UN appeal complements the Federation’s appeal.

Only when the water recedes, will it be possible to ascertain the full extent of rehabilitation and reconstruction needs. Appropriate institutions of the United Nations system and UNDP China should undertake a comprehensive assessment at that stage.

The background of this appeal and requirements by relief sector as well as planned implementation are described below. Project descriptions may be requested from respective UN agencies.

3. Disaster impact
Persistent torrential rains since June caused enormous flooding in the Yangtze river basin and in the northeast of China, affecting 223 million people in 29 provinces - one fifth of China’s population. 3,004 people died and millions of hectares of crops were totally destroyed, according to governmental estimates. The floods have caused severe damage to critical facilities such as health centres, schools, water supply, and other infrastructure such as roads, bridges, and irrigation systems as well as to industrial facilities. At the end of August, direct economic damage was estimated at over US $ 20 billion.

The Chinese Government mounted a massive rescue and relief operation. The struggle against the floods involved millions of farmers, villagers and the Army. Many of the displaced victims were provided with temporary shelter, emergency medical care, basic food, clothing and quilts. The Government’s effective forecasting and early warning systems contributed to reduce the casualties and the damage to property.

Since early June 1998, the Office for the Coordination of Humanitarian Affairs in Geneva (OCHA) has issued nine situation reports to inform the international community and to
mobilize international assistance. These reports were based on information provided by the United Nations Resident Coordinator in Beijing, donors, the Red Cross and NGO's.

By mid September total contributions reported to OCHA amounted to US$ 8.5 million. These were either bilateral, channelled through the United Nations or the International Federation of the Red Cross and Red Crescent Societies. This is comparatively modest, taking into account the magnitude of the disaster and the massive scale of the relief activities undertaken by the Chinese Government. This does not include the sizeable donations made by the Chinese people both in country and abroad.

4. Priority emergency needs and requirements by sector

4.1 Shelter

Background
Six million people were made homeless by the floods in the most affected provinces of the Yangtze river basin, and two provinces of northeast China. Where dams burst, or flash flooding has occurred, entire houses and their contents have been destroyed. In some cases whole villages have been swept away. The total extent of the disaster will only be seen after the floodwater has receded.

In the south of China, there are about five million homeless flood victims. Of these, 2.9 million victims have been staying on overcrowded dykes in the Yangtze area for over two months. The affected victims will be forced to stay there for another two-three months until the water recedes. This is an unprecedented long time compared to previous floods when they have been accustomed to stay for only a few weeks. The dykes are unprotected with narrow banks, only a few meters wide with water on both sides. The affected people have to cope with overcrowding, make-shift shelters and increasingly dangerous health/sanitary conditions. The temporary shelters are insufficient and will not be adequate for the winter.
In the north-east of China, the fight against the flood is almost over, but the fight against exposure to the severe winter has only just begun. Severe winter weather (-30 degrees C) is now only six weeks away and dictates that assistance must be provided now. In the north the houses in rural areas are traditionally made of clay and only a small proportion of these have survived the flood.

**Objectives**

- To provide tents as temporary shelter for 100,000 homeless people on dykes along the Yangtze river. When the water recedes, these can be used while they repair their houses.
- To provide materials for the construction of emergency shelter or repair of damaged houses for 450,000 displaced people in the southern provinces and 200,000 displaced people in the northern provinces.

**Strategy**

The Government has a threefold strategy to deal with the high number of displaced flood victims. This is to move as many as possible to relatives or friends, to arrange for temporary housing in public buildings, and finally to build temporary shelters or repair damaged houses. The resources mobilized as a result of this appeal are to be focused on the very severely affected counties and those that have been designated by the national or provincial government as poverty stricken. In the south the strategy is to provide the most vulnerable displaced families on the dykes with tents immediately. This will carry them through the coming months. After the water recedes materials will be provided for the repair of the damaged houses. The tents will also be used as temporary shelter during this period. In the north-east, the strategy is to provide displaced families with building materials (plastic sheeting to protect the roof, timber and small amount of bricks). Since the water has already started to recede, there is an immediate need for shelter before the winter.
<table>
<thead>
<tr>
<th>Item</th>
<th>No. of beneficiaries</th>
<th>Unit cost</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Padded /insulated</td>
<td>100,000 people</td>
<td>$400</td>
<td>$8,000,000</td>
</tr>
<tr>
<td>tents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelter materials</td>
<td>650,000 people</td>
<td>$160</td>
<td>$20,800,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total budget</td>
<td></td>
<td></td>
<td>US$ 28800,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsible UN agency</td>
<td></td>
<td></td>
<td>UNDP</td>
</tr>
</tbody>
</table>

### 4.2 Food

#### Background

In the four most seriously affected provinces (Anhui, Hunan, Hubei, Jiangxi) in the Yangtze area for which food assistance has been requested, over 7.4 million hectares of cropland, mostly rice, have been damaged, leaving an estimated 122 million people in need of food. These people, most of whom lost all their seeds and food stocks in the floods, receive little relief support from the Government for their subsistence and recovery.

#### Objectives

A short-term food intervention is the most appropriate to meet the acute food needs of the seriously flood-affected population living in temporary shelters. As the flood water in the south of China is only expected to recede within the next two to three months, these people have little or no chance to return to their homes on time to plant winter crops in 1998. Living in temporary shelters and, eventually, on their return to their homes, they are in need of food while clearing the land from debris, rebuilding their houses and rehabilitating essential infrastructure to prepare themselves for the next planting season in March/April 1999.
Strategy
Based on a vulnerability assessment and mapping (VAM) of the area, WFP and the provincial authorities have identified some 5.8 million most vulnerable people who are expected to receive food rations from WFP for a period of 120 days. Each beneficiary, registered by the village committee, will receive a standard rice ration of 0.5 kg per day (60 kgs in total) during the period of assistance. In order to maintain this standard rice ration, the Government of China has assured WFP that, subject to confirmation of WFP resources, a Government food input (rice) to the emergency operation of up to 100,000 tons could be considered. Food distribution to the targeted beneficiaries could start immediately by drawing on this rice contribution. To facilitate donor contributions to this emergency operation, WFP proposes two delivery options: either (i) WFP donated rice which would be merged with government stocks at the port of discharge and an appropriate amount of local rice would be released by the township grain bureau, or (ii) WFP bulk wheat which would be merged with the national grain bureau stocks and released in rice at an agreed exchange ration from the bureau’s stores located in or near the targeted townships. For the emergency operation, WFP is appealing for US $87,678,027 (total cost to WFP) as specified below:

Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Total costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food (247.214 MT Rice)</td>
<td>US $72,928,130</td>
</tr>
<tr>
<td>Other costs</td>
<td>US $14,749,897</td>
</tr>
<tr>
<td>Total budget</td>
<td>US $87,678,027</td>
</tr>
</tbody>
</table>

Responsible UN agency: WFP

4.3 Health
Background
The impact of the floods on public health in China in 1998 has been dramatic, with a death toll of 3,004 people, and hundreds
of people still missing. At least 200,000 persons were injured with thousands hospitalized. 5,204 medical health centres nationwide collapsed or were seriously damaged at county and township level. The Ministry of Health has vast experience in dealing with floods but not on this scale. Surveillance systems have been set up in the affected areas to rapidly identify outbreaks of disease. Mobile medical teams have been sent to all affected areas and will be functional until the restoration of normal medical services. The cold chain is being resumed for the purpose of continuing routine childhood immunization.

The main diseases among the flood victims are diarrhoea due to unsafe and inadequate water supplies, acute respiratory infections (ARI) due to crowding in temporary communal shelters, and skin infections and conjunctivitis (pink eye) due to lack of hygiene and contact with contaminated and polluted flood waters. Outbreaks of measles or serious water- and food-borne diseases such as dysentery, hepatitis, typhoid and cholera have not yet been reported. If no immediate action is taken to control rodents and insects, an increase in vector-borne diseases will likely occur in the coming weeks. No malnutrition in children was found in the areas that were observed by the UN team.

**Objective**

To minimize adverse health effects on the Chinese flood victims on the dykes by:

1) ensuring safe drinking water to the flood victims to prevent waterborne diseases
2) treating infectious diseases among flood victims, which untreated may become life threatening
3) eliminating rodents and insects to prevent exposure of the flood victims to vector-borne diseases
4) providing transport to ensure delivery of medicines and vaccines, particularly those that are temperature sensitive, and providing transport of essential medical teams.

**Strategy**
The health care response is mainly focused on improving and sustaining health care during the first 4 to 8 weeks while the displaced population is still living on the dykes. Funds for the provided items will be channelled through WHO to the Chinese Ministry of Health. Overall responsibility for providing health care services to the affected population will belong to the Government represented by the Ministry of Health in close cooperation with the province, prefecture, county and township level health authority. The Government will also be responsible for the planning, coordination, transport, manpower and infrastructure support for the planned health-care delivery to the affected people.

UNICEF and WHO have structured their health interventions in order to support the Government in dealing with the increase in cases of diarrhoea, measles, ARI, and skin diseases. UNICEF and WHO will collaborate closely with the Chinese Government to avoid duplication of work.

**Budget**

The estimated budget for this emergency health-care assistance proposal is US $ 7,000,000. A detailed breakdown is available from WHO. The budget estimate is based on local purchase.

<table>
<thead>
<tr>
<th>Items</th>
<th>Total costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic antibiotics</td>
<td>us $ 2,000,000</td>
</tr>
<tr>
<td>Oral Re-hydration Salts (ORS)</td>
<td>us $ 1,000,000</td>
</tr>
<tr>
<td>Water disinfectants</td>
<td>us $ 2,000,000</td>
</tr>
<tr>
<td>Pesticides, including rodenticides</td>
<td>us $ 1,500,000</td>
</tr>
<tr>
<td>Vehicles (20 x 4WD x US $ 25,000)</td>
<td>US $ 500,000</td>
</tr>
</tbody>
</table>

Total budget us $ 7,000,000

Responsible UN agency: WHO

**4.4 Water and Sanitation**

**Background**

In the *Yangtze* river basin, in the coming three months, families will return to devastated homes and communities. Their children
will face serious risks of infectious disease caused by unsafe household water supplies and contaminated environments. Past experience including the 1954 flood disaster shows that the period of highest disease risk is now approaching, particularly from diarrhoeal diseases and potential epidemics caused by contaminated water and poor sanitation. Children in Hunan, Hubei and Jiangxi, returning to severely damaged homes and communities after months of living on dykes, face special risks of diarrhoea and malnutrition which can easily become life-threatening.

Objectives
Based on field assessments, UNICEF and the Ministry of Health have formulated an intervention strategy to reduce children’s and families’ risks of disease, focusing on objectives to:
- rapidly restore safe water supplies;
- actively supervise community clean-up efforts to ensure environmental sanitation conditions that minimize risks of outbreak of serious diseases.

Strategy
The project design has four components:
- rapid restoration of repairable township water systems (replacement of electric pumps or spare parts, cleaning and purification of existing pipe systems and reservoirs/wells);
- establishing a logistics and supervision system for village teams (leading group, health worker, women’s federation cadre), and to train and support them to actively supervise clean-up and maintenance of village sanitation.
- provision of supplies for water purification and environmental contamination clean-up (chlorine, bleaching powder, insecticides), for environmental clean-up and purification of water supplies (township as well as village wells).
- support for training, monitoring and supervision activities, and rapid response to outbreaks identified within the village system.

The response will be implemented in three provinces (Hunan, Hubei and Jiangxi).
Budget  US $150,000 per very severely affected county times 19 counties
US $ 80,000 per severely affected county times 32 counties

Total budget:  US $ 5,400,000

Responsible UN agency: UNICEF Area Office for China and Mongolia

4.5 Agriculture

Background
Unprecedented flooding beginning in June 1998 in the most affected southern provinces in China have caused tremendous loss to standing crops and have made subsequent summer crop planting impossible for some of the most fertile and important farmland along the Yangtze River, its tributaries and associated lakes. In addition to crops, the floods have killed hundreds of thousands of livestock, inundated hundreds of thousands of hectares of intensive aquaculture activities and have damaged and destroyed both farm machinery and irrigation infrastructure. According to Government estimates for the three provinces of Hunan, Hubei and Jiangxi, more than 3 million hectares of crops and aquaculture have been completely destroyed out of 7 million hectares affected by the floods. The majority of the farmland was planted to rice, the staple food of China.

Objective
To provide critical inputs to farmers in the southern provinces affected by the flooding of the Yangtze River and surrounding area so that they can begin to re-establish their farming livelihoods.

Strategy
This will be done: a) by immediately providing seed and fertilizer to the worst affected farmers for upcoming winter cash crops to be planted in October-December and harvested in May; and b) initiating a more intensive assessment of the extent and nature of damage so that appropriate rehabilitation activities can be initiated after the waters have receded. The first component will accomplished through the local procurement of seeds and
fertilizer and distributed to farmers through the Ministry of Agriculture with which the FAO has established a strong working partnership. The second strategy will be done by a team of FAO-sponsored professionals in the fields of livestock, aquaculture, agronomy, horticulture and rural sociology. The findings of this team will result in the formulation and implementation of a rehabilitation phase.

**Budget**
FAO will provide detailed information after fielding of the proposed comprehensive assessment mission of the damage in the agricultural sector including livestock, fisheries, etc.

<table>
<thead>
<tr>
<th>Items</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>In depth assessment mission</td>
<td>US $90,000</td>
</tr>
<tr>
<td>Total budget</td>
<td>US $90,000</td>
</tr>
</tbody>
</table>

Responsible UN agency: FAO

**4.6 Initial rehabilitation of essential facilities in Jiangxi, Hunan, and Hubei provinces**

**Background**
The achievements made by China in developing low cost health facilities are now threatened for the affected tens of million in Jiangxi, Hunan and Hubei provinces. The impact of the floods on the health infrastructure has been devastating. In these three provinces, 376 county health centres, 3,063 township health centres and at least 11 epidemic prevention stations have been damaged or destroyed. In addition, losses of vital medical equipment have been reported.

The destruction by floodwater of thousands of schools threatens the impressive achievements made by China in education. This is particularly severe in Jiangxi, Hunan, and Hubei provinces where, without assistance, pupils will be without school buildings and furniture for a long time. The Government has
already managed to reopen schools in temporary shelters, but with the onset of winter this will become increasingly difficult.

Objective
The objective is immediate rehabilitation of health stations and schools in the most affected areas. UNDP’s targeted assistance contingent of this appeal will put into place sustainable and cost-effective solutions for affected areas.

Strategy
Although it will take years before the affected areas reach full recovery, it is critical that work begins in rehabilitating schools, health centres, and other health-related stations as soon as the flood waters recede in the lower Jiangxi region. In complement to local and national efforts, including the UNESCO initiated school repair programme in the north (see UNESCO section), UNDP’s immediate assistance will be targeted at immediately rehabilitating key medical and education facilities in devastated areas in the south. The priority efforts include:

Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urgent repairs of primary and lower-secondary schools</td>
<td>us $ 1,000,000</td>
</tr>
<tr>
<td>Re-supplying of school furniture</td>
<td>us $ 1,800,000</td>
</tr>
<tr>
<td>Urgent repairs of health care structures</td>
<td>us $ 1,000,000</td>
</tr>
<tr>
<td>Re-supply of basic health apparatuses and instruments</td>
<td>us $ 1,200,000</td>
</tr>
<tr>
<td>Total budget:</td>
<td>us $ 5,000,000</td>
</tr>
<tr>
<td>Responsible UN agency: UNDP</td>
<td></td>
</tr>
</tbody>
</table>

4.7 Education

Background
The floods caused heavy losses and enormous damage to the educational infrastructure in the inundated areas. According to governmental statistics, the floods in 9 provinces, autonomous regions and cities have affected 44,850 schools and 8.47 million of students, causing the collapse of 3 million square meters of school buildings. Large quantities of school instruments, equipment and library books have been destroyed. The direct economic loss is about 7.6 billion Chinese yuan, among which 85 % affects the compulsory education.

Objective

The objective is the rapid re-establishment of classroom learning under normal conditions. The Chinese Government attaches high importance to the availability of education to children.

Strategy

The Government undertakes the immediate repair of schools and builds up new schools in the most severely affected areas. UNESCO aims to provide the technical and logistical support to the rapid re-establishment of schools, including procuring the school textbooks. This will be done in close collaboration with the Chinese National Commission for UNESCO.

Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement of school textbooks</td>
<td>us $500,000</td>
</tr>
<tr>
<td>Urgent repairs to primary and secondary schools</td>
<td>us $ 3,500,000</td>
</tr>
<tr>
<td>20 temporary schools in severely affected areas (north)</td>
<td>US $600,000</td>
</tr>
<tr>
<td><strong>Total budget:</strong></td>
<td><strong>US $ 4,600,000</strong></td>
</tr>
</tbody>
</table>

Responsible UN agency: UNESCO

4.8 Coordination and management
Background
Given the magnitude of the present flood disaster in China, there is a need for UN support for the coordination and management of the disaster relief assistance mobilized through the UN appeal. UN support is also needed in the longer term perspective for disaster reduction efforts.

Objective
Under the overall leadership of the United Nations Resident Coordinator, key disaster coordination and management activities will be jointly undertaken by UNDP and OCHA in order to: (i) ensure the effective coordination, monitoring, reporting and evaluation of the international emergency relief assistance; and (ii) ensure a smooth transition from emergency relief to rehabilitation efforts. UNDP will also (iii) provide procurement services to mobilize inputs and (iv) develop capacity for disaster reduction planning to ultimately turn the present disaster into a development opportunity in affected provinces.

Strategy
An ad hoc task force composed of two additional staff from OCHA and UNDP will be set up in UNDP China for a duration of six months to assist the UN Disaster Management Team in China in the coordination of international assistance mobilized through the appeal. More specifically, the following management support is envisaged:

Information and coordination
To establish and maintain a joint OCHA/UNDP database, in the UNDP country office, on relief assistance provided by international and national donors. A bulletin will be prepared, monthly or as required, to inform international donors on the status of the assistance channelled through the UN. Donor meetings will be organized, as required, to keep donors updated on new developments.

Capacity development for emergency relief workers
A workshop to develop the capacity of frontline managers from northern provinces to respond to emergency situations and to foster inter-provincial and inter-sectoral emergency co-
ordination (a similar workshop has already been held for the southern region in July 1998).

Procurement services
Operational costs related to procurement activities, especially local procurement.

Monitoring and reporting
The joint UNDP/OCHA task force will pay regular visits to relief workers and ultimate beneficiaries to monitor the actual delivery of the assistance. Monitoring reports will be submitted by the task force to donors.

Evaluation
A joint UNDP/OCHA evaluation will be carried out on the impact of the emergency relief and the initial rehabilitation assistance, object of the present appeal.

Capacity development for disaster reduction
In accordance with the National Disaster Reduction Plan (NDRP) prepared with the support of UNDP and adopted by the Government of China last April, the following disaster reduction initiatives will be conducted in the worst affected provinces: (i) assist key institutions in developing local disaster reduction plans; (ii) analyze current disaster decision making and management information systems; (iii) formulate a strategy to establish an integrated Disaster Reduction Information System (DRIS).

Budget
This initiative will require funding estimated at US$ 600,000. Out of this amount, UNDP will provide US $ 150,000 from its core resources to implement part of the above activities, and also to cover the cost of a senior disaster officer for 6 months. UNDP is thus appealing for US $350,000 to fund the above item (c) procurement, and (f) capacity development for disaster reduction.

OCHA will assist the UN Resident Coordinator in the coordinating and monitoring of emergency relief and immediate
rehabilitation phase for a period of 6 months, through the provision of a disaster management expert. OCHA’s in-country support will deal with all above activities except procurement and disaster reduction. Total costs are estimated at US $100,000.

<table>
<thead>
<tr>
<th>Items</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDP</td>
<td>US $350,000</td>
</tr>
<tr>
<td>OCHA</td>
<td>US $100,000</td>
</tr>
<tr>
<td>Total budget</td>
<td>US $450,000</td>
</tr>
</tbody>
</table>

Responsible UN agencies: UNDP and OCHA

5. Summary table on requirements by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelter</td>
<td>US $28,800,000</td>
</tr>
<tr>
<td>Food</td>
<td>US $87,700,000</td>
</tr>
<tr>
<td>Health</td>
<td>US $7,000,000</td>
</tr>
<tr>
<td>Water &amp; sanitation</td>
<td>US $5,400,000</td>
</tr>
<tr>
<td>Agriculture</td>
<td>US $90,000</td>
</tr>
<tr>
<td>Initial rehabilitation of essential facilities</td>
<td>US $5,000,000</td>
</tr>
<tr>
<td>Education</td>
<td>US $4,600,000</td>
</tr>
<tr>
<td>Coordination and management</td>
<td>US $450,000</td>
</tr>
<tr>
<td>Grand total</td>
<td>US $139,040,000</td>
</tr>
</tbody>
</table>

6. Implementation arrangements

The requested relief items are available in China, and cash contributions are therefore most suitable. There is a possibility that the huge demand for these items over the next few months may lead to temporary shortages. In this case appropriate contributions in-kind can also be considered and donors are
requested to contact the United Nations Resident Coordinator in Beijing.

Donors should make their contributions either through the United Nations Office for the Coordination of Humanitarian Affairs (OCHA Geneva) or directly to the competent United Nations agency or agencies. The relief programme will be implemented by counterpart government ministries under the coordination of the Ministry of Civil Affairs, as well as by NGOs. Appropriate UN agencies will be responsible for monitoring, coordination and reporting on the progress of work. Local procurement of relief supplies will be undertaken by the United Nations agencies concerned. Distribution will be done by the Government. The overall monitoring will be managed by the United Nations Disaster Management Team in Beijing, under the leadership of the United Nations Resident Coordinator.

G.6.5 Mozambique Floods - February 1999

Mozambique

FLOODS

International Appeal of the Government of Mozambique

For Emergency Relief and Initial Rehabilitation
In collaboration with the United Nations Agencies
(15 February 2000 to 15 August 2000)

Maputo, Mozambique
23 February 2000
II OVERVIEW

1. Appeal Objective

On 10 February 2000, the Government of Mozambique appealed to the international community for US$2.7 million to implement emergency humanitarian assistance following severe flooding caused by heavy rains, which had initially affected Maputo and Matola cities. Subsequently, flooding has also affected much of Maputo and Gaza provinces and the central portions of Mozambique. Field assessment carried out by national authorities, in collaboration with aid agencies and the United Nations Disaster Assessment and Coordination Team (UNDAC), established the urgent need for a comprehensive approach to the emergency between national and provincial authorities and international partners.

The objective of the United Nations Inter-Agency Appeal is to solicit contributions for emergency relief and initial rehabilitation in the regions most affected by the floods affecting the severe flooding in Mozambique during the months of January and February 2000. The cost of the gross requirements is US$13,631,885 of which US$1,395,500 has already been received from donors leaving a net requirement of US$12,236,385.

This appeal covers six months period, from 15 February to 15 August 2000. The requirements of appealing United Nations agencies are based upon consultations on the scale of the disaster, capacities and resources available in Mozambique and priority needs. These consultations have involved national authorities, the United Nations (UN), the Red Cross and non-governmental organisations (NGOs) within and among the emergency sectors involved.

IFRC is currently conducting an updated assessment of needs outside Maputo City and province and will revise its original appeal launched on 11 February for other provinces. Attached to this document in Annex 2 are highlights from the IFRC appeal document for information.
2. Impact of the disaster

Torrential rains from 4-7 February 2000 compounded the flooding already caused by seasonal rainfall, leading to the worst flooding in southern Mozambique in nearly half a century. Precipitation levels in affected areas far exceeded levels normally received during the rainy season. The accumulation of rainfall during the three-day period in Maputo Province alone reached 455 mm compared to 594.9 mm from September 1998 to January 1999.

Table 2: Accumulation of Precipitation per Station -- 4 to 7 February.

<table>
<thead>
<tr>
<th>Meteorological Station</th>
<th>Precipitation (in mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changalane</td>
<td>169.9</td>
</tr>
<tr>
<td>Maputo - Observatory</td>
<td>303.0</td>
</tr>
<tr>
<td>Maputo - Mavalane</td>
<td>454.5</td>
</tr>
<tr>
<td>Xai-Xai</td>
<td>73.0</td>
</tr>
<tr>
<td>Inhambane</td>
<td>132.8</td>
</tr>
<tr>
<td>Vilanculos</td>
<td>132.6</td>
</tr>
<tr>
<td>Beira</td>
<td>45.7</td>
</tr>
<tr>
<td>Quelimane</td>
<td>22.7</td>
</tr>
<tr>
<td>Lichinga</td>
<td>19.9</td>
</tr>
</tbody>
</table>

*Source, INAM*
In addition, heavy rainfall in neighbouring South Africa, Zimbabwe, and Swaziland further exacerbated the situation. During the second week of February, water levels in the reservoirs in Mozambique and nearby rose drastically. As a result of this increased volume, waves of water, reaching up to eight meters high, descended the rivers of Limpopo, Incomati and Umbeluzi. The provinces most affected by the floods are Maputo/Maputo, Gaza, the northern part of Inhambane, where over 100,000 hectares of agricultural land have been flooded, with substantial crop losses.

As of the 20 February at least 70 people, were reported to have died mostly by drowning. By the same period, the Government estimated that 300,000 persons had been directly affected by the floods, having lost either houses or livelihoods, and were in need of immediate assistance. This figure was expected to rise, as the rainy season lasts up to March. While this document was being processed (February 20), Tropical Cyclone “Eline” moved into the channel of Mozambique and was expected to bring heavy rains to the southern and central portions of the country. Preliminary assessment of the impact of cyclone “Eline” which hit Mozambique from 21-22 February 2000, shows mostly Inhambane (Vilankulo and Govuro) and Sofala (Beira). In fact, the central hospital in Vilanculos suffered power failure while Govino had damages in houses and the road was cut off from EN1. In Beira two people died by electrocution around 90 power towers were damaged with telephone failure and left some houses roofless.

<table>
<thead>
<tr>
<th>Province</th>
<th>Total Affected Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maputo City</td>
<td>11,000</td>
</tr>
<tr>
<td>Maputo Province</td>
<td>110,000</td>
</tr>
<tr>
<td>Gaza</td>
<td>60,500</td>
</tr>
<tr>
<td>Inhambane</td>
<td>22,500</td>
</tr>
<tr>
<td>Sofala</td>
<td>48,000</td>
</tr>
<tr>
<td>Manica</td>
<td>21,000</td>
</tr>
<tr>
<td>Tete</td>
<td>27,000</td>
</tr>
<tr>
<td>Total:</td>
<td>300,000</td>
</tr>
</tbody>
</table>
The figures of the affected population are expected to rise taking into account severe climatic conditions in Mozambique and the Southern Africa region on the whole. Cyclone-prone provinces such as Zambezia and Nampula, as well as other areas not presently included in the Appeal, may be affected by flooding before the end of the rainy season. Affected population figures could be up to 100,000 in those areas.

National efforts to address this emergency were mobilised at the start of the emergency from all Government departments and ministries, national NGOs and civil society. The national relief effort has been coordinated by the Instituto Nacional de Gestão de Calamidades - National Institute for Disaster Management (INGC).

In addition, the international community operating in country, (donors, UN agencies, the Red Cross and NGOs) immediately mobilised to assist the affected population, as rapidly became clear that the disaster placed an enormous strain on the Government. Mozambique is struggling with the economic consequences of a 16-year long internal conflict, which came to an end in 1992. Although it has achieved an unusually high economic growth rate in recent years, life expectancy does not exceed an average of 43.2 years, and the infant mortality rate stands at 117.56 deaths/1,000 live births according to 1999 Government estimates.

At the request of the United Nations Resident Coordinator in consultation with the Government, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) dispatched a UNDAC team to Mozambique on 11 February 2000.

3. Strategy and Priorities of the Humanitarian Relief Operation

Initially, the relief operation targeted urban areas within Maputo and Matola cities and the areas flooded by the Maputo, Incomati, and Limpopo rivers. The prompt arrival of five helicopters and two fixed-wing aircraft of the South African National Defence Force (SANDF) facilitated the delivery of food and relief supplies, as it was not possible to reach the affected areas by road. Food, humanitarian supplies and aviation
fuel was propositioned by road as far as possible to make best use of the helicopters. Nevertheless, the operation cost the South African Government $100,000 per day.

The relief operation can be divided into three phases.

Phase 1
Immediate priorities
- Rescue and evacuation of nearly 2,500 people stranded by the flood water
- Immediate supply of food to major settlements cut off from Maputo
- Assessment of water and sanitation, medical requirements and damage to key infrastructure
- Establishment of a central coordination structure for international assistance

Phase 2 (towards 3rd week of February)
As the flood water started to subside, the relief operation entered a second phase. Flooding on the Maputo and Incomati rivers, and the state of the dams at Massingir and Curumane, is no longer a major concern. However, the main focus of the operation is the Limpopo flood plain between Chokwe and the sea, and the stretch of damaged road between Paimeiras and Macia. The damaged section of the road cuts off this area from Maputo. Until this is repaired, the area will be depended on the delivery of relief goods and food by air.

Of the total number of persons affected, along with the rest of the country, a substantial number are estimated to be living in temporary shelters and community centres, where the major need is for food, water, sanitation assistance and basic health services. The major risk, in view of the prevailing conditions, is an increased incidence of malaria and the threat of cholera. The scale of the health problems may not be known for several weeks.

Priorities
- Continued supply of food
- Supply by air of medical supplies and non-food items to the Limpopo floodplain
Ensure preparations are in place for possible malaria and cholera epidemic

Mobilise international support for SANDF air operations

Emergency repairs to the Palmeira/Macia road

**Phase 3**

The population in the Limpopo river basin was already highly vulnerable before the floods. It is necessary to address this through the essential infrastructure (healthcare structures the Maputo road) and support to agriculture. The markets in the six principal towns (Chokwe, Magude, Palmeiras, Macia, Xai-Xai) are dependent on the Maputo road. They are central to the economic life of the province and are presently inactive. Many of the local health centres, damaged or destroyed would be needed for preparedness against a possible malaria and cholera epidemic and for the provision of primary health care. Repair of the road, support for primary health care disrupted by the floods and a seeds and tools programme to support agriculture will be the priorities in this phase. In addition, the rehabilitation of damaged school buildings and restocking of schools with necessary supplies will be required.

**Priorities**

- Support for primary healthcare
- Repair schools and provide educational supplies
- Seeds and tools
- Permanent repair to the Maputo highway (see annex 3)

**4. Logistics Situation/Infrastructure**

Access to populations in need has emerged as the major constraint for national and international efforts in addressing this emergency. Damage to the road network has seriously hampered both assessment of needs and delivery of assistance to affected families. Critical railways have either have had their embankments washed away or are under water. The use of boats is mostly ineffective because of the danger of strong currents and their small capacity. The wetness of the soil has rendered airstrips across the affected provinces impracticable for heavy aircraft. This environment has restricted the means of transportation to helicopter and light planes in some of the most
affected areas. The national and international partners, however, are using road transport wherever possible to deliver food or to position supplies up-country.

The Government's preliminary assessment of the damage caused by the storm and rains on the infrastructure is alarming. Several main roads, including the connections with South Africa and Swaziland, were severely affected. Four bridges were destroyed in the Gaza Province only. As of the second week of February, National Road no. 1, which connects the capital Maputo with rest of the country, had been cut at several locations. The embankments of several bridges were washed away by the floods. The Mozambique Ministry of Public Works and Housing estimated that replacements of critical bridges and urgent repair of vital access roads would require about US$ 30.5 million. Costs for repairs of hydraulic structures is estimated at US$4.6 million and needs for flood control is US$950,000. Similarly, the railway and electric networks require repairs estimated to cost US$ 5.95 million and US$4.5 million respectively. Urban resettlement requirements are estimated at 3.5 US$ million.

Repairs to the infrastructure should be of high priority, as a backbone of the economy. The preliminary assessment of needs in these sectors is included in Annex 3 for information.

At the onset of the disaster, the Defence Force of South Africa placed at the disposal of Mozambique the air capacity of its SANDF. Between 11 and 18 February, a total of 2475 persons were rescued through this effort. In addition, the SANDF has provided critical assistance to national and international assistance delivery efforts. The air operation covered initially from Maputo and Beira is now based on two main locations, Maputo airport and the emergency airstrip at Palmeiras about 100 km from Maputo towards Xai-Xai.

Air assets available in country as at 20 February 2000:

- 5 Helicopters and 3 fixed wing aircraft operated by the SANDF.
- Helicopters (2 x MI-8) and other light aircraft operated by the Mozambique Defence Forces.
- A chartered light aircraft operated on behalf of WFP.
- A Transall aircraft provided on 19 February by the Government of France.
A light helicopter has also been funded by USAID through WFP for the use by the agencies and INGC (up to 60 hours) for their assessment missions to otherwise inaccessible parts of the country. The coordination centre established by INGC with assistance from the UNDAC Team runs this helicopter.

5. Priority emergency needs and requirements by sector

Table 3: Beneficiary numbers by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>No. of Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>11,000*</td>
</tr>
<tr>
<td>Shelter</td>
<td>100,000</td>
</tr>
<tr>
<td>Health</td>
<td>220,000</td>
</tr>
<tr>
<td>Water and Sanitation</td>
<td>220,000</td>
</tr>
<tr>
<td>Agriculture and Tools</td>
<td>13,000</td>
</tr>
<tr>
<td>Education</td>
<td>63,400</td>
</tr>
<tr>
<td>Communication</td>
<td>100,000</td>
</tr>
</tbody>
</table>

* average over 90 days

5.1. Food

Objective
Food is an essential basic need and a high priority in terms of emergency requirements. The immediate objective of the WFP emergency food assistance is to save lives and maintain health and acceptable nutrition status of those in rural areas who have lost crops and household food stocks, those in urban areas who have lost means of income and access to food, and those in temporary shelters who are displaced. A high proportion of these people have lost homes and their possessions. When conditions permit a return home of the displaced population, the food assistance objective will be to support recovery and rehabilitation activities through food-for-work.

Justification
Most of the cultivated land in the southern region is affected. About two thirds of the cultivated areas (100,000 ha) has possibly been lost, totalling respectively 30,000 and 70,000 ha in Maputo and Gaza. Losses in Sofala Province may be as much as 30,000 ha, Manica and Tete Provinces about 20,000 ha. This potential loss is already twice as high as any previous loss.
recorded due to floods. A substantial number of the population affected by the floods were already living below the poverty line and considered to be highly vulnerable in the context of food security. Damage to the national road and bridges has resulted in limited, if not impossible access to the affected population by road.

The food assistance includes maize/maizemeal, beans, oil and sugar. This ration provides 2,170 kcal, 60 grams of protein and 40 grams of fat and is satisfactory under the current conditions. A family relief pack is also being supplied containing the same foodstuffs, with the addition of soup. High-energy biscuits will be provided to children and adults who suffer from malnutrition.

**Strategy**

With food stocks already in-country for current development activities, WFP has accessed these stocks to respond immediately to the food requirements of those affected by the flood in the southern provinces (Maputo, Gaza and Inhambane), the cities of Maputo and Matola, and the central provinces (Sofala and Manica). WFP has launched an official Emergency Operational Project (EMOP) to be able to replace stocks and formalise the assistance as an emergency intervention. The EMOP is reflected in this document budget. In addition, WFP has purchased family food packs through funds from the WFP immediate response emergency mechanism. The total cost is US$181,000 for food, transport, non-food items and operational expenses.

Food is being transported in several ways. It is being trucked from Maputo for pre-positioning in Manhica and Palmeira, from where it is airlifted. Airlifting has also been used in Sofala Province while in Inhambane road transport has been possible. Family food packs will be airlifted. As soon as road access improves the airlift will no longer be required.

WFP launched a local request for funds to charter an aircraft to lift food and non-food items, and increase the airlift capacity. This initiative has been well received with donor contributions coming in against the total budget of $598,400. WFP has also received funds for positioning a helicopter dedicated to assist government, UN, NGOs to increase capacity to assess needs.
Of the 300,000 people estimated to be affected, WFP will provide food assistance to 110,000 people located in the areas described above over a period of 90 days (late February through late May 2000). Out of this number, 60,000 children will receive high-energy biscuits.

Responsibility for Implementation

- Government Responsible Institution: INGC
- Partner UN Agency: WFP

The provision of emergency food is one of the major relief activities coordinated by the Government through the INGC. Requirements announced by the local authorities are assessed jointly by government, UN, NGO and donor representatives.

Food distribution on site is the responsibility of both local committees of the flood displaced, mainly composed of women. Selected NGOs are also helping with food transport and when possible, distribution and monitoring. Provincial governors, city councils and district administrations are also key players in the implementation of the food distribution.

WFP has food monitors positioned in key distribution points to ensure regular feedback of information, reporting, and assessments of the situation.

- Budget

<table>
<thead>
<tr>
<th>Food</th>
<th>UN Agency</th>
<th>USS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize (4950 MT)</td>
<td>WFP</td>
<td>990,000</td>
</tr>
<tr>
<td>Pulses (495 MT)</td>
<td>WFP</td>
<td>198,000</td>
</tr>
<tr>
<td>Vegetable Oil (198 MT)</td>
<td>WFP</td>
<td>160,380</td>
</tr>
<tr>
<td>Sugar (198 MT)</td>
<td>WFP</td>
<td>49,500</td>
</tr>
</tbody>
</table>

- High Energy

| Biscuits (55 MT)    | WFP       | 77,000   |
| Family Food Packs   | WFP       | 99,833   |
| Sub-Total           |           | 1,574,713 |
Non-Food Items
(Kitchen sets and Recovery items) WFP 311,000
Assessment and Follow-up WFP 90,500
Transport (External/Internal/Air/bridge) 1,534,265
Operational and Support Costs 711,172
Total: 4,221,650

5.2. Health

Objectives
- To increase capacity of the health system to respond to the emergency
- To prevent and treat waterborne diseases, such as cholera and other diarrhoeas diseases
- To treat malaria cases among flood victims in a timely manner and prevent malaria outbreaks
- To treat acute respiratory diseases in flood victims
- To prevent epidemics of vaccine preventable diseases, such as meningitis and measles.
- To prevent and treat malnutrition among young children, and pregnant and lactating women;
- To respond to women’s special health needs, especially in reproductive health.

Problem Statement/Justification for Appeal

Many of the affected areas of the cities of Maputo and Matola and the provinces of Maputo, Gaza, Inhambane and to a lesser extent Sofala, are still without access to safe drinking water, health care and other basic services. Most of the population in need of humanitarian assistance is displaced people who are currently housed in temporary shelters.

Of the 300,000 people affected by the floods, 60,000 are children under five-years of age, most of whom have had little food and safe drinking water since the beginning of the flooding.
Reports received from the affected areas show an increase in the number of cases of severe and moderate malnutrition among children.

Inadequate sanitary conditions have significantly increased the number of communicable diseases and the risk of outbreaks such as malaria and cholera. The stagnant flood water and the heavy concentration of people in temporary shelters have drastically increased the incidence of malaria. Outbreaks of vaccine preventable diseases such as measles and meningitis are also major threats, to which immediate response is needed.

An estimated 15,300 of the 300,000 persons affected, are pregnant women, of whom 4,600 are expected to deliver within the coming three months. These women require special attention and urgent care to ensure safe delivery. Even under normal circumstances, Mozambique has one of the highest maternal mortality rates in the world (1059 per 100,000 live birth).

Health services in the affected areas are overwhelmed by the number of patients and are working beyond capacity. Drug stocks are running out, and there is a serious shortage of health workers.

Strategy
- Support to coordination
  - Rapid assessment
    - Health and nutrition needs of affected population
    - Health system capacity to respond to the emergency
- Disease prevention and control
  - Environmental health
  - Treatment of common illnesses: malaria, diarrhoea diseases, and acute respiratory infections;
  - Epidemics preparedness and response
  - Immunisation
  - Social communication
- Prevention and treatment of malnutrition among young children
  - Treatment of severe malnutrition
  - Supplementation of Vitamin A
Growth monitoring and surveillance

- Reproductive health care
  - Clean delivery
  - Provision of Iron/folic acid
  - STD prevention & family planning
- Health Information System
  - Rapid alert system for detection of epidemics and malnutrition
- Operational and Logistic support, incl. transport through helicopter

Responsibility for implementation

Government Responsible Institution: MISAU
Partner UN Agency: UNICEF, WHO and UNFPA

UN support aims to strengthen national capacity to implement and coordinate humanitarian assistance. The appealing agencies will work primarily through national counterparts and local authorities using existing coordination mechanisms under the umbrella of the INGC. The agencies will work in partnership with the Ministry of Health (MOH), the Red Cross and a number of NGOs (MSF, SCF-UK, Action contre la Faim).

Budget (US$)

<table>
<thead>
<tr>
<th>Description</th>
<th>UNICEF</th>
<th>WHO</th>
<th>UNFPA</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinatio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essential drugs</td>
<td>500,000</td>
<td>600,000</td>
<td></td>
<td>1,100,000</td>
</tr>
<tr>
<td>Cholera camps, health care in shelters</td>
<td>80,000</td>
<td>420,000</td>
<td></td>
<td>500,000</td>
</tr>
<tr>
<td>Support to Immunisation campaign incl. Transport cost</td>
<td>200,000</td>
<td></td>
<td></td>
<td>200,000</td>
</tr>
<tr>
<td>Social Communication Community mobilisation</td>
<td>50,000</td>
<td>45,000</td>
<td>95,000</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td>830,000</td>
<td>1,115,000</td>
<td>1,945,000</td>
<td></td>
</tr>
<tr>
<td>Treatment of severe malnutrition (est. 2,200 severely malnourished)</td>
<td>100,000</td>
<td></td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td>120,000</td>
<td></td>
<td>120,000</td>
<td></td>
</tr>
<tr>
<td>Reproductive Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean delivery kits 1 kit / 1,000 people / 3 months</td>
<td></td>
<td>38,000</td>
<td>38,000</td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>38,000</td>
<td>38,000</td>
<td></td>
</tr>
<tr>
<td>Communication equipment</td>
<td></td>
<td>90,000</td>
<td>90,000</td>
<td></td>
</tr>
<tr>
<td>Technical assistance</td>
<td></td>
<td>60,000</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>150,000</td>
<td>150,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2,253,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logistics and Ops. support cost</td>
<td>190,000</td>
<td>253,000</td>
<td>7,600</td>
<td></td>
</tr>
<tr>
<td>Grand Total:</td>
<td>1,140,000</td>
<td>1,518,000</td>
<td>45,600</td>
<td></td>
</tr>
</tbody>
</table>

5.3. Water and Sanitation
Objectives

- Assist in the prevention of outbreaks of cholera and other water-borne diseases;
- Ensure access of affected population to sanitation facilities;
- Support the promotion of personal and environmental hygiene in all affected areas.

Problem Statement and Justification

Many of the affected areas are still without access to safe drinking water and sanitation facilities. Although water supplies in Maputo and Matola cities are coming back to normal much work still need to be done in the Incomati and Limpopo valleys. Many water supply systems in Gaza, Maputo and Inhambane provinces are currently under water with serious damage to pumping and treatment works. In addition, the small systems, wells and boreholes etc. are flooded and contaminated.

Sanitation is a problem in all flooded areas, increasing the number of cases of diarrhoea and other communicable diseases and the risk of a cholera outbreak. A few confirmed cases of cholera have already been reported in the Maputo and Sofala provinces. The mosquito-friendly environment caused by stagnant floodwater and poor sanitation, combined with the high concentration of people in displaced settlements, have significantly increased the number of malaria cases. Reports show that the malaria cases are at least three times higher in flooded areas than in normal conditions.

Strategy

- **Hygiene promotion focussing on personal hygiene/handwashing**, proper management and storage of water supply in the home and latrine use.
- Sanitation initiatives focussing on soap distribution, the construction of simple latrines and where appropriate, the rehabilitation of existing sanitation facilities. The priority is to support the provision of sanitation facilities in displaced people’s shelters, schools and health facilities.
Water supply initiatives, which could be an individual or combination of individual activities in the following areas: individual chlorinating of household water supplies, cleaning/disinfection of existing wells and boreholes, quality control, provision of jerrycans, water transport, *i.e.* and small repairs and treatment systems damaged in the floods.

- Disinfection of housing and shelters: provision of chemicals/spraying equipment and cleaning equipment to disinfect houses and shelters.
- Evacuation of solid waste: provision of tools, shovels, buckets and protective clothing, etc. This will also include a communication campaign to promote appropriate disposal and burying of solid waste as part of the post-flood clean up.

The above are priorities agreed in the intersectoral, inter-agency support group. This group was created to support and coordinate the emergency response in the water and sanitation sectors. The aim is to ensure that an integrated water, sanitation and hygiene promotion will be pursued in all areas.

Responsibility for implementation

Government Responsible Institution: MOPH
Partner UN Agency: UNICEF/WHO

UN support aims to strengthen national capacity to implement and coordinate humanitarian assistance. The appealing agencies will work primarily through local authorities and NGOs using existing coordination mechanisms under the umbrella of the INGC.

<table>
<thead>
<tr>
<th>Description</th>
<th>UNICEF</th>
<th>WHO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid Assessment</td>
<td>30,000</td>
<td>30,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Provision of sanitation facilities</td>
<td>200,000</td>
<td></td>
<td>200,000</td>
</tr>
<tr>
<td>Chlorination of water</td>
<td>30,000</td>
<td></td>
<td>30,000</td>
</tr>
<tr>
<td>Sources (15 tons of chlorine)</td>
<td>50,000</td>
<td>30,000</td>
<td>80,000</td>
</tr>
<tr>
<td>------------------------------------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Hygiene promotion - education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water supply (pumping equipment, switchgear, piping, and labour)</td>
<td>300,000</td>
<td>300,000</td>
<td></td>
</tr>
<tr>
<td>Emergency water supply (truck of water, water tanks/bladders, jerricans, etc.)</td>
<td>100,000</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>Disinfection of housing and shelters (chemicals/spraying equipment, cleaning equipment, disposables, etc.)</td>
<td></td>
<td>260,000</td>
<td>260,000</td>
</tr>
<tr>
<td>Evacuation of solid waste (tools, shovels, buckets and protective clothing, etc.)</td>
<td>50,000</td>
<td>200,000</td>
<td>250,000</td>
</tr>
<tr>
<td>Logistics and operational/support cost</td>
<td>152,000</td>
<td>102,000</td>
<td>254,000</td>
</tr>
<tr>
<td>Total</td>
<td>912,000</td>
<td>612,000</td>
<td>1,524,000</td>
</tr>
</tbody>
</table>

5.4. Shelter

**Objective**

The objective is to provide immediate temporary shelter and basic resettlement materials to people internally displaced as result of floods.

**Justification**

100,000 people in the provinces of Maputo and Gaza have been displaced from their villages damaged by severe flooding. Their property and dwellings became submerged under water or swept away by the currents. Urgent basic shelter is required to avoid serious outbreak of disease.
**Strategy**

Supply of 120 tents for use of dispensaries and field health units, storage facilities for perishables.

- Supply of 1250 rolls of plastic sheeting for the accommodation of 20,000 families.
- Supply of 60,000 blankets (3 per family).
- Supply of 10 river boats with engines for the delivery of resettlement materials to assist displaced people in isolated areas.
- Supply resettlement materials. (For details refer to Food, Water and Sanitation sections of this document).

**Responsibility for Implementation**

Government Responsible Institution: INGC  
Partner UN Agency: UNDP

The programme for providing shelter will be coordinated by the INGC and UNDP. Implementation will be carried out in collaboration with Cruz Velmelha de Moçambique (CVM) - the Red Cross of Mozambique, MSF, UNICEF, WFP and WHO.

**Budget**

<table>
<thead>
<tr>
<th>Item</th>
<th>UN Agency</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>350 Tents</td>
<td>UNDP</td>
<td>300,000</td>
</tr>
<tr>
<td>1250 Plastic Rolls (4x60m)</td>
<td>UNDP</td>
<td>350,000</td>
</tr>
<tr>
<td>60,000 Blankets</td>
<td>UNDP</td>
<td>200,000</td>
</tr>
<tr>
<td>60 Rubber Boats with engines</td>
<td>UNDP</td>
<td>360,000</td>
</tr>
<tr>
<td>Logistics and Operations support (20%)</td>
<td>UNDP</td>
<td>242,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1,452,000</strong></td>
</tr>
</tbody>
</table>

**5.5. Agriculture**

**Objective**

The aim in the agricultural sector is to provide critical seed production inputs to farmers in the southern and central provinces
affected by the flooding so that they can begin to re-establish their farming livelihoods in the forthcoming second crop season (March/April through June).

Justification
Excessive rainfall followed by unprecedented flooding in the southern and central provinces caused tremendous loss to standing crops and livestock. This situation may seriously affect subsequent crop planting in the region in addition to diminished quality of farm food stocks. The floods have also killed livestock and destroyed both farm homesteads and roads. The loss to the farmers in the affected region is compounded by the fact that a significant number had already replanted due to irregularity experienced in the rainfall pattern.

Preliminary estimates, from provincial authorities, indicate that over 100,000 planted hectares have been destroyed and/or seriously affected. The affected crops in the order of importance are maize, beans, rice, sweet potatoes, peanuts and vegetables.

Strategy
Government preliminary estimates indicate that 62,600 farming households (approximately 313,000 people) are affected by the flooding. Due to limited access to the affected areas, extensive field assessments have not yet been possible. The appeal addresses the emergency needs of these families with a package containing 10 kg of maize, 3 kg of beans and 10 grams each of tomato, onion and cabbage, as well as basic tools. Emergency veterinary assistance will also be provided. The activities to be implemented are summarised as follows:

- Immediate provision of a standard emergency package of seeds and tools to the worst affected farmers for crops to be planted in the second crop season (March/April); and
- Initiating a more intensive and detailed assessment of the extent and nature of the damages caused.

Following the emergency phase, FAO will assist Ministry of Agriculture and Rural Development (MOARD) in formulating a post-emergency rehabilitation programme to be completed by the

Responsibility for Implementation

Government Responsible Institution: MADR
Partner UN Agency: FAO

The assessment of agricultural needs was done by MADR in collaboration with FAO. The seed emergency packages will be procured locally and distributed by the MADR in collaboration with UN agencies, NGOs, by lateral donors, local authorities, as well as farmers associations. An in-depth field assessment will be jointly conducted by MADR and FAO as soon as the field conditions allow.

Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>UN Agency</th>
<th>US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Seed Packages</td>
<td>FAO</td>
<td>1,450,000</td>
</tr>
<tr>
<td>Maize (565 t), Beans (170 t)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable seeds (1.7 t)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tools (Hoe, Cutlass, Axe, Sickle)</td>
<td></td>
<td>300,753</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>1,750,753</td>
</tr>
<tr>
<td>Transportation and Distribution</td>
<td></td>
<td>350,151</td>
</tr>
<tr>
<td>Detailed-Assessment Mission</td>
<td></td>
<td>75,000</td>
</tr>
<tr>
<td>Veterinary</td>
<td></td>
<td>350,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2,525,904</td>
</tr>
</tbody>
</table>

5.6. Education

Objectives
The aim in addressing the education sector is to minimise the impact of floods on the school population and communities affected areas in the provinces of Maputo City and Maputo, Gaza and Inhambane provinces.

The specific objectives are to:

- make a rapid assessment of the current needs in affected schools.
- increase the education system capacity to respond to the emergency situation caused by floods in Mozambique.
- provide learning and teaching materials to children and teachers affected.
- provide supplies for rehabilitation and cleaning of schools affected by floods.
- provide basic schools equipment.

Problem Statement and Justification

As a result of the floods, the school system in the four most affected provinces of Maputo City and Province. Gaza and Inhambane have been substantially destroyed. School buildings have been lost. The number of schools affected, reported by the provincial directorates of education, is as follows:

<table>
<thead>
<tr>
<th>Province</th>
<th>Schools</th>
<th>Pupils</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maputo City</td>
<td>17</td>
<td>25,500</td>
<td>425</td>
</tr>
<tr>
<td>Maputo Province</td>
<td>62</td>
<td>24,000</td>
<td>400</td>
</tr>
<tr>
<td>Gaza</td>
<td>52</td>
<td>12,795</td>
<td>173</td>
</tr>
<tr>
<td>Inhambane</td>
<td>10</td>
<td>2,150</td>
<td>75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>141</strong></td>
<td><strong>62,295</strong></td>
<td><strong>1,073</strong></td>
</tr>
</tbody>
</table>
Strategy

- Support to the Ministry of Education in the co-ordinating the relief activities
- Rapid assessment of the situation of the affected school communities
- Purchase and distribution of Teaching and Learning Materials for affected Teachers and pupils.
- Provision of basic school equipment and supplies for the minimum rehabilitation of destroyed schools

Responsibility for Implementation

Government Responsible Institution: MINED
Partner UN. Agency: UNESCO (62 schools), UNICEF (79 schools)

<table>
<thead>
<tr>
<th>Description</th>
<th>UNESCO</th>
<th>UNICEF</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic learning materials 42,295 schools x $2.71</td>
<td>79,556</td>
<td>105,460</td>
<td>185,016</td>
</tr>
<tr>
<td>Basic teaching materials 1073 teachers</td>
<td>2,306</td>
<td>3,059</td>
<td>5,365</td>
</tr>
<tr>
<td>School equipment 141 schools</td>
<td>28,253</td>
<td>3,7453</td>
<td>65,706</td>
</tr>
<tr>
<td>1. Sub-total</td>
<td>110,115</td>
<td>145,972</td>
<td>256,087</td>
</tr>
<tr>
<td>Rehabilitation and clean-up of sch 001s</td>
<td>235,750</td>
<td>8,500</td>
<td>244,250</td>
</tr>
<tr>
<td>Maputo City</td>
<td>79,000</td>
<td>31,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Maputo Province</td>
<td>150,000</td>
<td>150,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Gaza Province</td>
<td>50,000</td>
<td>50,000</td>
<td>100,000</td>
</tr>
<tr>
<td>2. Sub-total</td>
<td>514,750</td>
<td>39,500</td>
<td>544,250</td>
</tr>
<tr>
<td>Rapid needs assessment</td>
<td>21,500</td>
<td>28,500</td>
<td>50,000</td>
</tr>
</tbody>
</table>
5.7. Communications

Objective
The objective is to provide communities affected by severe flooding with authoritative, accurate and timely information (and instruction).

Strategy
There is an immediate need to provide information to the flood victims. They will require:
- information on preferable refuge and evacuation points;
- location of secure shelters and refugee camps;
- updates on the weather and on the progress of the flood waters;
- information on the availability and location of emergency food, fresh water and other supplies;
- messages from persons inquiring as to the well-being of family members;
- information on crops which are suited for short term production in the current environment;
- information from health authorities on actions which must be taken to prevent water-borne diseases.

To this effect, the following actions are required:
- Procure and deploy a mobile FM radio transmitter and studio to broadcast messages on health to affected population.
- Distribute 100 wind-up radios to affected communities.

Responsibility for implementation
The radio facility will be under the direct control of INGC. Together with the Instituto de Comunicação Social - Institute of Social Communication (ICS), this facility be responsible for identifying announcers and for obtaining relevant content from appropriate ministries as well as NGOs and other civil society entities. The proposed facility can be used in non-emergency situations to assist in the training of personnel for the fast growing community radio sector in Mozambique. Both ICS and UNESCO are currently involved in community radio initiatives. It is expected that in the long term, the structures being established for the management of community radio stations will, with Radio Mozambique and the INGC, constitute an important information network to be used in emergency situations.

**Budget**

<table>
<thead>
<tr>
<th>Item</th>
<th>UN Agency</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Mobile Radio station</td>
<td>UNESCO</td>
<td>25,000</td>
</tr>
<tr>
<td>Three 4 X 4 vehicle to transport radios</td>
<td>UNESCO</td>
<td>30,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>UNESCO</td>
<td>55,000</td>
</tr>
<tr>
<td>50 unwinding radios (free from INGC)</td>
<td>UNESCO</td>
<td></td>
</tr>
<tr>
<td>100 unwinding radios</td>
<td>UNESCO</td>
<td>2,000</td>
</tr>
<tr>
<td>220 volts Generator</td>
<td>UNESCO</td>
<td>1,500</td>
</tr>
<tr>
<td>Operational costs</td>
<td>UNESCO</td>
<td>8,500</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td>67,000</td>
</tr>
</tbody>
</table>

5.8. Co-ordination and Management

*Background*

At the onset of the emergency, in agreement with the Government of Mozambique, the UN Office for the Coordination of Humanitarian Affairs (OCHA) deployed an UNDAC team to assist the INGC and the UN Disaster Management Team under the
lead of the United Nations Resident Coordinator. In view of facilitating INGC’s disaster response coordination role, the UNDAC team facilitated the establishment of a Coordination Centre. UNDP, through its Emergency Response Division, immediately made US$ 50,000 available to provide the Coordination Centre with the required support, including computers, office and communication equipment, as well as interpretation and clerical services.

Objectives
In order for INGC to fulfill its expected role in coordinating relief assistance, it is essential that the Coordination Centre continue its activities. The objectives will be to:

- Ensure the continuation of effective cooperation between Government structures, donors, UN organisations and other agencies involved in relief efforts.
- Evaluate the overall impact of the floods and monitor the implementation and the impact of the relief and emergency rehabilitation actions.
- Guarantee timely and complete reporting of donations received, received against the UN appeal.

Strategy
To achieve these objectives, the functioning of the Coordination Centre will be ensured after the departure of the UNDAC team (by 25 February 2000) through the recruitment of an information and reporting officer and one clerical staff for six months. Adequate means of transport will be provided and some office supplies will also be procured. OCHA will assist the UN Resident Coordinator in the coordinating and monitoring of emergency relief and immediate rehabilitation phase for a period of six months, through the provision of a disaster management expert.

This will allow INGC to assess the impact of the current floods, monitor the implementation and impact of the relief and rehabilitation activities, and the needs for further intervention. On the basis of this experience the coordination centre will formalise the procedures, structures and methodologies for such activities in the future. An evaluation will be carried out of lessons learned, so
that they can be integrated into the National Disaster Management Plan.

Budget

Government Responsible Institution: INGC
Partner UN Agencies: UNDP/OCHA

The estimated budget for the functioning of the INGC Coordination Centre and the evaluation:

<table>
<thead>
<tr>
<th>Items</th>
<th>UN Agency</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disaster Management Expert</td>
<td>OCHA</td>
<td>100,000</td>
</tr>
<tr>
<td>Information and Reporting Officer</td>
<td>UNDP</td>
<td>24,000</td>
</tr>
<tr>
<td>Clerical staff</td>
<td>UNDP</td>
<td>6,000</td>
</tr>
<tr>
<td>'Lessons learned’ consultancy</td>
<td>UNDP</td>
<td>20,000</td>
</tr>
<tr>
<td>Driver</td>
<td>UNDP</td>
<td>2,500</td>
</tr>
<tr>
<td>4x4 vehicle</td>
<td>UNDP</td>
<td>30,000</td>
</tr>
<tr>
<td>Office supplies, fuel, communications</td>
<td>UNDP</td>
<td>10,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>192,500</td>
</tr>
</tbody>
</table>

Annex 1: Collaboration with NGOs / The Red Cross

<table>
<thead>
<tr>
<th>Sector</th>
<th>NGOs/IFRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>Action Aid, Caritas, Concern, World Vision, CCM, SCF- US, MBEU</td>
</tr>
<tr>
<td>Health</td>
<td>IFRC, MSF, SCF-UK, ACF</td>
</tr>
<tr>
<td>Water &amp; Sanitation</td>
<td>OXFAM</td>
</tr>
<tr>
<td>Agriculture</td>
<td>To be identified</td>
</tr>
<tr>
<td>Education</td>
<td>REDD Barna, SCF</td>
</tr>
</tbody>
</table>


The complete document can be found on the IFRC website: www.IFRC.ORG
Mozambique Floods Appeal No: 04/2000 11February 2000

This appeal seeks CHF 2,555,250 in cash and services to assist 10,000 beneficiaries for 6 months.

**Red Cross Action**

1. Health
   - provision of First Aid.
   - home visits to give basic preventive health education
   - establishment of First Aid Posts in areas without sanitation.
   - chlorination of water supplies

2. Supplementary activities:
   - Psychological support to traumatised flood victims
   - Fund-raising in cash and kind to assist flood victims
   - Special attention is paid to the needs of vulnerable elderly, women and children, many of whom have been made destitute.

3. Coordination

   The Mozambique Red Cross Society is the only humanitarian organisation permanently represented at the INGC and plays an important function as adviser to this body. The MRCS has representation at every level throughout Mozambique.

4. Assessment of Needs

   The approximately 10,000 people of the people who have been evacuated into Greater Maputo need shelter, blankets, healthcare, potable water, sanitation, and social services. WFP/Government will meet food requirements but the Red Cross will offer their support if needed. This appeal is to include capacity building within the national society and to support implementation. Requirements are:
   - 400 tents for shelter
   - 5000 blankets and 3000 cotton wraps
   - Kitchen utensils (1,500)
   - Soap, chlorine, medical kits (50 PS1 and 25 PS2)
   - Materials for temporary water supply, water purification and latrine construction
   - Materials for vector control
Construction materials for rehabilitation

2 vehicles

Transport, fuel and maintenance

Storage costs

Essential construction materials for housing rehabilitation

Telecommunications

Office materials and equipment

Training and refresher courses for volunteers

5. Immediate Needs covered by this Appeal

Provision of adequate shelter, blankets and utensils

Provision of safe water and sanitation facilities

Support to Ministry of Health, curative and preventative health

Targeting of the most vulnerable

Social services

6. Anticipated Later Needs

Rehabilitation, particularly in construction of housing

Continuation of social services, particularly of the most vulnerable

Health education and preventative health measures

7. Red Cross Objectives

The overall objective of the MRCS intervention is to provide humanitarian assistance to those most affected by floods in Greater Maputo.

To reduce the damage caused by the floods to the population in the provinces, and to improve their conditions during the period of refuge and upon return to their homes.

The operation has the following specific objectives in the short and medium term.

To provide temporary shelter and support to rehabilitation of ruined homes.

To provide first aid and support to the Ministry of Health

To disseminate preventive health care through the distribution of health education materials and home
visits.

To limit the occurrence of diseases caused by flooding, lack of safe water and poor sanitation.

Annex 3: Infrastructure - Government Request for assistance

Roads, Bridges, Railways and Electricity Network.

R
d
o
a
s
a
nd

Bri
d
ges

Several main roads, including the connections with South Africa and Swaziland, were severely affected as a month of the floods. Some bridges were damaged or washed away. The National Road no. 1 that connects the Capital Maputo with the rest of the country has been cut at several places, and embankments of bridges have been washed away by the rising waters. Based on the field assessment of the Ministry of Public Works and Housing (MOPH), an emergency intervention strategy has been outlined that encompasses the following objectives:

- Restoration of the transport links between Maputo and the rest of the country and with the neighbouring countries in order to transport persons and goods.
- Prevent future severe infrastructure damage by natural disasters.

Create basic urban road infrastructure in areas for resettlement. Some repair work has already started using Government’s own financial resources. Further funding from the World Bank loan for the ROCS project is being negotiated to begin to address the more serious problems. MPOH estimates the cost for the intervention strategy to be US$ 30.5 million. In addition needs for temporary road signs is estimated by the Ministry of Transport and Communication at US$3 1,000.

Railways

Mozambique Ports and Railways has prepared an emergency plan for the rehabilitation of railway infrastructure in the southern part of the country in order to allow the reopening of the Ressano Garcia line to South Africa, the Goba line via Swaziland to South Africa and the Limpopo line to Zimbabwe.
Repairs are also required in the Port of Maputo and on the Salamanga sideline. The estimated cost for the rehabilitation of the southern rail network is US$5.95 million.

Electricity Network
Electricidade de Mocambique - Electricity Mozambique (EDM), the public utility responsible for production, transmission and distribution of electricity within the country, has prepared a preliminary survey report on damaged electricity network due to the floods in the southern grid of the EDM network. As a result, villages such as Xinanvane and Magude have no electricity, thus resorting to the use of generators, partly provided by Italy/OCHA.

Urgent requirements for reconstruction of transmission and distribution lines and the rehabilitation of substations and switching stations have been identified. The estimated cost to repair damages to the electricity network is US$ 4.5 million. The Governments of Denmark and Norway have already indicated their intention to provide assistance.

Resettlement Requirements
The ministry of Public Works and Housing has prepared a survey on damaged urban infrastructure in the cities of Maputo and Matola. New areas for resettlement have been identified, and the sub-division into individual family plots is presently underway.

The cost of resettlement requirements is estimated at US$ 3.5 million.

Hydraulic structures and flood management
The Ministry of Public Works and Housing has carried out a survey on damages to hydraulic structures in Maputo and Gaza provinces as well as on flood control survey needs. The cost for repair for hydraulic structures is US$ 4.6 million and the needs in flood control survey are estimated at US$950,000.

Detailed information on infrastructure damage and cost estimates are available at the Ministry of Public Works, the Ministry of Mineral Resources and Energy and the Ministry of Transport and Communications.
Annex 4: Coordination Centre International Institute for Disaster Management (INGC)

**Structure**

The Government of Mozambique has set up a coordination centre at the INGC, whose aim is to ensure coordination between the Government, the UN System, international organisations and NGOs. Six coordination desks have been established at the INGC to facilitate this. A UN agency, and an International organisation have kindly agreed to be assigned to each of these desks to support the responsible government department. One representative each of the national Government departments concerned and the sectoral lead agencies mentioned below are manning the sectoral desks every day from 1530 hours to 1730 hours.

- Food (WFP)
- Health (WHO)
- Shelter/accommodation centres/non food (UNDP, IFRCS)
- Water & sanitation/infrastructure (UNICEF)
- Transport/customs/communications (DFID)
- Information (UNDP)

Office hours of the coordination centre: 0800-1800hrs seven days per week (until further notice).

**Daily 1100hrs Co-ordination briefing**

The daily coordination briefing at 1100 (duration 30 minutes) provides update information reports on progress. Each of the desk holds their own sector coordination meetings as appropriate with all organisations involved in that sector. Dates and timing of sector meetings are posted on the Coordination Centre notice board. Information provided to the Centre will be shared and made available to all concerned and integrated into the daily situation reports.

National Government departments invite the humanitarian community (UN, Red Cross, and NGOs) as well as international cooperation partners to attend this meeting.
Daily Agenda

Weather forecast
Information update on status of flooding/dam situation
Update on national relief efforts (Mr. Joao Zamissa, Head of Coordination Centre, INGC)
Sector briefings
Announcements of financial and/or in-kind donations

Function of the sector desks

It is important that both the Government departments and designated international organisations are represented at the INGC coordination centre:

☐ to develop a clear strategy for the sector
☐ to identify priorities
☐ to resolve problems as they arise
☐ to attract donors for specific projects within the sector

There will be a working meeting for heads of desks every evening at 1700hrs at the co-ordination centre.

Issued by: INGC Coordination Centre, Maputo, 17 February 2000

G.7. Annex

G.7.1. Items which may be included in Sitrep

A. National response

1. Authorities in charge of coordination at local level. List:

☐ name of organization or authority
☐ name of official in charge
☐ his/her title
☐ office telephone, facsimile, telex nos.
☐ office hours
☐ emergency 24-hour telephone no.
☐ street address
2. National/local organizations/services carrying out specific relief action. List:
- name of organization or authority
- name of official in charge
- his/her title
- office telephone, facsimile, telex nos.
- office hours
- emergency 24-hour telephone no.
- street address

3. Give a brief description of type of relief work carried out and area of operation:
- search and rescue
- evacuation
- provision of temporary shelter and personal/household utensils
- medical care
- distribution of food
- water and sanitation
- restoration of lifelines and critical facilities
- other

4. Is any detailed sectoral assessment of relief needs under way? If yes, specify:
- by whom
- in which area/sector
- when it will be completed

5. Areas where local/national response capacity seems to be overburdened:
- receipt and processing of relief goods
- relief activities: manpower, technical support, etc.
- coordination
- other

B. International response
1. Have any international teams arrived in the disaster area? If yes, indicate:
2. Have specific expertise/technical assistance been made available by

- UN agencies
- international non-governmental organizations
- intergovernmental organizations, such as the European Union
- bilateral donors
- other international actors?

3. If yes, specify and indicate whether this expertise is being used for a detailed sectoral assessment of relief needs in certain areas/sectors.

4. Indicate communication/transport/logistics support provided by international actors.

5. Describe main items of relief goods being distributed in the disaster area.

6. Have any problems been encountered with international assistance provided so far, e.g.

- provision of relief goods that are not required
- provision of unsorted, unlabelled relief goods
- congestion at certain logistical points
- logistical problems created by international elements (transport, control, etc.)
- inadequate storage
- inadequate distribution
- other
Estimated Needs for Assistance

A. Describe immediate corrective action required to mitigate effects on the population as indicated in Chapter I (in addition to relief measures already under way)

B. List needs identified from an initial assessment of the affected area under sub-headings as follows:

- search and rescue
- medical assistance
- shelter and personal/household utensils
- water and sanitation
- food
- logistics (in-country transport, storage and handling of relief supplies)
- expertise for detailed sectoral assessment and/or restoration of critical facilities
- other

C. In each case, describe as far as possible:

- whether contributions in kind or in cash are recommended
- whether items of acceptable quality can be obtained locally, and estimated purchase and delivery costs
- the precise type, specifications and quantities of supplies, equipment and services needed
- numbers and expertise of any personnel required

D. When applicable, specify whether relevant data have been checked with personnel of the specialized UN agency concerned (WHO, UNICEF, WFP, FAO)

E. Where possible, indicate relative priorities for the various items

- Do you recommend that any specific assistance measures be provided by/through OCHA

Means of Delivering International Assistance
A. Describe logistics system for receipt and transportation of relief goods arriving in disaster area:
- recommended airport(s) or other points of entry
  - if required, indicate characteristics (see Logistics Chapter for checklist on airports)
- transport facilities from airport/points of entry to disaster area/distribution points
- availability of storage space, handling equipment, manpower
- availability of fuel
- major logistics bottlenecks or problems

B. Indicate local authority(ies)/service(s)/organization(s) or international organization (WFP, etc.) in charge of coordinating arrival of goods and/or distribution. List:
- name of organization or authority
- name of official in charge
- his/her title
- office telephone, facsimile, telex nos.
- office hours
- emergency 24-hour telephone no.
- street address

C. Describe procedures for distributing goods to the victims

D. List service(s)/organization(s) operational on site, with capacity to receive and manage international donations

Prospects
A. Describe trends in the development of the situation, e.g.
- are there signs that life is returning to normal?
- are there any particular events or actions which might either accelerate or retard the re-establishment of self-reliance?

G.7.2. UN Instructions regarding communication with the Press - (copy of memorandum of 28 April 1999 from the UN Secretary-General)
INTEROFFICE MEMORANDUM

TO: All Heads of Departments  DATE: 28 April 1999

THROUGH: SIC DE:

FROM: The Secretary-General

SUBJECT: UN Secretariat Relations with the Media

Dear All Heads of Departments,

1. Please find attached guidelines on United Nations Secretariat relations with the media. They have been revised in light of the discussion in the Senior Management Group on 31 March.

2. I would be grateful if you would bear these guidelines in mind in your dealings with the media. Please note in particular bullet point three of paragraph 6, which lists the number of officials authorized to speak on sensitive issues. If you have not already done so, you may wish to designate staff in your Departments as appropriate.

Thank you.

cc: Members of the Senior Management Group
UNITED NATIONS SECRETARIAT RELATIONS WITH THE MEDIA

The Policy:

1. The United Nations is committed to being open and transparent in its dealings with the press. It is in our interest to work with the media quickly and honestly, and to develop a coherent communications strategy based on these same principles. We should not only react to events but, where appropriate, project the Organization's point of view on important international developments. However, we must sometimes keep confidences — not to mislead or conceal, but to protect a diplomatic process. Our media policy must therefore balance the need to be open and the need to respect confidentiality.

Speaking to the press:

2. The principal voice of the Organization is the Secretary-General. He speaks to the media frequently, at Headquarters and when travelling.

3. Media policy is an integral component of the broader communications and public information work of the Organization, headed by the Under-Secretary-General for Communications and Public Information. The Director of Communications in the Office of the Secretary-General is responsible for coordinating the development of a communications strategy that would help project to the world's media a coherent and consistent message for the Organization.

4. The Secretary-General's Spokesman and his staff speak to journalists on the Secretary-General's behalf throughout the day. The Spokesman gets his guidance directly from the Secretary-General and senior members of his staff. As the Spokesman's staff cannot be expert in all subjects, they seek the assistance of UN specialists — either to provide them with information that they can pass on to the press or to speak directly to the journalists themselves.

5. As a matter of principle, every member of the Secretariat may speak to the press, within limits:

- speak only within your area of competence and responsibility;
- provide facts, not opinions or comment;
- leave sensitive issues to officials who are specifically authorized to speak on them (see paragraph 6 below).

Sensitive issues:

6. The number of officials speaking on sensitive issues is necessarily limited to:

- the Spokesman, on the basis of guidance;
- designated members of the Secretary-General's staff and Heads of Department, within their areas of competence;
- staff authorized by their Heads of Department, on the basis of guidance; and
- Directors of UNICs, on the basis of guidance from Headquarters.
7. For those speaking on sensitive issues, knowing the journalist's particular interest in a story can be useful. Such information can usually be provided by the Director of Communications or the Spokesman.

8. No staff member should presume or pretend to speak for the Secretary-General or characterize his views without his explicit consent.

Sharing Information

9. For the United Nations to communicate effectively with the outside world, it needs to do the same internally. Senior officials should share information with those under their supervision and should keep each other informed of their media activities.

Ground Rules

10. All UN officials should normally speak to journalists on the record—that is, for attribution. Sometimes, though, officials specifically authorized to address sensitive issues can give a journalist a deeper understanding of an issue by speaking on background. However, it is very important that the journalist know on which of the following bases the conversation is being conducted:

   On the record: "everything I say can be attributed to me by name"
   Not for attribution (on background): "don't attribute this to me by name, but rather to a UN official"
   On deep background: "use my ideas but not my words; don't attribute to anyone"

11. Keeping the Secretary-General's Spokesman informed of important background briefings will help provide an indication of the issues that the media is interested in.

12. It is unwise, and may sometimes be unethical, to tell one journalist what another is working on, or to suggest that one journalist discuss a pending story with another.

13. Officials should not feel that they have to answer every question, in particular any hypothetical ones.

24 April 1999
H. Urban Search and Rescue
H. URBAN SEARCH AND RESCUE

H.1. Responsibilities of partners involved in international urban Search and Rescue operations (SAR) (p. 1)

H.2. Basic Facts (p. 3)
   H.2.1. Types of Construction and Collapse Profile (p. 4)
   H.2.2. Building Occupancy (p. 4)
   H.2.3. Hazards (p. 4)
   H.2.4. Time Factor (p. 5)
   H.2.5. Search and Rescue Phases after an Earthquake (p. 5)

H.3. Assessment and Response (p. 6)
   H.3.1. Search and Rescue Assessment Checklist (p. 6)

H.4. Duties of an OSOCC supporting SAR teams after an earthquake (p. 9)
   H.4.1. Operational Checklist for actions to be taken while establishing an OSOCC for SAR operations (p. 13)

H.5. Annex
   INSARAG Markings during a SAR operation (p. 15)

H.1. Responsibilities of partners involved in international urban Search and Rescue operations

Introduction

International Urban Search and Rescue (SAR) assistance is an extremely complex and fast moving form of international assistance normally provided immediately on occurrence of an earthquake affecting an urban area. For it to be successful, each of the partners involved i.e. OCHA, the affected country and the assisting country must be aware of their responsibilities which are outlined below. The UNDAC team members will be required to set up an OSOCC and its related functions (Reception and despatch) for international SAR teams.
1. OCHA Responsibilities

☐ Maintain an up-to-date International SAR Directory
☐ Distribute Advisories, Alerts, Activations, Situation Reports, Request/Appeals for assistance.
☐ Coordinate the dispatch of SAR Teams.
☐ Dispatch of an UNDAC Team as appropriate.
☐ Establish an OSOCC Reception Center.
☐ Establish an OSOCC.
☐ Follow-up on affected country responsibilities.

3. Affected Country Responsibilities

☐ Affected country to provide in-country transport (personnel/equipment):
  • Will provide identified local transportation.
  • Fuels as required.
☐ Affected country needs to make available needed support facilities.
  • Base of Operations.
☐ Security for resources will be provided by the affected country.
  • Personnel, equipment and facilities.
☐ Affected country will issue proper waivers.
  • Emergency medical practice, controlled drugs.
  • Canine/dog quarantine requirements, clearance/visa, specialized communications equipment.
☐ Interpreters will be provided by the affected country.
☐ Ability to provide:
  • Compressed gases, fuels.
  • 24-hour point of contact.

4. Assisting Country Responsibilities

☐ Assisting country to bear the cost of deployment.
☐ Getaway from time of activation:
  • Within ten hours for air transport.
  • Within eight hours for ground transport.
☐ Self-sufficiency:
  • For ten operational days.
  • Food, water, team medical support, shelter, etc.
  • Ability to self-resupply.
  • Priority on taking care of your own.
Incident Management Structure:
- Command and control.
- Responding resources place minimal burden on affected country:
  - Exceptions are compressed gases, fuel, in-country transport.
- Internal/external communications.
- Perform search and rescue operations.
- Provide staff and logistical support to UN/OSOCC operations, as requested:
  - Be prepared to provide management/liaison-type personnel.

It is recognized that the SAR Medical function, considering its quantities of medicines, equipment, and highly trained members, may, in some instances, be ‘handing off’ a potentially unstable patient to a less sophisticated, interim level medical provider for patient transport to definitive care. This is considered to be standard practice under the circumstances of disaster operations.

Staff Team with qualified personnel capable of performing multiple functions:
- Staffed to conduct 24-hour operations.
- Length of deployment of up to minimum of 14 days.
- Team members have appropriate inoculations/immunizations for affected country.
- Team be those regularly assigned to conduct SAR operations in their own country.
- Team members have appropriate travel documents.
- Team members have appropriate training (i.e. UNER).

Assisting country have provisions to deal with:
- Proper conduct of all team members.
- Treatment of injury to team members.
- Full responsibility for death(s) of a team member.
- Damages brought by malicious, wanton and/or willful acts of its members 24-hour point of contact for deployment.

H.2. Basic Facts

A number of factors have a direct influence on the casualty rate in a disaster with many collapsed structures and on the
survival chances of trapped victims.

**H.2.1. Type of Construction and Collapse Profile**

The material used for construction, the method and quality of construction and the type of structure bear a relationship to the type of collapse (collapse profile):

- Multi-story structures of framed construction (reinforced concrete or rolled steel joints), with reinforced concrete floors and panelled walls of brick or building board. Upon collapse, this type of structure leaves cavities (lean-to or tent collapse) where casualties can be located with good prospects for survival.

- Medium-rise buildings of brick construction with poor bonding techniques. With this type of building, total collapse can be expected, the end result being a large pile of compacted rubble offering little chance for survival (compact collapse).

- Low-rise buildings constructed with local materials, such as single-story dwellings of adobe construction with heavy roof structures. Upon collapse, the load-bearing members tend to disintegrate completely (pile of rubble), leaving little room for survivors.

**H.2.2. Building Occupancy**

- Some buildings (e.g. hospitals, old people’s homes, boarding schools, mental institutions, etc.) have a permanent occupancy risk irrespective of the time of day. Others (e.g. schools, offices, commercial centres) have a high-occupancy risk during working hours and low risk after this period.

- Residential property is at highest risk during the night, when occupants are in bed, causing the greatest number of casualties.

**H.2.3. Hazards**

- Exposure hazard: Climatic conditions and temperature are important factors. Although in some countries a comfortable temperature is enjoyed during the day, it can fall at night to below zero, creating a risk of hypothermia for exposed
casualties.
- Trapped victims often suffocate due to a lack of oxygen or exposure to gas leaks or smoke.
- Water penetrating into cavities, particularly cellars and basements, may often lead to the drowning of victims. The risk of electrocution may also be increased.

H.2.4. Time Factor

- Rescue efforts during the first 24 hours after an earthquake result in a very high percentage of victim survival. After that period, the survival rate drops dramatically.

H.2.5. Search and Rescue Phases After an Earthquake

- **Phase I:** Informal, spontaneous search and rescue by families and neighbours. The emergence of on-the-spot citizen rescue groups. These informal groups perform the majority of rescues.
- **Phase ZZ:** Light search and rescue. Coordinated localized searches by trained teams, often with dogs and other sensing resources, to rapidly search likely locations of survivors and rescue those not requiring major resources of equipment and manpower.
- **Phase III:** Intensive search and rescue. More-focused, intensive efforts through increased manpower and equipment, often involving tunnelling to search major buildings and gain access to buried spaces. All survivors who can be located without major cutting and lifting operations are extracted.
- **Phase IV:** Heavy urban rescue. Use of specialized equipment and manpower to disassemble and lift portions of collapsed structures to reach survivors and recover bodies not otherwise accessible.

The role of the UNDAC team is to establish an OSOCC to support SAR and assess the need for Phases III and IV. When necessary an OSOCC will be established by and UNDAC team to support international and national Search and Rescue teams. The duties of such an OSOCC through various phases of a SAR operation are discussed below.
H.3. Assessment and Response

The information collected by the UNDAC team - particularly regarding the following subjects - should guide search and rescue teams already in the disaster area and those who plan deployment:

- **Damage-related information:** The type of construction and type of building have to be taken into consideration (see above).
- **Secondary threats:** such as the release of hazardous substances from chemical factories, pipelines and transport resources, storage facilities, power plants or nuclear facilities in the affected area.
- **Teams already operational in the area (local, national, international):** The local SAR effort should be taken into account in deciding the need for outside assistance.
- **Coordination mechanisms at the site(s):** One should examine the organizational structure supporting search and rescue activities to see if it is a spontaneous effort by untrained locals, uncoordinated, unstructured and with limited effect, or if it is an operation performed within the local Emergency Plan with identified tasks and priority setting.
- **Specific equipment and expertise required:** The local availability of specialist SAR equipment for both detection and rescue should be evaluated.
- **Priority areas of intervention:** The UNDAC team should help determine those areas where search and rescue operations can be most effective, taking into account resources already deployed. It should be borne in mind that SAR operations with scarce resources should be directed at those locations and buildings where the collapse profile and occupancy factors indicate that the largest numbers of live casualties are likely to be trapped. Coordination is extremely important for an efficient utilisation of resources.
- **Local/national support:** that can be provided to international teams,

H.3.1. Search and Rescue Assessment Checklist

In emergencies involving a large number of collapsed structures (e.g. earthquakes), priority has to be given to assessing the need for assistance with Urban Search and Rescue.
A. Are the local authorities requesting assistance with search and rescue?

B. Has the disaster caused the collapse of buildings in an urban area?
   □ if yes, estimate the no. (or percent) of buildings

C. Do the collapsed structures include:
   □ hospitals, multi-story public housing units, schools
   □ other buildings constructed of reinforced concrete or other materials which would leave spaces where trapped victims could survive (not adobe, mud bricks, etc.) including:
     □ apartment buildings
     □ industrial buildings
     □ office buildings
     □ hazardous installations creating secondary risks
     □ other

D. In what phase is the present rescue effort?
   □ informal/spontaneous SAR (on-the-spot citizen rescue groups)
   □ light SAR (coordinated, localized (random) searches led by trained teams not requiring/using major resources of equipment or manpower)
   □ intensive SAR (focused, intensive efforts with increased manpower and light equipment, survivors located without major cutting and lifting operations are extracted)
   □ heavy urban search and rescue (use of specialized equipment and manpower to detect, reach and extract survivors and bodies not otherwise accessible)

E. Have international SAR teams already arrived at the site (list country, organization, name of team and approximate number of members for the following categories)?
   □ governmental
   □ non-governmental
   □ private volunteers
F. Is the rescue operation continuing day and night?

G. Is heavy equipment (bulldozers, front-loaders, etc.) being used to clear rubble at the sites of collapsed structures of the above type?

H. Needs for SAR assistance
   - is there a need for specialized equipment (and personnel) for:

1. Search
   - technical equipment (ultrasonic detectors, fibre optics, thermal imaging)
   - search dogs (n.b. some cultures have difficulties in accepting dogs)

2. Rescue
   - lifting equipment (air bags, heavy duty jacks, spreaders, etc.)
   - pulling equipment (winches, etc.)
   - cutting equipment (disc-cutters, gas-cutters, pneumatic chisels, etc.)
   - lighting equipment (portable generators and associated lighting equipment)
   - digging equipment (air-hammer, pneumatic drills, shovels, etc.)

3. Medical
   - are medical personnel (doctors, nurses, paramedics) supervising the extraction of trapped victims
   - are extracted victims immediately treated and/or evacuated to medical centres
   - is sufficient equipment available to treat victims with crush symptoms (dialysis)
   - are victims treated locally or evacuated to regional or national health facilities

4. Special operations
   - management of escaping hazardous materials (nuclear, biological, chemical)
   - demolition work
   - shoring up of dangerous structures
   - damage control and emergency repair
H.4. Duties of an OSOCC supporting SAR teams after an earthquake

Introduction

The mission of the UN OSOCC is to assist the LEMA with the management of the disaster, in particular the coordination of international SAR. UN OSOCC may be established in consultation with the UN and the affected country. On site operations are however determined by LEMA in Coordination with OSOCC. The OSOCC will normally be established by using resources from the Field Coordination Support Unit (FCSU) of the Disaster Response Branch (DRB) of UN OCHA Geneva and the UNDAC system.

The UN OSOCC will assess the need for and use of international teams, communicate their operational capabilities and provide support to the country and LEMA in managing operations and logistical support for incoming teams. The UN OSOCC will in general:

- Recommend assignments for teams based on their known capabilities.
- Identify team support requirements and provide advice on the most efficient means of incorporation into the affected country’s disaster response efforts.
- Coordinate with LEMA officials from the disaster location and present a clear picture of the capabilities and logistical requirements of the incoming teams.

The OSOCC may need to interact with various entities present at the disaster site/in country. A schematic diagram of possible entities is at Appendix A.

The UN OSOCC should develop a written document that details the objectives of the incoming international teams. This document should be agreed upon and signed by LEMA and the UN OSOCC.

If teams arrive prior to OSOCC being established they must ensure actions normally taken by OSOCC for reception and OSOCC functions are initiated by them.

If an OSOCC is established, teams must ensure they assign a person to assist the OSOCC in its functions.
**Preparedness Phase**
OSOCC to prepare appropriate marking of Reception Centre for SAR teams and OSOCC location i.e. flags etc.

OSOCC should be prepared to register team capacity data on arrival and make necessary information available to LEMA and media.

FCSU, OCHA Geneva to have personnel ready to be picked up by the nearest SAR team leaving for disaster site in order to establish an OSOCC.

**In Transit/Activation Phase**
OSOCC assigns to the international SAR teams an area upon arrival.

SAR team leaders to be briefed on Plan of Action of OSOCC to understand context of emergency.

Relationship between LEMA/SAR team/OSOCC to be made clear to the SAR team by OSOCC.

OSOCC should identify team’s on site contact person.

The UN OSOCC must advise the SAR team leader of
- The communications plan.
- The reporting schedule including situation reports, operational briefings, etc.
- How reports and requests are transmitted to and from the UN OSOCC.
- Support for the Team that is locally available.
- Availability of a Base of Operations site.
- Availability of specialized equipment.

The specific team assignment should be discussed with the UN OSOCC and the LEMA. This briefing should include:
- Location information.
- Team assignment.
- Information relating to the affected area prior to the event.
- General population demographics, language(s), and anticipated numbers of victims.
- Identified objectives of the assignment.
- Safety and security information.
Infrastructure assessment (structures, utilities, medical, hazardous substances, etc).
Maps.
Medical treatment/transport.
Patient hand-off information.
Medical evacuation for team members.
Cultural sensitivities.

OSOCC assigns incoming teams a Base of Operations.

OSOCC to prepare a media management plan in cooperation with LEMA.

OSOCC to prepare security/safety briefing for teams in cooperation with LEMA.

OSOCC to prepare a communication plan in cooperation with LEMA which includes assignment of frequencies, call signs, local disaster operational frequencies. If necessary coordinate exchange of telecommunications equipment between teams.

OSOCC should support/coordinate SAR teams transport to disaster site with LEMA and prepare a movement plan if necessary.

Operations Phase

1. SAR team actions to be directly coordinated by LEMA and OSOCC. Teams to be informed of reporting requirements.
2. SAR team leader to report to OSOCC on arrival if not already done so earlier.
3. OSOCC give instructions to SAR team leader and assign a work area.
4. OSOCC to coordinate with LEMA results of assessments of damage and needs.
5. The channel of authority is LEMA→OSOCC→Team.
6. OSOCC coordinates activities of national SAR team(s).
7. OSOCC should be able to coordinate:
   - request for additional resources for teams in cooperation with LEMA
   - information on progress of operations and shortfalls.
   - additional request for assistance.
requests for medical assistance.
team interviews and press briefings.

8. OSOCC should prepare a communication plan with LEMA that addresses the following:
   - Command and Control.
   - Tactical SAR operations.
   - Air to ground.
   - Logistics.
   - To SAR teams.
   - To LEMA.
   - To OCHA Geneva.

9. OSOCC should prepare following documentation and disseminate as appropriate:
   - Chain of command.
   - Point of contact.
   - Situation update.
   - Team capability/assignment.
   - Safety/security issue.
   - Communications plan.

10. OSOCC should prepare requirements/procedures for interaction with media together with LEMA.

11. OSOCC should integrate teams planning into OSOCC Plan of Action.

12. OSOCC should organise regular team briefings.

13. OSOCC should prepare rescue prioritisation and mission assignment for teams in cooperation with LEMA.

14. OSOCC should coordinate with LEMA disposal of any remains recovered by SAR teams.

15. OSOCC should coordinate SAR team assignment completion report in conjunction with LEMA.

16. OSOCC should support medical care and evacuation of casualties of SAR team staff, if any.

17. OSOCC to issue regular safety/security updates to all SAR teams.

**Reassignment/Stand Down Phase**

The OSOCC will act as a coordination point for reassignment and/or stand down of SAR teams i.e. provide teams with estimated stand down date and time and be prepared to coordinate the reassignment and stand down plan for teams.

OSOCC should develop a reassignment/stand down plan with LEMA which covers:
Disengagement phases.

Time schedule.

Logistical requirements (i.e. transportation):
- Site clean up/rehabilitation.
- Donations.

Identify and communicate home base support needs (i.e., transportation, media issues, arrival procedures? etc.).

Security and safety issues.

**Return to Home Base Phase**

International SAR teams to provide a quick field operations evaluation to FCSU, DRB, OCHA Geneva.

-- FCSU to develop and implement any corrective action needed for the OSOCC concept through INSARAG.

**H.4.1. Operational Checklist for Actions to be taken while establishing an OSOCC for SAR operations**

Given below is a checklist for actions to be taken while establishing an OSOCC for SAR operations.

- Receive briefing on assignment and objectives
- Gather information about the facility(s) to be used (i.e. airport, etc.) including the number of terminals, available hangar space, length or runway, landing tariffs, 24-hour operation, military or civilian, management authority
- Determine staffing needs based on facility and incident analysis
- Establish Operational Work Schedule and hours of operation
- Develop Organisation Chart that includes LEMA, UNDAC, Airport liaison etc
- Assign responsibilities to support staff
- Establish work areas including a briefing area separate from an information processing area
- Install or rent telephones as needed
- Provide for team logistical needs including lodging and meals
- Determine appropriate means of transportation for the team
- Determine language skills needed to communicate with
the teams

☐ Coordinate for appropriate interpreters with LEMA liaison

☐ Coordinate additional supplies and materials requests to LEMA liaison

☐ Post signs and banners (UN) announcing Processing Center location(s)

☐ Establish information exchange requirements for LEMA and SAR Teams

☐ Brief SAR Team on planned operation

☐ Establish communications with appropriate Airport authorities including immigration, customs, and security (including diplomatic)

☐ Establish communications with major airlines to facilitate information on incoming and outgoing teams

☐ Develop SAR Team Contact Directory

☐ Notify all points of contact to inform on operational readiness, i.e., OSOCC, UN/OCHA, etc.

☐ Prepare handouts for incoming SAR Teams

☐ Meet arriving SAR Teams to brief on mission and purpose of the Processing Center

☐ Inform UNDAC on current status of all resources being processed

☐ Prepare information for Situation Reports

☐ Maintain liaison with LEMA

☐ Maintain liaison with UNDAC

☐ Coordinate with affected country officials and OSOCC to gather information on resources being reassigned or released

☐ Prepare debriefing area

☐ Debrief and gather information from all departing teams

☐ Rehab all assigned work areas

☐ Close facilities when mission is complete

☐ Conduct debriefing with UNDAC team members

☐ Prepare draft after action report

☐ Conduct close out interview with appropriate officials prior to leaving country
H.5. Annex

INSARAG Markings during a SAR operation

Introduction
It is important that information related to structure identification, conditions and hazards, and victim status are posted in a standardized fashion to ensure uniformity and clarity, as SAR Team participants may originate from countries around the world.

The purpose of this guideline is to standardize the identification of SAR Team functions (by color), the conspicuous identification of work site hazards, standardize mapping, sketch and landmark labeling with common symbols, ensure the accuracy of search assessment markings and to document SAR Team accomplishments. The following information is addressed in this guideline:

- Common identification system:
  - Marking.
  - Signaling.

- Structure Assessment:
  - Go/no go.
  - Search.
  - Rescue.
  - Special hazards of that structure.
  - Victim location.

- Results:
  - Warning.
  - Tracking.
  - Continuity and interoperability.

Marking systems

The SAR Team Marking System is identified and divided into the following types:

- Assigned area or work site - Identify sites individually (i.e., by address, physical location, unique design, etc.).

- Structure Assessment:
  - Structure/hazards assessment marking.
  - Search assessment/victim location marking.
- General hazard marking (cordon banners, flagging, etc.).
- Facility/vehicle markings.
- Team and functional markings.
- Symbols.

**Marking**

Information will be conspicuously made with flourescent color to permanently identify and mark the structure.

**General area marking**

If no maps are available, the following should be addressed:

- Develop a sketch map.
- Identify and label landmarks.
- Assign a name to each site (GPS references).

Structure orientation should be established. This would include:

- Exterior.
- Interior.

It is important to identify locations within a single structure.

The address side of the structure shall be defined as SIDE 1. Other sides of the structure shall be assigned numerically in a clockwise manner from SIDE 1.

---

**Quadrant B | Quadrant C**

**Quadrant A | Quadrant D**

---

**700 Block Alpha Street**
The interior of the structure will be divided into QUADRANTS. The quadrants shall be identified ALPHABETICALLY in a clockwise manner starting from where the side 1 and side 2 perimeter meet. The center core, where all four quadrants meet will be identified as Quadrant E (i.e., central core lobby, etc.).

Multi-story structures must have each floor clearly identified. If not clearly discernable, the floors should be numbered as referenced from the exterior. The grade level floor would be designated ground floor and, moving upward the next floor would be floor 1, etc. Conversely, the first floor below grade level would be Basement-1, the second Basement-2, etc.

Structure assessment marking

Cl The basic symbol consists of a 1 meter X 1 meter square box at the primary access point into any compromised structure.
<table>
<thead>
<tr>
<th>Team</th>
<th>Time/Date of Start</th>
<th>Time/Date of End</th>
<th>#Live Victims Removed</th>
<th>#Dead Victims Removed</th>
<th>#Persons Unaccounted for</th>
<th>Location of Other Victims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austrian Team</td>
<td>20/11 0730hrs</td>
<td>21/11 1730hrs</td>
<td>2</td>
<td>2</td>
<td>12</td>
<td>2 dead in elevator</td>
</tr>
</tbody>
</table>
During the search function, it is necessary to identify the location of any known or potential victim. The amount and type of debris in the area may completely cover or obstruct the location of the known or potential victim. The victim location markings are made by the Search Team or other individuals conducting search and rescue operations whenever a known or potential victim is located and not immediately removed. The victim location markings should be made with fluorescent color. A large “V” is drawn near the location of the known or potential victim.

- The letter “L” with a number will denote the number of live victims.
- The letter “D” with a number will denote the number of dead victims.

Draw an arrow beside the “V” when the location of a victim has been confirmed either visually, vocally or hearing specific sounds which would indicate a high probability of a victim.
This may be done when the victim is initially located or may need to be done later after some debris removal or use of specialized search equipment.

- A canine alert will initially receive the "V" without an arrow to indicate a potential victim.

- A circle would be drawn around the "V" when the last live victim has been extricated from that location.

- Draw a horizontal line through the "V" to indicate only dead victim(s) remain.

- A circle would be drawn around the "V" when all dead victims have been removed.

Potential Victim Location

confirmed Victim Location

L - # of live victims
D - # of dead victims

L - # OF LIVE VICTIMS
D - # OF DEAD VICTIMS
Dead Victim(s) Only Location

Extricated Live Victims (s)
Extricated Dead Victim

Other markings

El General cordon markings (cordon banners, flagging, etc.) - to be used for small defined area. They can be enlarged to include other non-buildings (i.e., bridge, dangerous zones, NBC, security, etc.). Large areas may require barricades/fences/patrol/etc.

- Operational Work Zone
- Collapse/Hazard Zone

- **Facility:**
  - Iconic flags, banners, balloons, etc. (must identify team identity, team medical facility, team CP),

- **Vehicle:**
  - Vehicles must be marked with team name and function (flag, magnetic sign, etc.).

- **Team and function:**
  - Response team identity (country and team name) by uniform, patch, etc.
  - Personnel — the following positions must be color-coded and labeled in English plain text (vests, arm bands, helmet color, etc.)
    - Management position(s) — white
    - Medical position(s) — red cross/crescent
    - Safety/security position(s) — orange

- **Symbols:** (Plain text such as Team name would be denoted adjacent to the symbol.)
  - Facilities • circles
  - Zones • irregular
  - Command function • box
- Reference point - triangle

- Time denoted \(22/11\) 0700hrs (with arrow pointing (local time) \(23/11\) 1900hrs to activity site)

Sample symbols

- Command Post (bow w/CP)

- EOC (box w/ EOC)

- SAR Base of Ops (circle w/ BoO)

- OSOCC (box w/OSOCC)

- Reception Center (box w/ OSOCC RECEPT)

- Work Site (circle with WS)

- Airport (AP in circle)
On-Site Signaling/Alerting

- Effective emergency signaling is essential for the safe operation of SAR Team personnel operating at a disaster site.
  - These signals must be clear and universally understood by all SAR Team personnel.

- Air horns or other appropriate hailing devices shall be used to sound the appropriate signals as follows:

  - Cease Operation/All Quiet:
    - 1 long blast (3 seconds)

  - Evacuate the Area:
    - 3 consecutive short blasts (1 second each)
    - Conduct a radio roll call to account for all
personnel. When all are accounted for, the radio signal “all clear” will be broadcast on the command channel.

Resume Operations:
- 1 long and 1 short blast

Crane Hand Signals
I. UNDAC and OCHA Support Resources
I. UNDAC AND OCHA SUPPORT RESOURCES

I.1 Introduction (p. 1)
I.2. Human Resources (p.2)
I.3. UNDAC Equipment Support (p.3)
   1.3.1. Principles for formulating Equipment Support for UNDAC Missions (p.3)
   1.3.2. Mission Equipment (p.4)
   1.3.3. Resource Providers Equipment Modules (p.4)
   1.3.4. Basic Module (p.5)
   1.3.5. Augmented Module (p.6)
   1.3.6. Complex Emergency Support Equipment Module (p. 7)

I.4. Additional Services provided by OCHA’s Disaster Response Branch (DRB) (p. 8)
   1.4.1. Emergency Cash Grant (p. 8)
   1.4.2. Channel for Donor Contributions (p.9)
   1.4.3. Warehouse of Emergency Related Items (p. 9)
   1.4.4. Search and Rescue (SAR) teams (p. 10)
   1.4.5. Emergency Telecommunications (p. 10)
   1.4.6. Technical and Logistics Resources (p. 10)
   1.4.7. Environmental Emergencies (p. 11)
   1.4.8. Central Register of Disaster Management Capacities (p. 11)
   1.4.9. Military, Civil Protection and Civil Defence Assets (p. 12)

1.1. Introduction

For an assessment and coordination team to work in the field under, sometimes, very difficult circumstances in areas where there are no means of communication, no basic office equipment, and no or very little food to be had, it is of great importance that these things are made available. It can also be of value to know what comprises OCHA’s response system and what these resources can provide.

The following chapters describe the support that an UNDAC
team can draw on, and the various assets found especially within OCHA.

1.2. Human Resources

The Office for the Coordination of Humanitarian Affairs has a system of desk officers, duty officers and delegates. The desk officers are responsible for information gathering and response concerning emergencies, and they along with FCSU are therefore the focal point when an UNDAC team contacts Geneva. OCHA also operates a twenty-four-hour duty system through which duty officers can be contacted, especially outside working hours, and during weekends and holidays. An UNDAC team wanting to contact OCHA-Geneva outside office hours would be put through, to the duty officer. Should an UNDAC Team wish to discuss purely administrative (technical aspects of the mission e.g. equipment, travel, etc, they should contact FCSU in OCHA Geneva directly. If an UNDAC team is not sent, but OCHA decides that it is necessary for a OCHA staff member to be on the spot, then a staff member can be sent out as a OCHA field delegate to assist the UNDP office in the affected country.

Staff within OCHA also help with other aspects of emergencies, such as alerting the UNDAC team, preparing missions, establishing relief flights.

The UNDAC team consists of experienced emergency managers made available to OCHA by their Governments or organisations to ensure the ability to respond in real time to a natural disaster. At the time of publication of this handbook, the team has a Europe wing (which covers Asia and Africa too) as well as wings in Latin America and the Pacific. In total it has 131 UNDAC members from 33 countries, OCHA, UN Agencies, NGOs and the Red Cross family.
1.3. UNDAC Equipment Support

1.3.1. Principles for formulating Equipment Support for UNDAC Missions

An UNDAC mission needs to have the ability to draw an enhanced equipment support should the need arise. This could be in the form of subsistence Support Equipment, Office Support Equipment, Telecommunications Support Equipment or Transport support. At the same time this equipment support should be rapid by deployable and flexible. With the assistance of the relevant organisations of the resource providing countries i.e. the Swedish Rescue Services Agency (SRSA), the Danish Emergency Management Agency (DEMA), the Emergency Logistics Team of the United Kingdom’s Department for International Development, the Norwegian Emergency Preparedness System of Norway and the Finnish Rescue Force (FRF) FCSU has established a modular system of equipment support to UNDAC missions which is given below. Should an UNDAC Mission feel it needs additional equipment support, it should inform FCSU in Geneva who would alert the resource providing countries. The equipment support available has been formulated based on the following principles:

1. Normal UNDAC mission 2-3 weeks, maximum one month in a natural disaster environment.

2. Complex emergency UNDAC missions are rare and their requirements including equipment should be treated as such.

3. The UNDAC mission will be launched with personal equipment and that held in FCSU. This will be supported by modules from resource providers, if needed.

4. The number of individuals with both the UNDAC mission and resource providers’ equipment should be minimal so as not to be a burden on host country, Res Coord and facilities.

5. As far as possible equipment should be transportable on commercial airlines.
6. Resource providers’ support should be simple and modular in concept.

1.3.2. Mission Equipment

Based on the above principles, the equipment with which the UNDAC mission in natural disaster response would be equipped would include the following. In complex emergencies an UNDAC deployment and equipment should be discussed separately as it is not a normal UNDAC mission.

a) **Level 1** - Personal equipment held with UNDAC member.
   b) **Level 2** - Basic, essential **office** equipment held with FCSU.
   c) **Level 2** - Basic communications equipment held with FCSU.
   d) **Level 3** - Resource Provider Equipment Modules.
      a) Basic module
      b) Augmented module

1.3.3. Resource Providers Equipment Modules

Should Level 2 equipment be deemed insufficient for the mission through either discussion with the UNDAC team leader, the Resident Coordinator or because of the remote location of the disaster, FCSU will request augmentation of equipment from resource providers. This should be in modules, each of which could consist of

a) Subsistence support equipment - accommodation, water, food, electricity, sanitation, etc;
   b) **Office** support equipment;
   c) Telecommunications support equipment;
   d) Transport support equipment;
   e) Medical support equipment;

This equipment may be required in two incremental modules
from the resource providers i.e. the basic module and the augmented module. The UNDAC team leader can recommend deployment of either of these modules to FCSU.

1.3.4. Basic Module

This basic module could be provided by a resource providing country with up to 2 support personnel (at the discretion of the resource provider). The equipment given below does not include the requirements of personal kit and administration of the (up to) 2 support personnel of the resource providing country. It is not essential for the entire module to be used at one time, the situation may warrant FCSU requesting only portions e.g. office support equipment or telecommunications support equipment to be used on a mission. The module is expected to be ready for deployment within 12 hours of the request being made. It caters for 5 OCHA (UNDAC) staff and 2 support personnel for up to 30 days.

1. Subsistence Support Equipment

- 4x3 man tents
- Water purification equipment for 8 persons
- Electricity • 2 kva Generator plus cables, etc.
- Sanitation equipment (to be decided)
- Food (MREs), cooker
- Miscellaneous equipment, e.g. chain saw, torches, shovels

2. Office Support Equipment

- 1 office tent
- 3 Lap Tops with English software (Microsoft office)
- 3 Printers with toner and, 2 cartridges
- 1 small copying machine
- 1 INMARSAT M with fax
- 1 Table and 2 chairs collapsible
- White board collapsible

3. Telecommunications Support Equipment

- INMARSAT Mini M + Fax
- 2 Laptops with E-Mail access and Microsoft
4. **Transport Support Equipment**
- Two 4x4 all terrain vehicles with fuel
- Telecom fitted in vehicles
- Maintenance equipment
- Inflatable rubber dinghy with OBM • 2

5. **Specialist/Medical Support Equipment**
Medical or Specialist equipment and personnel could be a part of the module depending on the needs of the mission e.g. Nurse with basic medical equipment, air traffic controller for controlling incoming aircraft/helicopter at disaster site, exert in forest fires, etc

1.3.5. **Augmented Module**
(with up to 4 Support personnel)

Should be complementary to and in addition to the two-man basic module and is meant to be requested if either the mission duration is extended or the location of the emergency is completely devoid of infrastructure. Also if an OSOCC serving a large number of organisations is to be established. This should be capable of being used in varying climatic conditions.

1. **Subsistence Support Equipment**
- 2x3 men tents (+ bedding)
- 2x8 tents (one with bedding)
- Water purification
- Electricity 5kva generator
- Sanitation
- Food "MRE's", cooker
- Miscellaneous equipment

2. **Office Support Equipment** Augmented module
should include:

- 5 workstations (Microsoft office)
- 3 printers + scanner head
- 2 copy machines (small) or 1 large
- 1 INMARSAT Mini M with fax
- 3 tables and 6 chairs collapsible
- 2 whiteboards collapsible
- Office supplies

3. **Telecommunications Support Equipment**

- 2 INMARSAT and Fax
- 3 Laptops with E-Mail and Microsoft Office
- 12 VHF radios hand held
- 1 Base station for VHF
- 1 VHF repeater station
- 3 kva generator

(24 hrs duty for radio operators)

4. **Transport Support Equipment**

- 4 Toyota land cruisers and 2 trailers
- Telecom (fitted land cruisers)
- Maintenance equipment

In case of floods 2 inflatable boats and OBM

**I.3.6. Complex Emergency Support Equipment Module**

It is extremely difficult to predict either the duration, level of involvement or staffing of an OCHA team for a sudden onset complex emergency (which is where an UNDAC team may be deployed). Therefore, it is probably prudent, in keeping with the modular principle and simplicity to say at this stage that for equipment deployment in complex emergencies (a rare occurrence), OCHA should state its need in terms of numbers of modules needed i.e. 1, 2, or 3 etc. Any specialised equipment not available in a basic augmented module unit e.g. heavy trucks, can be asked for in addition to the module.
1.4. Additional Services provided by OCHA’s Disaster Response Branch

In compliance with General Assembly resolution 46/182, the Office for the Coordination of Humanitarian Affairs (OCHA), in Geneva, has established an emergency response system for coordinating actions taken by the international community as a result of natural disasters and environmental emergencies, including technological accidents.

The Office for the Coordination of Humanitarian Affairs (OCHA) is the focal point in the UN system for mobilizing and coordinating international disaster response and can be contacted on a twenty-four-hour basis in case of emergency. The OCHA Geneva Operations Centre is immediately activated, when necessary, and is specially designed and equipped for the mobilization and coordination of international emergency operations in response to disasters.

Outside official working hours, the OCHA Geneva Operations Centre is activated by the Duty Officer who, in case of emergency, can be reached at any time through the emergency telephone number (+41 22) 9 17-20 10.

Countries can address requests for information and/or international assistance in cases of natural disasters or environmental emergencies directly to OCHA, or through the United Nations Resident Coordinator in the affected country. In case of emergency, OCHA alerts and mobilizes the international community.

As the focal point for coordinating international response to an emergency, the relevant Regional Desk immediately prepares and disseminates situations reports to emergency relief services of donor governments, the United Nations system, intergovernmental and non-governmental organizations (all together about 600 addressees).

1.4.1. Emergency Cash Grant

When the situation warrants and subject to the availability of
funds, OCHA will provide an emergency cash grant to the Government of the disaster-stricken country. The purpose of the grant is to cover the most pressing needs of the affected population, which cannot be satisfied from national resources, while awaiting the response of the international donor community. OCHA can make available up to US$ 50,000 through the Office of the United Nations Resident/Humanitarian Coordinator if the Government launches an appeal for international assistance immediately after the occurrence of the disaster.

1.4.2. Channel for Donor Contributions

OCHA is ready to act as an expeditious channel for donor contributions, relying on quick and simple administrative procedures.

Cash contributions by donors to affected countries will be managed by OCHA, in accordance with existing procedures, under a dedicated sub-account in the United Nations Trust Fund for Disaster Relief. Contributions channelled through OCHA will be used to cover priority relief needs identified in close consultation with the government of the affected country and the local United Nations Disaster Management Team (UN-DMT).

1.4.3. Warehouse of Emergency related Items

OCHA maintains a permanent (renewable) stock of donated disaster relief items, at the OCHA Warehouse in Pisa, Italy.

There are essentially basic survival items, such as tents, blankets, generators etc., donated by various governments and which OCHA can transport immediately to disaster affected areas, subject to the donor(s) agreement and the items being available in stock. In case of need, the OCHA Warehouse can act as an assembly centre for the international relief community. Goods and transport are offered to the disaster-affected country free of charge.
Further to existing agreements with the World Health Organization (WHO) and the World Food Programme (WFP), emergency food and medical supplies are also stored at the Pisa Warehouse.

The management of this warehouse is now with WFP and on the date of publication of this handbook, the warehouse was to be shifted to Brindisi.

1.4.4. Search and Rescue (SAR) teams

OCHA alerts and coordinates Search and Rescue (SAR) Teams from different countries when the situation warrants it, e.g. in the case of a major earthquake affecting urban areas. Together with the International Search and Rescue Advisory Group (INSARAG), OCHA maintains close contacts with operators of major International Search and Rescue Teams and has developed a Directory of SAR Teams which meet agreed quality criteria for international operations.

1.45 Emergency Telecommunications

OCHA can assist in establishing and coordinating secure and reliable telecommunications during the emergency response phase.

In connection with an OSOCC, and when required, OCHA can provide satellite and radio telecommunications equipment together with experienced technicians in order to establish reliable telecommunications channels internationally and between a capital and an affected area, as well as within the affected area.

1.4.6. Technical and Logistics Resources

OCHA can assist in identifying needs for and accessing technical and logistics resources in support of field coordination.
OCHA has established stand-by arrangements with Governments and humanitarian organizations for access to field coordination support resources (such as office support, transport, telecommunications, coordination centre infrastructure, etc.). When required, in large scale emergencies, OCHA can assist in the mobilization, deployment and management of such resources for the establishment of a Coordination Centre and other common services.

1.4.7. Environmental Emergencies

When requested, OCHA can also assist countries to cope with environmental aspects of emergencies, including industrial accidents, not covered by other existing arrangements.

In particular, depending on the circumstances, the Joint UNEP/OCHA Environment Unit will:

- act as a broker to facilitate quick direct links between focal points in requesting countries and providers of expertise and specialised equipment, and, if necessary, help with the practical modalities of delivering assistance;
- serve as an information clearing-house to provide rapid access to existing national bodies, and international sources of information and advice on the response required;
- facilitate initial assessment and/or post-emergency analysis, by establishing contacts between requesting countries and designated experts or international bodies, and arranging assessment missions upon request.

1.4.8. Central Register of Disaster Management Capacities

OCHA maintains a Central Register of Disaster Management Capacities, which may be available for international assistance.

The following parts of the Register are in existence: on
International Search and Rescue Teams, on Emergency Stockpiles of Disaster Relief Items, on Disaster management Expertise, on Military and Civil Defense Assets, on Customs Focal Points, on Contacts for Disaster Response, and on Major Donors for Emergency Humanitarian Assistance.

1.4.9. Military, Civil Protection and Civil Defence Assets

OCHA can mobilize and coordinate the deployment of Military, Civil Protection and Civil Defence Assets from a number of countries and multinational organizations.

These assets include specialized personnel and equipment required for disaster relief operations (e.g. aircraft, helicopters, ships, nuclear/biological/chemical decontamination facilities, field hospitals, water purification units etc.).

A Military and Civil Defence Unit (MCDU) is established within OCHA as a focal point for the use of military and civil defence (civil protection) resources in all types of humanitarian emergencies. Moreover, it can establish an on-site coordination centre for multi-agency employment of such assistance. In case of natural disasters and environmental emergencies, including technological accidents, the provision of military and civil defence assets takes place in accordance with agreed upon procedures (Oslo Guidelines, May 1994).

In most major disasters, the stricken country will mobilise its own military and civil defence resources to enhance its national disaster response capacity. In some cases, however, the need for additional and/or specialised assets exceeds the capacity of the stricken country. For that purpose, OCHA has developed a system for the mobilisation of international Military and Civil Defence Assets (MCDA) through the Military and Civil Defence Unit (MCDU).

MCDA include a wide variety of specialised equipment, skills and personnel. Examples from past emergencies include fixed-wing aircraft, helicopters, rescue boats, air traffic control, airfield safety control, chemical detection, bridge
construction and repair, rapid runway repair, water purification and distribution, and provision of shelter (camp construction and security). Such assets are provided, normally free of charge, by a number of donor countries on the basis of existing arrangements and procedures with OCHA. The MCDU maintains a database of MCDA which donor countries have indicated as potentially available for humanitarian emergencies (Information from this database is available on the OCHA-Online website).

**Requesting MCDA**

The MCDU never initiates requests for assets on its own initiative, but only on the basis of a request from a responsible humanitarian agency or organization. The UNDAC team can recommend to OCHA, through the Resident Coordinator, and in agreement with the disaster-affected country, that the MCDU be instructed to mobilise MCDA if such are found to be necessary.

The basic criteria should be that military and/or civil defence assets are necessary due to the urgency or magnitude of the disaster, or because the specific equipment or skills required do not exist elsewhere. An UNDAC generated request (through the Resident Coordinator) to OCHA should indicate:

- the task to be performed (as detailed as possible)
- the urgency
- the reason why the task cannot be completed by civilian resources
- and, most importantly, the responsible point of contact who will receive the requested MCDA.

In case of large scale employment of MCDA in an emergency, the MCDU may be required to send a staff member, or a person trained at the UN CIMIC (Civil-Military Cooperation) courses to assist in the liaison between the military and the civilian disaster response coordination mechanism. If no CIMIC or MCDU personnel is deployed, it is the responsibility of the requestor (UNDAC Team/Resident Coordinator) to ensure that incoming Military or Civil Defence Assets are received and guided to their place of
employment.
PART III.
INTERNATIONAL RESPONSE ORGANISATIONS AND COORDINATION IN THE FIELD

J. United Nations and International Response Organisations
J. UNITED NATIONS AND INTERNATIONAL RESPONSE ORGANISATIONS

J.1. Introduction (p. 1)

5.2. The United Nations System (p.2)
J.2.1. UN DMT (United Nations Disaster Management Team) (p.2)
J.2.2. OCHA (United Nations Office for the Coordination of Humanitarian Affairs) (p.3)
J.2.3. UNDP (United Nations Development Programme) (p.4)
J.2.4. UNHCR (United Nations High Commissioner for Refugees) (p.6)
J.2.5. UNICEF (United Nations Children’s Fund) (p.9)
J.2.6. WFP (the World Food Programme) (p. 14)
J.2.7. WHO (World Health Organisation) (p.18)

5.3. The Red Cross and Red Crescent Movement (p.20)

5.4. Non-Governmental Organisations (NGO’s) (p.23)

J.5. The US DART Team (p.25)

J.1. Introduction

When an UNDAC team is on a mission, it will be working within a relief environment that consists of a range of organizations working towards the same goal. These vary from the national and local authorities (described at other places in this handbook) through the United Nations organizations to international and local response organizations. The UNDAC-members must be aware of this environment and take it into account as well as seek to work together with its components in the best possible way. This should be done in an open and non-threatening way (i.e. UNDAC is not a competing or rival organization), and by acting as a catalyst within the relief community.
In the following sub-chapters the most likely organizations that an UNDAC team will meet and cooperate with are given a short description.

5.2. The United Nations System

5.2.1. UN DMT (United Nations Disaster Management Team)

A UN Disaster Management Team (UN DMT) is formed in each disaster-prone country in the event of a disaster affecting the country. If the disaster clearly falls within the competence and mandate of a UN agency, then this organization will normally take the lead (the UN DMT will then be the forum for discussing the support of the lead agency). The UN DMT is convened and chaired by the UN Resident Coordinator (who will usually be the UNDP/OCHA Resident Representative, and will always represent OCHA) and should normally be comprised of a core group represented by the country level representatives of FAO, UNDP/OCHA, UNICEF, WFP, WHO, and, where present, UNHCR. Apart from this core group, the composition of the UN DMT is determined by taking the disaster type into account. The team may be enlarged by including personnel from relevant agencies when a disaster arises. The leader of the UNDAC team, which is assigned by OCHA, should automatically become a member of the UN DMT. The UN Resident Coordinator is responsible for the UNDAC team while it is in-country. The UNDP disaster focal point officer often serves as secretary for the UN DMT, but the team may choose to designate another person. The UNDP also provide the venue and the basic administrative support for the meetings as well as the basic support.

Purpose of the UN DMT

The primary purpose of the UN DMT is to ensure that a prompt, effective, and concerted response by the UN system is made at country level in the event of a disaster. The team should ensure similar coordination of UN assistance to the receiving government in respect to rehabilitation.
reconstruction, and disaster mitigation. The team should coordinate all disaster related activities, technical advice and material assistance provided by UN agencies, as well as taking steps to avoid wasteful duplication or competition for resources by UN agencies. The UN DMT also interfaces with the receiving government national emergency management team, from which a representative may, where practical, be included in the UN DMT. In practice it is vital that the policies of the UN DMT relate to those approved by the receiving government.

J.2.2. OCHA (United Nations Office for the Coordination of Humanitarian Affairs)

In compliance with General Assembly resolution 46/182, the UN Emergency Relief Coordinator was established by the Secretary-General. The Office for the Coordination of Humanitarian Affairs (OCHA) is the office of the Emergency Relief Coordinator who is also the UN Under-Secretary-General for Humanitarian Affairs. The office is part of the UN Secretariat and the USG Humanitarian Affairs/ERC reports directly, to the Secretary-General. The goal of the General Assembly was to strengthen the coordination of humanitarian assistance in the UN, and the resolution sets out the basic principles for humanitarian assistance to be provided by the organization, and recommends specific measures to facilitate a prompt and coordinated response to complex emergencies and natural and man-made disasters.

OCHA is situated in both New York and Geneva; the former to enable the office to be able to support the Secretary-General and to look after the political, military and policy related aspects of its work, the latter to enable the office to be close to the implementing UN agencies and thereby be effective in coordinating field response to natural disasters and complex emergencies. Policy coordination, policy planning and early warning are dealt with in New York, while the Geneva office acts as the focal point for emergency operational support and disaster response coordination.

OCHA is able to respond to emergencies within its remit
immediately because of a twenty-four-hour duty system. Response is adjusted according to the type and size of an emergency, i.e. anything from issuing Information Reports (when no appeal has been received from the affected country), through issuing Situation Reports (when an international appeal has been received from the affected country) to full-scale involvement by sending assessment and coordinating teams to the affected area, coordinating relief efforts, launching joint UN appeals etc.

Resources
The resources available are used in response to both natural disasters and complex emergencies. The human, technical and logistic resources available are mostly supplied by the Danish and Norwegian Refugee Councils, the Danish Emergency Management Agency, the Swedish Rescue Services Agency, and the Emergency Logistics Management Team of the United Kingdom Overseas Development Administration through the Field Coordination Support Unit (FCSU) in Geneva.

OCHA administers a Central Emergency Revolving Fund (CERF) which can be used for providing urgent funds to the UN Resident Coordinator in emergency situations. The fund will be reimbursed by the agency.

J.2.3. UNDP (United Nations Development Programme)

UNDP focuses primarily on the development-related aspects of disaster risks and occurrences, and on providing technical assistance to institution-building in relation to all aspects of disaster management and mitigation. Its emphasis is therefore on:
(a) Incorporating long-term risk reduction and preparedness measures in normal development planning and programmes, including support for specific mitigation measures where required.
(b) Assisting in the planning and implementation of post-disaster rehabilitation and reconstruction, including the definition of new development strategies that incorporate risk reduction measures relevant to the affected area.
(c) Reviewing the impact of large settlements of refugees or displaced persons on development, and seeking ways to incorporate the refugees and displaced persons in development strategies.
(d) Providing technical assistance to the authorities managing major emergency assistance operations of extended duration (especially in relation to displaced persons and the possibilities for achieving durable solutions in such cases).

In addition, UNDP provides administrative and operational support to the Resident Coordinator function, particularly at country level, but also at headquarters.

**Resources**

In the event of a disaster, where a major emergency substantially affects the whole development process within a country, UNDP resources may be used to provide technical assistance to plan and manage the operation, with the agreement of the Government.

In the event of a major emergency operation of extended duration taking place in a developing country, UNDP may accept and administer special extra-budgetary contributions to provide technical and material assistance to the responsible national authorities. This might include helping to establish and then administering a UN-DMT Emergency Information and Co-ordination (EIC) support unit. Such UNDP actions are closely coordinated with OCHA and all other UN agencies involved in providing assistance.

Technical and material assistance in support of long-term risk reduction and preparedness measures is included in the country programme, and may be funded from IPF resources or from other UNDP-administered funds. The same can also be used to assist rehabilitation and reconstruction. Special additional grants up to (US$1.1 Million) may be made from SPR funds for technical assistance to post-disaster recovery efforts following natural disasters.

**Organizational arrangements**

The resident representative is responsible for ensuring that all concerned in planning development programmes are aware of
any known or potential hazards and their likely effects, and that these are appropriately taken into account in the country programme. In the event of a disaster the resident representative mobilizes UNDP staff and technical assistance personnel and other resources that meet the needs of the situation, particularly those needed for the initial assessment and immediate response.

The UNDP resident representative also:

- Collaborates with the UNHCR in cases of protracted refugee assistance operations to help integrate the refugees into local development programme activities, and include a development perspective in the assistance to the refugees.
- Helps other organizations, including NGOs, involved in planning and providing emergency assistance to include development perspectives in their programmes and activities.

In all disaster-prone country field offices, a senior national officer is designated a “disaster focal point” for all disaster-related matters including mitigation, response and in-country UN/UNDP preparedness.

J.2.4. UNHCR (United Nations High Commissioner for Refugees)

The majority of UNHCR’s programmes begin as a result of an emergency: a sudden influx of refugees. The aim of UNHCR’s emergency response is to provide protection to persons of concern to the organization and ensure that the necessary assistance reaches them in time. With regard to material assistance, UNHCR’s goal is the survival of refugees through ensuring adequate basic and supplementary food supplies, health care, shelter, water and sanitary facilities, clothing and essential community services. Much of UNHCR material assistance is channelled through its implementing partners, i.e. the government of the asylum country and non-governmental organizations.

Resources (financial, technical and material)

Financial: UNHCR has an Operational Reserve (as of 1 January 2000) from which financial assistance can be
provided to refugees and displaced persons in emergency situations for which there is no provision in existing annual programmes. The High Commissioner may allocate from the Reserve for emergencies, provided that the amount made available for any one single emergency shall not exceed $10 million in any one year.

Technical: In the UNHCR Emergency Preparedness and Response Section (EPRS) there are 5 Emergency Preparedness and Response Officers (EPRO) who are on standby to lead emergency response teams. They may be supported or complemented by a wide variety of other human resources namely:

- **1 Emergency Administrative Officer** and **2 Emergency Administrative Assistants** on standby for setting up offices in emergency situations;
- 30 members of an Emergency Roster, who are staff with various levels of skill and experience who are occupying posts throughout the world but are expected to be immediately released for emergency deployment. The composition of this roster is changed periodically to ensure a high level of staff preparedness and availability;
- An arrangement with the Danish Refugee Council, the Norwegian Refugee Council and the United Nations Volunteers to provide various categories of staff at short notice for emergency deployment. There are some 500 persons on this standby roster;
- A roster of external consultant technicians in various sectors such as health, water, sanitation, logistics and refugee shelter;
- An arrangement with selected NGOs for rapid deployment to implement assistance activities in different sectors such as health, sanitation, logistics and social services.

All these staff can be supported under an arrangement with the Swedish Rescue Services Agency which can set up a base camp and office, in extreme conditions, with 48 hours notice. Additional stockpiles of vehicles, telecommunications equipment, computers, personal field kits, and pre-packaged office kits are maintained for staff support.
Material: UNHCR maintains a centrally controlled stockpile of prefabricated warehouses, blankets, kitchen sets, water storage and purification equipment and plastic sheeting. These are stored in regional warehouses or are on call with established suppliers who guarantee rapid delivery. UNHCR also has arrangements with external stockpiles outside the UN system such as with the Swedish Rescue Board and is negotiating similar arrangements with NGOs which maintain their own stockpiles.

UNHCR representatives may commit a limited amount of resources, including financial, material and technical, to a refugee emergency when there is already an existing operation in that country.

Procedures for country level staff in relation to post-disaster assessments and reporting
UNHCR field staff are responsible for carrying out emergency needs/resources assessments, frequently with the assistance of EPRS staff and technical experts from headquarters. General guidelines for assessment surveys are available in the UNHCR Handbook for Emergencies. Reporting to Headquarters takes place through situation reports, a format for which is also available in the UNHCR Handbook for Emergencies. Plans for carrying out such assessments and situation reports should be detailed in each Branch Office’s Refugee Emergency Contingency Plan.

Definitions and fundamental principles relating to UNHCR assistance to “refugees”
Under the Statute of UNHCR a refugee is: “Any person who, owing to well-founded fear of being persecuted for reasons of race, religion, nationality, or political opinion, is outside the country of his nationality and is unable or, owing to such fear or for reasons other than personal convenience, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence, is unable work, owing to such fear or for reasons other than personal convenience, is unwilling to return to it.”

Until the refugee status of individuals or groups presenting
themselves as refugees has been determined by State Party or the 1951 Convention and/or the 1967 Protocol; they are considered asylum-seekers and are entitled to the protection of the UNHCR. The UNHCR has the responsibility to extend protection to such persons whether or not the Government of the country in which they are seeking asylum has made any formal request for the intervention of the Office. The High Commissioner has the right to take initiatives to extend protection. Material assistance is however, only given in response to an official request.

Resolutions adopted by the General Assembly and ECOSOC have, in some cases, called upon the High Commissioner to concern herself with displaced persons, often within the framework to United Nations humanitarian endeavours for which the office may have particular expertise. The High Commissioner may participate in such endeavours with other United Nations agencies, as required, at the invitation of the Secretary-General of the General Assembly.

5.2.5. UNICEF (United Nations Children Fund)

GOALS AND OBJECTIVES
UNICEF’s goal in emergency situations is broadly defined as follows:
“In emergency situations that pose a violent, extreme and often sudden threat to the survival, protection and development rights of children and women and to the integrity and stability of the family, UNICEF advocates for the special protection and care of affected children and women and extends assistance to them impartially, without discrimination and on the basis of need.”

The basis objectives are to:

- Prevent exposure of children to risk by addressing root causes of conflict;

- Ensure the survival of the most vulnerable children and women— including those displaced within their own countries— and protect them against malnutrition and disease during dangerous and
chaotic early days of acute emergencies, though access to essential life-saving and life-sustaining services;

Assure protection against intended violence, exploitation, abuse, rape, and recruitment into armed forces;

Support the rehabilitation and recovery of people and communities through development actions to restore psycho social health, maternal and child health care, schools, water supply, and sanitation systems;

Promote long-lasting solutions by creating and strengthening self-help capacities at family community levels and by supporting women’s participation in the development and management of such solutions.

**Overall Strategies**

**Family Focus**

UNICEF’s actions in emergencies recognize the primary responsibility of parents and families for ensuring children’s rights and well being. Its overall aim is to reinforce the capacity of families to provide appropriate care to children and to reunite separated families by supporting national and local governmental and non-governmental delivery systems and institutions upon which families depend. Where these are weak or non-existent, UNICEF also works directly through international non-governmental organisations.

**Development Orientation**

The foundation of UNICEF action lies in its long-term country programme approach and its development orientation. Recognizing the central importance of building capacity and self-reliance for effective and sustainable assistance and to reduce the vulnerability of children to future emergencies, UNICEF aims to enhance rather than supplant locally available resources and mechanisms. The maximum involvement of individuals, communities and local
and national institutions is stressed at all levels of UNICEF emergency action.

- **Integrated Approach**
  UNICEF adopts an integrated approach in addressing the needs and rights of women and children in emergencies. This approach recognizes the complex range of factors and the interrelationship between physical and emotional security, social and cognitive development, and health and nutritional status. This integrated approach provides a broad perspective in addressing and assessing the specific needs of children and women in an emergency situation.

- **Components of the Emergency Response**

  **Assessment**
  Appropriate and flexible actions during all stages of an emergency are based on systematic assessment of acute threats and emergency needs of children and women. Assessments, taken as part of regular country programming efforts, provide insights into the underlying risks to the survival, protection and development of children and help to determine appropriate intervention, collaboration and advocacy. Periodic assessments of specific at-risk groups are also required.

  **Care and Service Delivery**
  Care and service delivery activities are designed to ensure that basic survival and development needs are met. These programmes are implemented through community-based systems as well as through national, regional and local authorities. Services include nutrition and family food security, access to potable water, environmental hygiene and safe excreta disposal, essential child health services and reproductive health care for women, psycho-social support to traumatized children and women and the re-establishment of education facilities. When required, UNICEF also plays a limited role in providing basic non-food items.

  **Protection from Harm**
  Protection activities include the protection of a child’s right to humanitarian assistance through ensuring continuous access
to children in need and preventing abuse of misuse of such assistance. Protection also includes shielding children from harm inflicted by others, such as violence, exploitation, sexual abuse, neglect, cruel and degrading treatment, and recruitment into armed forces. The legal and ethical standards that guide UNICEF’s protection activities are defined by the Convention of the Rights of the Child and other relevant human rights legislation. Child rights are promoted through advocacy, negotiation, dissemination, training and capacity building, physical protection, monitoring, reporting, and the follow-up of violations.

Pre- and Post-Emergency Action

Pre-emergency prevention and preparedness and post-emergency recovery are critical components of UNICEF’s overall emergency mission.

Pre-emergency Prevention

Basic elements of emergency prevention are built into the UNICEF country programme. These programmes support the extension of basic services to marginalized populations, support equitable development, promote equal opportunity for girls and women, and contribute to the amelioration of the root causes of social conflict.

Pre-emergency Preparedness

Warning signs are usually apparent before a full-blown crisis erupts, and early action can prevent or mitigate some of the adverse consequences on women and children. In addition to the ongoing assessments and analysis of underlying risks, UNICEF supports a number of preparedness initiatives, including preparation of country level preparedness plans.

Post-emergency Recovery

UNICEF’s capacity-building and rehabilitative activities begin as early as possible and are intensified during the post-emergency of post-conflict phase. These activities support the physical and psycho social recovery and social reintegration of child victims of neglect, exploitation and abuse; the demobilisation and social reintegration of child soldiers; family reunification of unaccompanied children; the
re-establishment and improvement of basic social services and education; and the reconstruction of legal system and provisions to protect the status and rights of women and girls, and to protect child soldiers, displaced children and other child victims of intentional harm.

**Funding Emergency Action**

UNICEF’s emergency programmes are an extension of regular UNICEF programme activities in response to an emergency and any additional activities outside the framework of regular country programme. Emergency activities are funded primarily from supplementary funds for which purpose a specific emergency programme plan of action is developed. The emergency programme plan of action can be planned, launched and implemented under the authority of the Executive Director, without prior approval by the Executive Board. In the case of a major or complex emergency, the coordination of programming with other agencies is formalized through the preparation of a consolidated inter-agency appeal.

In order to enable an immediate but limited response to an emergency situation, UNICEF Representative can divert up to $50,000 from country programme resources to emergency activities. When the emergency situation significantly weakens the relevance of the established country programme, the UNICEF Representative can reprogramme resources with government concurrence and headquarters approval.

UNICEF’s Emergency Programme Fund (EPF) comprises of a two-year allocation of $25 million out of which a release can be made to provide necessary cash-flow for initial response to an emergency.

**Institutional arrangements and responsibilities within UNICEF**

The UNICEF Representative has the responsibility to plan and manage UNICEF’s response at the country level. The
Office of Emergency Programmes (EMOPS), which has staff both in New York and in Geneva, has the overall responsibility for coordinating UNICEF’s emergency related activities in close collaboration with UNICEF Programme Division, managing the Emergency Programme Fund, and ensuring close inter-agency coordination with international humanitarian organizations.

As part of the overall response capacity in emergencies, UNICEF can call on experienced staff with skills and competencies from UNICEF offices worldwide to provide support to country offices affected by an emergency situation. These staff are well-trained UNICEF personnel, experienced in the areas of emergency programme design and management, operations, supply, information, communications and security in emergency situations.

UNICEF Supply Division in Copenhagen is the designated focal point to ensure rapid response in emergency situations in terms of provision of supplies. The reimbursable procurement facilities of the UNICEF Supply Division are available also to other organizations and agencies.

**J.2.6. WFP (World Food Programme)**

In the event of an emergency WFP may, depending on the needs:

- Provide advice and assistance to the government, other concerned agencies and local authorities in assessing possible requirements for emergency food aid, and in planning and managing appropriate food aid interventions.
- Provide food aid to meet emergency food needs, subject to the availability of resources and the assessed need for international food aid.
- Help to mobilize and ensure co-ordination in the planning and delivery of food assistance from all sources, and any necessary logistics support and other complementary inputs.

Through INTERFAIS (the computerized International Food Aid Information System), WFP monitors food aid flows, including emergency food aid, and makes detailed data
available to the international community concerning requirements, donors’ allocations, delivery schedules, etc.; as an aid to planning and co-ordination. Information is also included on port conditions and overland transport possibilities.

Although WFP provides substantial quantities of food and is responsible for almost all multilateral food aid, it is neither responsible nor able to meet all emergency food needs. The majority of international food aid is provided bilaterally. Its role is in ensuring the co-ordination and orderly scheduling of food aid shipments from all sources; seeking ways to expedite deliveries; mobilizing and providing logistic support; and advocating appropriate policies and procedures for the use of food aid, can be at least as important as that of food aid supplier. WFP also assists donors, upon request, to procure, transport and/or monitor the distribution of certain bilateral food aid consignments.

New working arrangements between WFP and UNHCR were agreed in 1991. In refugee situations WFP collaborates with and assists UNHCR and the Government in assessing any food aid needs and mobilizing/providing a specific range of commodities and the resources to deliver and distribute them. WFP is responsible for mobilizing basic food commodities (cereals, pulses, beans or other protein-rich food, edible oil or fat, salt) plus sugar and blended foods, together with the cash resources for 100% external transport and in-country transport, storage and handling (ITSH) and associated costs related to those commodities. UNHCR is responsible for mobilizing any other required commodities and related cash resources.

**Provision of food aid commodities**
Commodities may be provided from the “emergency” resources available to WFP (see below) subject to specific

---

1 On average, WFP’s multi-lateral assistance accounts for approximately 25% of world emergency food aid
criteria and a request being presented by the government. When approved, commodities are provided as a grant delivered to the ports of entry: in the case of developing countries delivery is sometimes arranged to defined “extended delivery points” within the country. Lead times for the delivery of donated food aid commodities are, however, long typically 3-5 months, sometimes even longer. The ability to deliver commodities rapidly to meet initial relief needs is usually dependent on the availability of suitable stocks in country which can be borrowed, or purchased. The vast majority of food requirements following sudden disasters are met by borrowing.

The types and quantities of commodities which WFP might supply in any situation depend on the assessed needs and the commodities and cash resources available to WFP at the time. However, WFP seeks to ensure provision of the necessary “basic” commodities required to provide a balanced nutritionally adequate ration, at calorie levels which have been agreed to be sufficient. WFP allocations for “general” feeding/food distribution operations in emergencies typically include a suitable cereal, an edible oil or fat, and a protein-rich food such as pulses. Where necessary, WFP may also provide some commodities for “supplementary” feeding programmes.

In addition to supplying certain quantities from the resources available to it, WFP may help to mobilize and ensure coordination of the delivery of international emergency food aid from all sources, and “non-food” inputs which are essential for the proper implementation of the planned food assistance programmes (especially logistic equipment) and for the utilization of the food by beneficiaries (e.g. grinders, utensils, cooking fuel).

**Assistance to in-country logistics**

WFP co-operates in the detailed assessment of logistic systems and capacities and, where necessary in a major emergency in a poor country, may provide technical and material assistance, and assistance for the training of warehouse and other personnel. It may, where needed, help/intervene with the governments of transit countries to
facilitate and expedite the passage of relief goods to emergency-affected landlocked countries.

In a major food emergency, WFP may, on an exceptional basis:

- Provide certain material logistic support for ITSH operations (international transport, storage, and handling) - e.g. transport units, storage and handling equipment and expertise - where absolutely essential for the implementation of the planned food aid programmes.

- Help - either directly or through contacts with other competent organizations - to set up and manage major transport and logistics units, especially to arrange transport of food aid commodities from ports to regional depots (e.g. during the major food emergencies in Ethiopia, Sudan, Mozambique and Chad in the late 1980s).

This is largely dependent on appropriate cash or in-kind contributions being made available for the particular purpose by donors.

**Resources**

WFP administers the International Emergency Food Reserve (IEFR), which, in principle, comprises the equivalent of at least 500,000 tonnes of cereals annually but is often exceeded, and manages a separate set of resources pledged by donors for assistance to “protracted” refugee and displaced persons operations. In addition, annual allocations are set aside from WFP’s general resources: US$ 15 million for “emergency” assistance plus US$30 million for “protracted” assistance.

A cash account, known as Immediate Response Account (IRA), was established in 1992 as an integral part of the IEFR for the purchase and delivery of food to enable the fastest possible response to new emergency situations prior to the arrival of foodstuffs through customary channels. The purchases are made locally, where feasible, but otherwise regionally or internationally as determined most cost-effective and compatible with timely arrival. A cash fund of US$ 30 million, unencumbered by restrictions, is contributed voluntarily by the donors over and above commodity pledges
to IEFR and related transport and other costs.

The resources consist mainly of food commodities pledged by donor governments. Cash resources are limited and are reserved for local purchases to meet immediate needs in the aftermath of sudden disasters, and for transport costs. In cases of extreme need, the Executive Director may authorize the release of some cash from WFP’s general resources as seed money to finance essential logistics assistance in anticipation of receipt of special-purpose contributions from donors.

**Authority at country level**

The WFP Director of Operations can agree with the Government on the acceleration/adaptation of ongoing WFP-assisted development projects to meet emergency needs, subject to certain criteria (notably that there is no increase in the WFP commitment). He/she may also purchase up to US$50,000 worth of commodities locally to meet immediate needs where these are urgent and cannot be met in any other way. Other forms of assistance, including the borrowing and exchanging of commodities, require advance approval of WFP headquarters.

**J.2.7. WHO (World Health Organization)**

In an emergency, the World Health Organization (WHO) as the primary UN Specialised Technical Agency for health matters, has the following responsibilities:

- Ensuring that:
  - i. Health needs are properly assessed and are reflected in requests for international assistance, e.g. in UN Appeals.
  - ii. Humanitarian Assistance applies the best health practices, reflects the Country’s health priorities and respects its capacities.

- Providing services to the partners:
  - i. Informing on the Country’s epidemiological profile, e.g. on the pre-emergency health coverage.
Facilitating collaboration between international and national partners.

Mobilising national and international expertise to meet specific health hazards, e.g. tropical diseases that can exceed the capacities of even the most experienced international NGOs.

Ensuring the most effective deployment of all health related personnel.

Overseeing the coordination of external assistance to ensure that there is no duplication of effort and waste of resources.

This mandate covers any type of emergency - natural, man-made and technological disasters as well as epidemics. In some cases, e.g. epidemics, WHO may be the Lead Agency of emergency operations. Even if this role is with another agency, WHO retains a mandate in international health coordination.

DISASTER PREPARATION AND PREVENTION

Long-term presence in most member countries gives WHO a comparative advantage in understanding the context where disasters take place and their real impact on the people’s health. WHO promotes disaster-risk awareness, planning for disaster preparedness and prevention, and national and international capacity building for emergency management. In this regard, WHO organises international, regional and country training on emergency health management and collaborates with institutions engaged in the public health aspect of disasters.

WHO gathers, analyses and disseminates health information on at-risk and emergency affected populations, for advance planning of humanitarian interventions. Web sites carrying disaster-related information and advice are constantly updated.

After a crisis, WHO long-term view of the country’s health priorities facilitates synergies between immediate relief, rehabilitation and sustainable recovery.

Possible WHO emergency inputs

- Teams for rapid health assessment and epidemiological
surveillance.

- Emergency medical supplies to combat serious and immediate threats to public health.
- An “Emergency Library Kit”, containing key guidelines for best practices in emergencies
- Specialised staff and consultants to assist in various aspects of emergency health management: for prevention, preparedness, relief, rehabilitation and recovery.
- WHO may procure services or supplies on behalf of governments, UN agencies or NGOs in official relations with WHO, if these deposit funds in advance for this purpose.
- Guidelines for drug donations and purchases by sister agencies or other organisations.
- A specific software program (SUMA) for the coordination of health relief supplies

RESOURCES

WHO Headquarters and Regional Offices may give assistance through regular programme mechanisms and from limited special disaster accounts. WHO HQ has a fund from which allocations can be approved in anticipation of subsequent receipt of donor contributions.

WHO may directly approach potential donors but does not normally launch emergency appeals. It usually co-ordinates assessment in the health sector and proposes elements for inclusion in any UN/OCHA appeal which, subject to the necessary funds being contributed, WHO then implements.

5.3. The Red Cross and Red Crescent Movement

The Red Cross is a component in relief work that will be prevalent in all aspects of relief work, and is therefore an integral part of the environment that an UNDAC team will
work within. The Red Cross is composed of three elements:
- The National Red Cross/Crescent Societies
- The International Federation of the Red Cross and Red Crescent Societies (IFRC)
- The International Committee of the Red Cross (ICRC)

**The National Society**
The Nation Red Cross and Red Crescent societies embody the work and principles of the International Red Cross and Red Crescent Movement. National Societies act as auxiliaries to the public authorities of their own countries in the humanitarian field and provide a range of services including disaster relief, health and social programmes. During wartime, National Societies assist the affected civilian population and support the army medical services where appropriate.

The unique network of National Societies - which cover almost every country in the world - is the Federation’s principal strength. Cooperation between National Societies gives the Federation greater potential to develop capacities and assist those most in need. At a local level, the network enables the Federation to reach individual communities.

National Society programmes and services are tailored to each country’s needs and address both immediate and long-term needs and include:

- community-based health
- first aid training and activities
- control and prevention of diseases
- HIV/AIDS prevention
- water and sanitation
- emergency shelter, food and medicine
- disaster preparedness
- blood donor recruitment, collection and supply
- restoring family contact for victims of disaster and conflict
- youth activities

**The International Federation of the Red Cross and Red Crescent Societies (IFRC)**
The International Federation of Red Cross and Red Crescent Societies is the world’s largest humanitarian organization, providing assistance without discrimination as to nationality, race, religious belief, class of political opinions.

Founded in 1919, the International comprises 175 member Red Cross and Red Crescent societies - with an additional number in formation - a Secretariat in Geneva and more than 60 delegations strategically located to support activities around the world. The Red Crescent is used in place of the Red Cross in many Islamic countries.

The Federation’s mission is to improve the situation of the most vulnerable people - those who are at greatest risk from situations that threaten their survival, or their capacity to live with an acceptable level of social and economic security and human dignity.

The Federation coordinates and directs international assistance to victims of natural and technological disasters, to refugees and in health emergencies. It combines its relief activities with development work to strengthen the capacities of National Societies, and through them, individual people.

The unique network of National Societies - which covers almost every country in the world - is the Federation’s principal strength. Cooperation between National Societies gives the Federation greater potential to develop capacities and assist those most in need. At a local level, the network enables the Federation to reach individual communities.

Together, the National Societies have 105 million volunteers and 300,000 employees, who provide assistance to some 233 million beneficiaries each year.

The International Committee of the Red Cross (ICRC)

The ICRC is the founder body of the Red Cross movement and the promoter of the Geneva Conventions and their additional Protocols, both parts concerning the treatment of wounded and sick military personnel, prisoners of war, and civilian populations in internal and international conflicts. It is an independent and private institution, and is neutral and...
politically, ideologically, and religiously impartial. The Committee itself is composed of a maximum of 25 members all of whom are, by statute, Swiss citizens.

The organization, which has its headquarters in Geneva, acts in cases of conflict - internal or international - to:

- Ensure that the Geneva Conventions are observed by parties to the conflict;
- Assure/provide protection, medical care and material relief assistance to victims of the conflict;
- Organise tracing services to identify and re-establish communications between family members who have become separated, as well as tracing and visiting prisoners (e.g. prisoners of war or “security detainees”).

The ICRC cooperates with the national Societies but exercises its particular functions and usually mounts its own operations separately. It establishes its own offices (delegations and sub-delegations) and assigns its own personnel (who will be Swiss ICRC delegates or delegates from other national Societies - there will always be Swiss ICRC delegates in any delegation and usually in the core functions). Medical teams from other national Societies may be assigned in the field under the auspices and directions of the ICRC. The ICRC raises funds by international appeals.

5.4. Non-Governmental Organizations (NGO’s)

In the context of this handbook, a Non-Governmental Organization (NGO) is an organization that works in any capacity with relief assistance. The NGO’s can be divided into two main categories, namely the international NGO’s (working in the international field, even though they may not be an international organization in the true sense of the name) and the local NGO (working within its own country).

NGO’s are in principle autonomous and are independent of governments (hence the name), and are financed by private individuals or groups. Financing, however, has changed in recent years. The modern tendency for NGO funding goes towards receiving more and more funding from governments
(usually their own governments) or Inter-Governmental Organizations (IGO's), e.g. the European Union. Whether or not this affects the autonomy greatly depends on the individual NGO and the possible strings attached to the funding.

The NGO community is becoming increasingly important in the humanitarian world. The period from around 1980 till the beginning of the nineties has rightly been called the decade of the NGO's. In the years after World War II, the amount of international NGO's began to soar (from 832 in 1951 to 9398 in 1981). These NGO's include all aspects of relief work. In the eighties the number of international NGO’s have nearly doubled to 16208 in 1990. Of these about 500 are involved directly with humanitarian work.

NGO’s work in all areas of the humanitarian field and provide the greatest international capacity to implement relief on the ground. Therefore it is important to inter-relate with them as there is valuable information and help to be found (and given). It is usually the case that one or more NGO’s are actually physically in the area of an emergency before, during and after the impact, and will therefore have hands-on information and experience of the issues. NGO’s also tend to specialise in one or two fields, or to direct their efforts towards one needy population group. They usually offer skilled staff, rapid deployment capacity (if they are not already in the area), operational flexibility, and resources that might not otherwise be available in an emergency.

The number of local NGO’s has also accelerated in the past years. These can be helpful in a variety of ways, especially because they are known locally and they themselves know the area, the culture, the population etc. In many cases they work together with international NGO’s, the UN and others. They are assets that can be helpful not just with giving information, but also as implementing partners.
J.5. The US DART Team

Overview

The U.S. Agency for International Development’s (USAID) Office of Foreign Disaster Assistance (OFDA) has developed a response capability called the Disaster Assistance Response Team (DART) as a method of providing rapid response assistance to international disasters, as mandated by the Foreign Assistance Act. A DART provides an operational presence on the ground capable of carrying out sustained response activities. A DART includes specialists trained in a variety of disaster relief skills who assist U.S. Embassies and USAID Missions with the management of the United States Government (USG) response to disasters.

The activities of a DART vary depending on the type, size, and complexity of disasters to which the DART is deployed.

Purpose

During fast onset disasters, the focus of a DART is to:

- Coordinate the assessment of the situation and report on the needs.
- Recommend USG response actions.
- Manage USG onsite relief activities (for example, search and rescue and air operations).
- Manage the receipt, distribution, and monitoring of USG-provided relief supplies.

During long-term, complex disasters, the focus of a DART is to:

- Gather information on the general disaster situation.
- Assess the effectiveness of the overall humanitarian response.
- Identify the needs not being met by current overall response efforts.
- Monitor and evaluate the effectiveness of current USG funded relief activities.
- Review proposals of relief activities for possible future funding.
- Advise USAID/Embassy on disaster issues.
- Make recommendations to OFDA/Washington (OFDA/W) on follow-on strategies and actions.
- Fund relief organizations and procure contractual
services when delegated the authority.

During either type of disaster response, DARTs coordinate their activities with the affected country, private voluntary organizations (PVOs), non-governmental organizations (NGOs), international organizations (IOs), and UN relief agencies and other assisting countries. When U.S. military assets are involved with the disaster response, the DART will work closely with those assets to ensure a coordinated effort by USG resources.
PART IV - REFERENCES

K. Personal Health
K. PERSONAL HEALTH

K.1. Personal Health (p. 1)
K. 1.1. Pre-deployment (p. 1)
K. 1.2. Upon Activation for UNDAC Mission (p.3)
K. 1.3. During the UNDAC mission deployment (p. 4)

K.2. Safe Food for Travellers (p.5)
K.2.1. Safe food during deployment (p.5)
K.2.2. Preparing before Departure (p.6)
K.2.3. Precautions taken after arrival (p. 6)

K.3. Safe Water for Travellers (p.7)
K.3.1. Safe water during deployment (p.7)
K.3.2. Preparing before departure (p.8)
K.3.3. Precautions to be taken after arrival (p. 8)

K.4. Stress (p.8)
K.4.1. The Stress Situation (p.9)
K.4.2. How to Minimize Stress during a Disaster Operation (p. 11)
K.4.3. Stress Debriefing (p. 12)
K.4.4. After the UNDAC mission (p. 14)

K.5. Medical Emergencies and First Aid (p. 17)

K. PERSONAL HEALTH

K.1. Pre-deployment

Health Screening/Check-up. All UNDAC members should ensure that they have regular health screenings/check-ups to ensure that they remain in the best of health. Such screenings enable the early detection of medical problems which can then be managed early. The health screenings should include:

- General medical examination, with blood and urine investigations
  - Chest X-ray and electrocardiogram (ECG/EKG)
  - Breast examination and PAP (cervical smear) for females
- Dental
  - Visual acuity.

Vaccinations. Your UNDAC mission may take you to places in which you may be exposed to communicable diseases. The
deteriorated public health conditions that accompany many of the emergencies you respond to may increase your risk of contracting an illness. Apart from personal hygiene, certain vaccinations are recommended:

- **a.** Yellow fever, for which vaccination is a requirement for entry into certain countries.
- **b.** Tetanus, in combination with diphtheria
- **c.** Poliomyelitis
- **d.** Hepatitis A and Hepatitis B
- **e.** Typhoid
- **f.** Cholera
- **g.** Meningococcal meningitis
- **h.** Other vaccinations according to the diseases endemic in the area of the world being visited (e.g., Japanese encephalitis, rabies).

It is advisable that you discuss your vaccination requirements with your doctor so that your needs can be met and a schedule of vaccination can be developed. It is not advisable to attempt to be vaccinated against all of these conditions at one time.

Because of the time required for full vaccination and the very short notice given for UNDAC missions, you are strongly advised to keep your vaccinations updated and valid. Use of the WHO international vaccination certificate is strongly recommended as a means of recording and verifying your vaccination status.

In addition, the rise in tuberculosis (TB) world-wide should be noted. UNDAC members are advised to determine their TB status and follow their doctor’s advice regarding possible vaccination (BCG).

**Documentation.** It is recommended that UNDAC members maintain their own health records showing important health data which may be used by health providers wherever the UNDAC member may be. Important information should include:

- **a.** Dates and results of health check-ups (including dental and visual)
- **b.** Medical illnesses and medication being used
- **c.** Allergies, particularly to medication/drugs
d. Vaccinations

e. Individual information such as blood group

f. Health insurance details

g. Name and contact details of your usual health care provider (e.g. Personal doctor or medical specialist).

Any relevant certificates or official health documents should be included. This information should be updated and carried with the UNDAC member whenever he or she is deployed.

The WHO handbook entitled “International Travel And Health” should also be carried by all UNDAC members.

**Health Insurance.** For peace of mind, UNDAC members should ensure that they are adequately provided for in terms of health insurance. Where this insurance may provide coverage in overseas areas to which members may be deployed, the necessary documentation should be carried at all times.

**Preventive Medicine.** UNDAC members should be prepared to deploy to areas in which malaria poses a threat. Commercially available treatments such as Permethrin should be applied to clothing to be used on deployments, with particular attention to outer garments and mosquito nets. A medical kit should be prepared and checked periodically to maintain the usability of the contents. Details of this medical kit are given in a separate section below. The booklet entitled “Personal Hygiene” should also be referred to by all UNDAC members.

**K.1.2. Upon activation for UNDAC mission**

Upon activation for an UNDAC mission members should take the following steps:

a. Evaluate their state of health. If there are any doubts about existing illnesses or injuries, members should advise OCHA directly on their conditions.

b. Check that their individual medical kit is prepared and packed. This should include any prescription medication or supplies being used by the member that may not be available in the deployment location.

c. Pack spare health articles such as spectacles, contact lenses, dental fixtures, and the maintenance kit.
needed for these articles.
d. Pack all necessary individual health documentation.
e. Check the health threats in the deployment location, and commence prophylactic treatment (eg. Anti-malarial drugs) and other preparations (eg. Extra water purification tablets).

K.1.3 During the UNDAC mission deployment

Precautions taken after arrival.

Way of life
During the first weeks, the newcomer unused to the conditions of life and climate is likely to have a lower resistance. He should allow himself at least eight hours of sleep a night, if possible have a short siesta, avoid excessive physical or intellectual strain and lead a regular life.

Diet
This should be well balanced. Heavy meals should be avoided and alcoholic drinks either excluded or consumed in moderate quantities, only in the evenings. On the other hand enough liquid should be drunk to compensate for perspiration losses; it may be necessary to increase salt intake in the case of profuse perspiration. Amoebic dysentery and other enteric infections very widespread in tropical regions, are transmitted by foods eaten raw or contaminated by dirty hands or unclean water. This causes acute or chronic digestive troubles which can be prevented by taking simple hygienic precautions.

Water should be the object of special care: it can transmit numerous infectious diseases when used for drinking or toilet purposes. Water of uncertain purity should be treated or boiled (boiling remains the best method). In case of difficulty drink water in the form of tea or mineral water. When a house-filter is used it is of paramount importance of boil the water after filtration. See also K.2. Safe Food for Travellers below.

Body hygiene
Water used for oral and dental hygiene should be purified or boiled beforehand; even sea water can be contaminated near
river mouths, and bathing in suspect water can be the cause of certain tropical infections. Without reliable information bathing should, therefore, be avoided.

**Protection against Insects**

Certain insects and particularly certain mosquitoes in hot countries can transmit infections such as malaria. When mosquitoes are numerous in an area where malaria is endemic, all exposed areas of the skin should be treated with mosquito repellent in order to prevent bites which, besides being painful, are also dangerous; in addition it is useful to wear clothing that covers the arms and legs in the evening.

It should be remembered that mosquito nets only provide protection under certain conditions: material sufficiently finely meshed, folded correctly during the day and the net properly closed at night so that insects cannot get in. Inside houses insects must be destroyed by spraying with an insecticide. Sprays made from products with a pyrethrum base destroy rapidly but their action is short lived.

**Prophylaxis against Schistosomiasis (Synonym Bilharzia)**

It is important to avoid contact with unsafe water in a zone where this affection is found. Bathing in rivers or other water sources should be strictly avoided in the absence of reliable information, as the infestation is brought about by penetration of the skin by the larval form of the parasite.

The above instructions do not pretend to be complete, their purpose is to draw attention to the main essentials.

**K.2. Safe Food for Travellers**

**K.2.1. Safe food during deployment**

One of the two main reasons for travellers becoming ill is eating without taking into consideration some simple rules. Following the rules laid down below may, in the short term, spare the traveller a considerable amount of annoyance, while, in the long term, they can hinder serious diseases.
K.2.2. Preparing before Departure

- Consult your physician for advice on the various diseases to which you may be exposed, and the need for vaccinations or other preventive measures.
- Make sure your medical kit contains Oral Rehydration Salts (ORS) and water-disinfectant tablets.

K.2.3. Precautions taken after Arrival

Eating Safely
The following recommendations apply to all situations, from food vendors on the street to expensive hotel restaurants:

- Cooked food that has been held at room temperature for several hours constitutes one of the greatest risks of foodborne illness. Make sure your food has been thoroughly cooked and is still hot when served.
- Avoid any uncooked food, apart from fruits and vegetables that can be peeled or shelled. Avoid fruits with damaged skin. Remember the dictum “Cook it, peel it or leave it”.
- Ice cream from unreliable sources is frequently contaminated and can cause illness. If in doubt, avoid it.
- In some countries, certain species of fish and shellfish may contain poisonous biotoxins even when they are well cooked. Local people can advice you about this.

What to do in case of diarrhoea
Most diarrhoeal attacks are self-limiting and clear up in a few days. The important thing is to avoid becoming dehydrated. As soon as diarrhoea starts, drink more fluids, such as bottled, boiled or treated water, or weak tea. Fruit juice (diluted with safe water) or soup may also be taken. If diarrhoea continues for more than one day, prepare and drink ORS solution and continue to eat normally.

If ORS is not available, mix 6 level teaspoons of sugar plus 1 level teaspoon of salt in one litre of safe water. Drink this as indicated above for ORS. Another solution would be to drink a cola soft drink.
Amounts of fluid or ORS to drink:

Children less than 2 years: 1/4 - 1/2 cup (50 - 100 ml) after each loose stool

2 years to 10 years: 1/2 - 1 cup (100 - 200 ml) after each loose stool

Older children and adults: unlimited amount

Seek medical help if:

Diarrhoea lasts for more than 3 days and/or there are very frequent watery bowel movements, blood in the stools, repeated vomiting or fever.

When there is no medical help available and there is blood in the stools, a course (5 days) of cotrimoxazole may be taken.

Prophylactic use of antibiotics is not recommended. Antidiarrhoeals (e.g. loperamide) are not recommended but may be used, in addition to fluids, by adults only, for symptomatic relief. They should never be used for children. If there are other symptoms, seek medical advice.

K.3. Safe Water for Travellers

K.3.1. Safe water during deployment

Contaminated water is the second main reason for travellers becoming ill during their stay in foreign countries. Again, as in the case of food, it is vital to follow some simple rules to

Dosage for cotrimoxazole (trimethoprim, sulfamethoxazole):

For adults: 160 mg of trimethoprim and 800 mg of sulfamethoxazole, twice a day, for 5 days.

For children: 5 mg of trimethoprim and 25 mg of sulfamethoxazole per kg of body weight, twice a day, for 5 days.
prevent disease caused by unclean water.

**K.3.2. Preparing before Departure**

As with the preparations when concerning food, it is important to consult your physician for advice on diseases, vaccinations, and preventive measures as well as to ensure that your medical kit contains Oral Rehydration Salts (ORS) and water-disinfection tablets. A personal water purification kit (e.g. Katadyn) is also recommended.

**K.3.3. Precautions to be Taken after Arrival**

When travelling - if you are at all in doubt - all water should be perceived as being contaminated. The following recommendations therefore apply to all solutions:

- When the safety of drinking water is doubtful, have it boiled or disinfect it with reliable, slow-release, disinfectant tablets. These are generally available in pharmacies.
- Avoid ice unless you are sure that it is made from safe water. Be aware that ice from apparently clean sources, e.g. hotel ice-automats, is not always safe.
- Beverages, such as hot tea or coffee, wine, beer, and carbonated soft drinks or fruit juices which are either bottled or otherwise packaged, are usually safe to drink.
- Unpasteurized milk should be boiled before consumption.
- It is possible to buy bottled clean water in most places. It is recommended that water be purchased and used whenever possible - also for brushing teeth.

**K.4. Stress**

Working in emergency relief environments - especially in the case of complex emergencies - exposes the relief worker to a number of stress factors, such as internal and external organizational problems, conflicts within the group, lack of information, time pressure, various levels of confusion, different levels of human suffering, dangers to him/herself and to friends and colleagues, and, in the extreme, even the wounding or killing of a colleague. The level of reactions to stress varies from person to person and can range from feeling
apathetic, confused, or being very active, through feeling sick, having headaches, feeling helpless or being quick-tempered, to having attacks of fear, a sense of guilt, sleeplessness, and even having attacks of paralysis.

All these reactions and others are normal reactions to abnormal situations. It is important, however, for the relief worker to acknowledge this and to do something about it, because the reaction to a situation can be alleviated and prevented from becoming chronic. There are a number of things that can be done to increase the relief workers ability to manage stressful situations. The following are different aspects of the stress situation.

K.4.1. The Stress Situation

Experience has shown that knowledge, especially through training, is a kind of “stress-vaccine” - not to say that this will prevent stress, but it will lessen the possibility of acute or chronic stress or even trauma. First of all it is important to know the kinds of situations that may occur during ones work, i.e. the stress factors during assessments (pressure of people asking for help, the experience of the, often, horrendous human suffering, the dangers in the disaster situation etc.) and coordination, and the dangers if the work is carried out in a complex emergency. This should be made clear through training. Second, it is important that the relief worker knows the symptoms of stress and trauma, enabling him/her to recognise these within him/herself as well as in others. Thirdly, a relief worker should be able to know the basic principles in coping with stress.

Within a team it is vital to pair up in a “buddy system”, which enables people to recognise the first symptoms of stress in his/her partner, whereby coping strategies can be set in early in the process.

The 5 Phases of Stress

Stress reactions occur in five phases:
- The pre-event phase which has a varied duration depending on circumstances; when living in a potentially dangerous environment, e.g. where there are possibilities of natural
disasters, in complex emergencies etc., there is a tendency to deny that anything could happen to oneself. This results in a lack of both physical and mental preparedness if such a situation happens,

- The warning phase which also has a varied duration depending on circumstances; the period when the person knows that something is going to happen; again there is a tendency to deny that anything can happen to oneself. To a certain extent this can be a good thing as it does not restrain productivity. The other reaction in this phase is activity, e.g. an atmosphere of panic,

- The acute phase which may have a duration of seconds to days; it is the time during which a person is exposed to the event. This is the time of shock, where people react differently. 10-30% react calmly and are actively helping; 50-75% are apathetic and confused; 10-25% show such strong reactions that they need medical help; while 1-3% lose control and show symptoms of serious breakdown, i.e. complete mental breakdown or panic.

- The interim phase which can be divided into two parts: the reaction period, lasting from one to six weeks, and the healing period which lasts from one to six months. This phase commences after the event and its immediate effects when people start to realise what has happened and what it means for them.

- The post-event phase which starts after about six months and can last indefinitely; this is also called the post-traumatic period which may be latent. This phase may never occur, though, if a successful healing period has taken place. The post-traumatic results can vary greatly, but can typically be re-living the event; nightmares; over-reaction to sounds; a lack of interest in important occurrences; insomnia; feelings of guilt; problems of concentration; and loss of memory.

**Stress symptoms**

It is important to know and thereby be able to recognise stress symptoms that might occur. It is not only vital to recognise them within the person him/herself, but also if they occur in colleagues. The symptoms may include some of the following:

- Palpitations
- Excessive perspiration
- Diarrhoea
- Nausea
- Shivering
- Hyperventilation
- Dizziness
- Sensation of a weight on the chest
- Difficulty in breathing
- Headache
- Difficulty in physical coordination
- Lack of perception:
  - Does not understand orders given
  - Does not remember information
  - Is unable to remember names
- Irrational activities
- Assessment abilities affected
- Tunnel vision
- Irritation
- Fear
- Weeping
- Sadness
- Apathy
- Complete mental breakdown

This list must be seen as symptoms that may occur, and certainly not all symptoms will occur. Reactions such as the above may not occur at all. It very much depends on the level of training of the individual and the help that a person is given and how long after the event.

K. 4.2. How to Minimize Stress during a Disaster Operation

Following are some ways to minimize stress during a disaster operation:
- As much as possible, living accommodations should be personal and comfortable. Mementos from home may help disaster workers to keep in touch psychologically.
- Regular exercise consistent with present physical condition and relaxation with some activity away from the disaster scene may help.
- Getting enough sleep and trying to eat regular meals even
if the workers are not hungry will help. Workers should avoid foods high in sugar, fat, and sodium, such as donuts and fast foods. Taking vitamin and mineral supplements may help the body to continue to get the nutrients it needs.

- Excessive use of alcohol and coffee should be avoided. Caffeine is a stimulant and should be used in moderation as it affects the nervous system, making relief workers nervous and edgy.
- Although relief workers need time alone on long disaster operations, they should also spend time with coworkers. Both experienced and new relief workers should spend rest time away from the disaster scene. Talking about normal things (home, friends, family, hobbies, etc.) other than the disaster is a healthy change of pace.
- Humor helps ease the tension. However, use it carefully as victims or coworkers can take things personally, resulting in hurt feelings if they are the brunt of "disaster humor."
- When on the job, it is important for relief workers to take breaks during the day, especially if they find themselves making mistakes or unable to concentrate.
- Team members should try to stay in touch with family back home if they can. Communication helps prevent the sense of being strangers when they return after the disaster.

Team Leaders can take specific, practical action to prevent and reduce the effects of CIS, consequently avoiding the personal and organizational costs associated with them. Steps include:

- Learning to identify and respond to CIS in personnel.
- Educating team members in advance about the potential harmful effects of critical incidents.

It’s normal to experience stress during a disaster operation, but remember.....stress can be identified and managed.

**K.4.3. Stress Debriefing**

If, e.g. an UNDAC team is exposed to traumatic events certain procedures should be carried out. Initially help should be given immediately in the form of a (psychological) debriefing while professional help may be required at a later stage. Experience shows, though, that if a debriefing is started.
within the first 48 - 72 hours after the event, more help is rarely needed.

The debriefing can very well be initiated by the team leader, and has short-term and long-term objectives.

Short-term Objectives
- Technical aspects:
  - To collect information for use in investigating the incident
  - To uncover needs for radical changes in operational procedures
- Mental aspects:
  - To “decompress”
  - To assess the need for professional help.

Long-term Objectives
- Technical aspects:
  - A learning process
  - To provide the grounds for possible adjustments to policies, plans, principles, material etc.
  - To provide the grounds for disseminating the acquired knowledge
- Mental aspects:
  - To prevent mental after-effects
  - To assess the need for professional help
  - To ensure daily functioning
  - To maintain and improve team solidarity and activity resources.
  - To prevent the “scapegoat” effect

Main Debriefing Points
- Immediately after the event (not more than 48 - 72 hours later)
- The team must initially be together in plenum
- The session should start by going through the operation and giving it and the event coherence and a linking thread
- The next phase should be in groups of not more than 6 - 12 persons
- If possible this should be led by people who have knowledge of emotional/psychological first aid (a team leader
should be capable of this)
- Every participant should be allowed to talk about anything he/she wants to and to show the emotions that he/she feels.
- The session should not last more than about four hours
- If there is a need, a new session can be carried out later
- “High-risk” groups should be identified (e.g. personnel closest to the event, people with responsibility etc.)
- Carry out a separate debriefing should be carried out with the high-risk group.

K.4.4. After the UNDAC mission

Medical check-up. UNDAC members should seek medical consultation and treatment promptly if they have signs of any illness or injury following the deployment. Of particular concern are persistent fever, cough or abdominal upset with diarrhoea, as these may be due to a disease contracted during the deployment. If members had any sexual contact during the deployment, they should consider being tested for venereal disease and HIV/AIDS. HIV tests may not be positive until about 3 weeks after the exposure to the virus. If signs of stress persist, UNDAC members should seek consultation with a professional mental health care provider.

Documentation. Members should update their individual health records if they develop any illness following deployment with UNDAC. They should also advise OCHA who may then alert other UNDAC members to be aware of the health threat in the deployment location, or the local health authorities in the deployment site.

Medication. UNDAC members should continue to consume medication according to the regime established by the manufacturer of the medication even after they depart the deployment location. This information can be found in the packaging of the medication and applies especially to anti-malarial drugs.

Medical Kit

Contents. Every UNDAC member should carry an individual medical kit to cater for minor health illnesses or injuries. The
medical kit contents should be clearly marked, including the names of the medications and their usage instructions. It is recommended that a sturdy waterproof container be used to store the medical kit contents. Organisation of these contents into separate compartments for different needs will help to make use of the kit more efficient. Suggested medical contents include the following:

a. Skin

- Sunblock/sunscreen
- Lip salve
- Moisturiser
- Powder (possibly with anti-fungal medication)
- Waterproof plasters (assorted shapes/sizes)
- Hydrocortisone cream (skin allergies, insect bites)
- Antiseptic cream (cuts, abrasions)
- Antiseptic soap (e.g., Dettol)

a. Medication

- Fever, aches, pain (e.g., Paracetamol, Aspirin)
- Sore throat, cough (e.g., Lozenges)
- Running nose (Anti-histamine e.g., Chlorpheniramine)
- Abdominal pain (e.g., Buscopan)
- Abdominal upset (e.g., activated charcoal, antacids)
- Diarrhoea (e.g., Imodium)
- Anti-malarial (e.g., Mefloquine)
- Anti-biotics (e.g., Erythromycin)
- Water purification tablets

a. Others

- Alcohol wipes
- Bandages (e.g., Triangular, elastic)
- Surgical gloves

WHO Medical Pack. Each UNDAC member is issued a WHO medical pack. This contains some useful items that can be used as part of the individual medical kit. The following table summarises the WHO medical pack contents and makes reference to the pages of the WHO booklet entitled
“International Travel And Health” that describe the conditions for use of the contents.

<table>
<thead>
<tr>
<th>Area</th>
<th>Pack Contents</th>
<th>Use</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Application</td>
<td>Hydrocortisone cream</td>
<td>Insect bites, skin allergies</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Co-trimoxazole cream</td>
<td>Antiseptic to clean cuts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mycel powder</td>
<td></td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Gamma benz. Hexachloride powder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdominal</td>
<td>Hydroclectronazone</td>
<td>Water purification</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Immodium</td>
<td>Diarrhoea</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Oral rehydration salts</td>
<td>Severe diarrhoea, cholera</td>
<td>63</td>
</tr>
<tr>
<td>Malaria</td>
<td>Eloquine (mefloquine)</td>
<td>Anti-malarials for use in different parts of the world</td>
<td>68-69, 77, 83-84</td>
</tr>
<tr>
<td></td>
<td>Proguanil</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nivaquine (choloroquine)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical/Skin</td>
<td>Kik ACTIV</td>
<td>Insect repellent</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Infusion set</td>
<td>Intravenous treatment</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Syringes</td>
<td>Injections</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Syringe needles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alcohol wipes</td>
<td>Skin cleaning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cosmoplast strips</td>
<td>Cuts, abrasions</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>Doliprane (paracetamol)</td>
<td>Fever, mild pain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Erythromycin</td>
<td>Antibiotic for infections...</td>
<td></td>
</tr>
</tbody>
</table>

Useful References
a. Website: www.who.ch
K.5. Medical Emergencies and First Aid

This section contains very basic information on medical emergencies and first aid. Most field medical situations you encounter are not immediately life threatening. The few that are can generally be addressed by anyone with basic first aid skills and a rational approach. Maintain a calm, thoughtful manner. Panic will cause or contribute to a “shock” response in the victim and may cause others to act irrationally as well.

When confronted by a medical emergency, your first step is to determine whether or not you can safely and effectively render assistance. Do not move the victim unless you have to for your safety or his or hers. Once you have determined that you are not endangering yourself and that the victim is in a relatively safe position, get help if you are able to do so.

**WARNING**—There is a definite risk to the first aid responder from the bodily fluids of the patient. These include blood, mucus, urine, and other secretions. You should take the steps necessary to protect yourself before attempting to treat the patient. Use surgical gloves if you have them. Also, it is strongly advised that you use a cardiopulmonary resuscitation (CPR) barrier device if giving mouth to mouth. A facemask will also reduce the potential for rescuer infection.

**The Initial ABCs of Medical Emergencies/First Aid**
The basic steps in assessing your victim and initiating treatment are as follows:

- **Airway**—Open and maintain an adequate airway.
- **Breathing**—Check for breathing by listening at the mouth and watching the rise of the chest.
- **Circulation**—Check for circulation by feeling for a pulse at the wrist, ankle, or throat.

In a fully unconscious person you can clear the airway by using a “finger sweep”---reaching into the back of the throat to remove a visible object but being careful not to push the
object in further. Place them on their back, look inside the mouth, and do a finger sweep. If the victim is not unconscious, be careful not to get bitten. Falling unconscious and relaxing may loosen the object from the throat. If it does not, kneel astride the person and place your hands at the base of the rib cage. The heel of one hand should be down. the fingers of the upper hand between those of the lower, grasping the palm. Deliver five quick upward thrusts to the abdomen.

If you are able to clear the blockage but the patient has not resumed breathing, perform mouth-to-mouth resuscitation, part of cardiopulmonary resuscitation (CPR).

1. **Position the Victim.** Lay the victim on their back. Kneel and position yourself at a right angle to the victim’s body, with your knees perpendicular to the victim’s neck and shoulders.

2. **Head Tilt/Chin Lift.** Position your palm on the person’s forehead and gently push backward, placing the second and third fingers of your other hand along the side of the victim’s jaw, tilting the head and lifting the chin forward to open the airway.

3. **Modified Jaw Thrust.** If you suspect a neck injury, a modified jaw thrust (without the head tilt) may be used. This is done by placing your hands on each side of the victim’s face, your thumbs on the cheekbones but not pushing, and pulling the jaw forward with your index fingers. Again examine the mouth for foreign objects. If you find any, use the finger sweep to clear them.

4. **Check for Breathing again.** Put your ear directly over the victim’s mouth to listen and feel for air being exhaled. Look at the victim’s chest to see if it is rising or falling.

5. **Mouth-to-Mouth Resuscitation.** Position yourself at a right angle to the victim’s shoulder. Use the head tilt/chin lift maneuver and pinch the victim’s nose closed, using your thumb and forefinger. Open your mouth wide, and place it tightly over the victim’s mouth. Exhale into the victim—just enough to see the chest rise. Take another breath and repeat. Check to see if the victim’s chest is rising when you exhale. If the stomach bulges the air is going into
the stomach and not the lungs. The airway may be blocked still. Check the airway again.

6. **Check for a Pulse.** After you have delivered your two breaths into the victim, check for a pulse using two fingers just to the side of the Adam’s apple. If the victim has a pulse but is not breathing, continue mouth-to-mouth resuscitation, using the same technique of big breaths every 5 seconds (12 times/minute). Remove your mouth between breaths. Continue to check for signs of breathing and watch for chest movement. If the victim’s breathing is weak, you may have to continue mouth-to-mouth, following the victim’s breathing pattern, ensuring a breath at least every 5 seconds.

7. **Restore Circulation.** If you are unable to find a pulse in the victim, you must begin heart compressions to restore circulation. The compressions must be coordinated with the mouth-to-mouth resuscitation. Kneel and position yourself at a right angle to the victim’s chest. Find the base of the breastbone at the center of the chest where the ribs form a V. Position the heel of one hand on the chest immediately above the V; with the other hand, grasp the first hand from above, intertwining the fingers. Shift your weight forward and upward so that your shoulders are over your hands; straighten your arms and lock your elbows. Shift your weight onto your hands to depress the victim’s chest (1 ½ to 2 inches in an adult). Count aloud as you do it, five times in an even rhythm, slightly faster than 1 compression/second (80-100 beats/minute). Repeat the pattern for a total of 15 chest compressions.

8. **Continue Breathing for the Victim.** You must continue to give the victim oxygen through mouth-to-mouth resuscitation. Give two breaths. Repeat.

9. **Alternate Pumping and Breathing.** Pump the victim’s chest 15 times, then breathe for him or her twice. Establish regular rhythm, counting aloud. Check the pulse and breathing after four cycles. Continue until help arrives, if possible.

10. **Performing CPR on a Child.** The procedure is essentially the same, but you use only one hand for chest compressions and pump the child’s chest five
times. You then breathe for the child once, more gently than you breathe for an adult.

11. **Two-Person CPR.** One person provides breathing assistance while the other pumps the heart. Pump the heart at a rate of 80 to 100 beats per minute. After each five compressions, a pause in pumping is allowed for a breath to be given by the other person.

---

**Choking**
The victim will be unable to speak or breathe effectively if their airway is obstructed. If they are coughing or gasping strongly for air, leave them alone. If they are unable to speak, trying to clear their throat, or coughing weakly, stay with them and carefully monitor their breathing. If the victim is unable to speak and puts their hands around their throat, act promptly; this is the universal sign for choking. Clearing the airway is easiest if the patient is standing. Step behind them, make a fist with one hand and place it over the abdomen, thumb side towards the patient, between their navel and the bottom of their rib cage. With your other hand, grasp your wrist. With a sharp inward and upward thrust, compress the abdomen. Repeat until the airway is clear. If the person has passed out, is too big for you to reach around, or cannot be stood up, lay them flat on their back, turn their head to one side, and use an abdominal thrust with both hands similar to a CPR chest compression. Continue to monitor the ABCs and treat for shock, if indicated.

---

**Other Emergency Situations**
Once you know that your patient’s ABCs are OK, you can move on to determining what other problems they may have. If you saw the injury occur and the patient is conscious and able to communicate effectively with you, this step is fairly simple. If a language barrier exists or the patient is not conscious, it becomes more difficult. Be sensitive to cultural barriers or obstacles, especially when your patient is of another culture.

**Shock**
The most commonly encountered form of shock in the field is traumatic shock, induced by injury. *If left untreated, it may*
result in death. Always monitor for signs of shock and routinely treat for it in cases of severe injury. The patient may be cold and clammy, have pale skin, a rapid, weak pulse, rapid, shallow breathing, or a combination of these symptoms. Except in cases of head injury, have the patient lie flat on their back and elevate their legs. Cover them with a blanket or other thermal cover and monitor the ABCs.

Bleeding

There are several ways to control the bleeding. These should be attempted, in the following order:

- Using a sterile gauze square, apply pressure directly over the wound. When it stops bleeding, tape or otherwise secure the gauze in place. Immediately removing the gauze may cause the bleeding to restart.
- If you have knowledge of the arterial pressure points, apply pressure, using one or both thumbs over the artery. Once this has controlled the bleeding, apply pressure bandages to the wound site.
- If you are unable to control the bleeding in any other way, and professional help is many hours away, apply a tourniquet to the affected extremity. There is a high risk of losing the extremity, particularly if professional attention is not immediately available. This is a last resort.
- Bleeding from the torso does not lend itself to control by any method other than direct pressure. Elevation may help, and if ice is available in sufficient quantity, it will also help.
- Bleeding from the head can usually be controlled by direct pressure, elevation, icing, or a combination of all three. Do not apply a tourniquet.

Burns

Burns may be three basic types: chemical, electrical, and thermal. The treatment for each is different, but in every case, treatment for traumatic shock should be part of your approach.

Chemical burns-These may arise from inadvertent spills when handling chemicals, coming in contact with improperly disposed chemicals and chemical waste, or chemical warfare
acts. Take precautions to ensure that you are not contaminated or exposed to the chemicals before attempting treatment. If you can determine the nature of the chemical that caused the burn, it will be helpful in determining the follow up treatment.

- Remove all contaminated clothing.
- Thoroughly rinse with copious amounts of clean lukewarm water. Rinse for at least 20 to 30 minutes or longer if possible.
- Seek professional medical attention as soon as possible, regardless of the apparent severity of the burn.

**Electrical burns**-These usually stem from electrical shock. Before approaching the patient, be certain that no further risk of injury is present. If you know the patient is still in contact with the electrical source and you know it is low voltage, you can move the wire or the patient to a safe position with a dry pole or rope. If the wire is of unknown or high voltage, get professional help to shut off the current or move the wire. Attempting to do so yourself will likely result in an increase in the body count for this incident. Don’t do it.

- As soon as it is safe to do so, check the ABCs and continue to monitor them. Patients with electrical burns often suffer cardiac or respiratory arrest.
- If there are evident burns, cover them loosely with sterile dressings.
- Seek professional help in treating the burns. Do NOT apply burn creams or ointments.

**Thermal burns**-These range from mild sunburn to the severe burns associated with open flames and heated metal. Thermal burns are categorized by degree. Appropriate treatment is keyed to the severity of the burn.

- **First-degree burns**-Symptoms are minor swelling and redness of the affected area.
  - Apply cool running water or wet compresses as soon as possible, continuing until the pain subsides.
  - Leave the burned area exposed. Do NOT apply ointments or salves. If pain recurs, reapply cold water.
- **Second-degree burns** - Symptoms are definite redness of the affected area, swelling, and blistering.
  - Treat as above for first degree burns for 15 to 30 minutes, preferably using sterile water.
  - Cover with a dry, sterile bandage.
  - Elevate the burned area, and treat the patient for traumatic shock.
  - Seek professional help.

- **Third-degree burns** - Typically, these are areas of deeper burning, surrounded by areas that display first and second degree burn characteristics.
  - Charring or a leathery appearance are also common.
  - Check the ABCs and continue to monitor them.
  - Treat for traumatic shock.
  - Cover the burned area with a sterile, nonadhesive dressing.
  - Elevate the burned area.
  - Immediately seek professional help.

*Fractures (broken bones)*

Usually, the patient will know if they have broken a bone. The symptoms are bruising around the fracture site, localized pain, deformity, and swelling. In treating a fracture, the objective is immobilization of the ends of the broken bone. Immobilize any fracture before moving the patient. This is especially important in the case of known or suspected spinal injury. When splinting a fracture, immobilize the adjacent joints as well as the fracture site. After splinting is completed and on a continuing basis until professionally treated, check circulation in the affected extremities. In the case of an open fracture, you will most likely need to control the bleeding using pressure points instead of direct pressure. Monitor the patient for the onset of traumatic shock symptoms. Treat for shock routinely in fractures of major bones and open fractures (when the bone breaks the surface of the skin). Get medical attention for open fractures.

*Frostbite*

Frostbitten tissue will feel cold to your touch, and either numb or painful to the patient. In extreme cases, the tissue will turn white and harden. Do not attempt to thaw frozen tissue until you can ensure it will not be immediately refrozen. It is better to delay treatment a few hours than to refreeze previously.
frozen tissue. To treat, gently warm the affected areas in a heated space, using lukewarm water where it is possible to immerse the affected area. Give the patient warm fluids and be alert to signs of shock. Rewarming that is too rapid will cause circulatory problems and possibly worsen the tissue damage. If the tissue blisters, avoid breaking the blisters and cover the affected area with a dry gauze bandage. Prevent injured fingers, toes, etc., from rubbing against each other by placing gauze pads between them. Seek medical attention for all but mild cases, as there is risk of septicemia and gangrene in more severe cases.

**Heat Exhaustion**
The patient usually sweats profusely, feels clammy to the touch, may complain of a headache or nausea, and may be disoriented and feel weak. If you suspect heat exhaustion but the patient is not sweating, see **Heat Stroke**, below. Get the patient out of the direct sun and cool them down by applying cold compresses and fanning. If they are conscious, give ORS and water, or plain water. If recovery isn’t fairly immediate upon treatment, seek medical attention.

**Heat Stroke**
The patient will have hot, dry skin and a temperature well above normal. *This situation is life threatening and must be treated immediately and aggressively.* In more advanced cases, the patient will lose consciousness and may convulse. Get the patient out of the sun and into a cool space. Remove their clothing and immerse them in cold (NOT icy) water until the onset of shivering. Seek medical attention. You must immediately lower the body temperature or it is quite likely that the patient will die.

**Hypothermia**
The patient will shiver in the early stages of hypothermia, but once the body’s core temperature goes below about 92 degrees, they may not. They will be uncoordinated and may demonstrate mental confusion, slurred speech, and irrational behavior. Merely bringing the patient into a warm space will not reverse severe cases. Remove any wet or constricting clothing, place the patient in a prewarmed bed or sleeping bag, and add water bottles of warm (NOT hot) water around the torso. If warm water is not available, use one or more warm, dry rescuers in the sleeping bag or bed to provide heat.
If the patient is sufficiently conscious to protect their airway, give them warm (100-115°F) fluids such as lemonade or Tang. This provides readily absorbed fuel (sugar) and a means to provide heat to the body core. Do NOT give coffee, tea, other stimulants, or any form of alcohol. The patient has lost the ability to produce sufficient heat and heat must be provided externally. While this is a “cold” injury, it is most common at temperatures above freezing and in wet, windy conditions.
L. Disaster Logistics
L. DISASTER LOGISTICS

L.1. Introduction (p. 1)
L.2. Logistics Overview (p.4)
L.3. Logistics Assessment Checklist (p.8)

L.1. Introduction

Often it is not realised that logistics is one of the largest and most complex elements of relief operations. There are a number of different types of logistics programmes, but they all have some common elements, and they need a systematic and professional approach. The ability to deliver the right supplies and the right amount, where and when they are needed and in a good condition, is a prerequisite for an effective emergency operation. The vital role of logistical support must not be overlooked in the initial planning, and a logistics specialist may be required on assessment missions. In many circumstances it is vital to use logistics experts. In the UN System, WFP is normally responsible for coordinating logistics in a humanitarian operation.

A whole range of logistical activities will usually be improvised at the local level during emergencies. These are often the most effective and national and international logistics should support and reinforce such local responses. The logistical responses in an emergency can be divided into providing for limited needs (such as providing critical medical items, communications equipment, repair items for water supply, sanitation, electrical power etc.) and moving bulk commodities (such as food and shelter or even people themselves). In their own rights, each of the two above can be equally important and both require good and effective planning, the first being the one that can be planned in detail at all levels. Apart from the important fact that relief logistics are hampered by usually having to be organised quickly, it is important to bear in mind that there are a number of other factors that pose constraints on logistics, such as pre-existing logistics infrastructure, political factors, the damage caused by the disaster, and sometimes the security environment.
Planning Logistics Programmes.

Planning and anticipation are the cornerstones of good logistics, and must be based on the knowledge of, among other things, geological, technical, political and physical aspects. It is important to establish an implementation and operations plan, with the first describing the tasks necessary to build the system, including the linkages, the sequence, the resources involved, and how progress is measured. The second, the operations plan, must set goals and responsibilities for relief deliveries, as well as proposing schedules to meet goals, and describing how the control system will operate. As logistics is part of an on-going relief operation, any logistics planning must be coordinated with plans in other sectors of the relief operation. It is also important to take into account that there may be breakdowns for various reasons, and plans must take this into account as well as being as flexible as possible.

Any logistics planning must also contain information and control systems, since accountability and monitoring of performance against realistic and continually assessed standards are important to the success of the operation and to the donors. To achieve this, procedures must be established for recording and reporting on the quantity, location and condition of commodities, where and when they will move next, and who is responsible for them at each stage. This requires a set of requisition forms, waybills, stock records, and reporting formats.

Structure of Relief Logistics.

A typical relief logistics structure starts at the points of origin (e.g. producing or donor countries), to one or more ports of entry (this can be both land, sea or airports), and one or more primary warehouses (near the port of entry), through to forward warehouses (for holding), and lastly to terminal storage points from which the relief goods are transferred to places of distribution to the beneficiaries. As a rule, the further you get in this logistics flow the smaller the used vehicles will be. The transportation means will usually start with ships, trains or aircraft, through big trucks with trailers or semi-trailers, to smaller trucks or even smaller four-by-four vehicles.
For a full-blown logistics operation the following facilities will be needed: offices and administrative equipment, warehouses at various levels, fuel and spares stores, workshops, vehicle parks, vehicles for management staff, fleets of trucks, special vehicles such as cranes, tankers and cargo-handling machines, communications equipment, and accommodations. The resources for a logistics operation will usually come from a variety of organisations; from one's own organisation, from the national authorities, from relief organisations, or from the private sector.

A large part of the logistics structure may very well be an already existing, loose and multi-organisational structure that was built up in the very first phase of the emergency. The looseness can result in the loss of commodities, as the structure will be built up by improvised means. It is therefore important • if you are among the first on-site • to take this into account and try not to build a loose structure, or • if you arrive later in the emergency • to take steps to organise the operation in a more tight and accountable manner.

Distribution
Distribution to individuals and families is first of all very different from the rest of the logistics chain, and secondly it creates the biggest problems of diversion of relief aid. The effectiveness of the distribution depends on how recipients are chosen and identified. The person or persons in charge of this should always take into account the complexity and highly political aspects which it entails. Organisations, with the task of distribution, must have extensive experience in this field as well as being politically independent.

The UN.
The responsible UN representatives (UNDMT, WFP, UNHCR or others) may well be in the process of, or have already established a logistics structure normally led by WFP in the early stages of an emergency. This will usually be to assist the government in their logistics efforts. The UN Resident/Humanitarian Coordinator should be prepared to designate a transport/logistics support group, responsible for port and airport clearance, commodity tracking and scheduling, local procurement of goods and equipment,
vehicle allocation, management and maintenance, driver support and payment, and storage.

External procurement procedures will usually be handled by the relevant agencies, while procedures in-country should be laid down by the relevant UN organisations before emergencies. It is important that all staff are familiar with the ordering system, and that cash handling is systematised in an operational fashion, that does not lay unnecessary constraints on operational aspects. In-country UN-personnel (UNDMT, WFP, UNICEF, UNHCR etc.) will normally be familiar with the local customs procedures and will be able to help with these.

**National Authorities**

As in other areas of relief work, it is vital that there is a close relationship with the national authorities when carrying out logistical operations. The following have proved to be central in the relationship with governments and the effectiveness of logistical operations:

- Agreement over the form and content of the master commodity management plan.
- Agreement on the agency’s authority to control commodity movement and distribution.
- Agreement on setting up communications networks (e.g. radio, telex, and satellite).
- Arrangements for travel to and in restricted areas.
- A public commitment to the security of agency staff, and action to be taken in the event of specific incidents.
- Use of agency resources in support of the authorities in the event of specific emergencies.
- Duty-free/ taxation exempt status for all equipment and consumables.
- Favourable foreign exchange rates.
- Early agreement on the strategy for phase over of the operation to national authorities.

**L.2. Logistics Overview**

*Emergency Logistics.*

Emergency logistics is a “systems exercise” and requires:
- Delivery of the appropriate supplies in good condition, when and where they are needed
- A wide range of transport, often improvised at the local level
- Limited, rapid, and specific deliveries from outside the area
- A system of prioritising various relief inputs
- Storing, staging, and moving bulk commodities
- Moving people
- Possible military involvement in logistics support (especially in cases of civil conflict).

Main factors in the operating environment which shape the response are:
- Capacity of the infrastructure
- Politics of the situation
- Civil conflict in the area of operations.

Effective planning for logistics programmes requires both implementation and operations plans as well as information and control systems.

International involvement in logistics operations varies greatly from situation to situation. However, some or all of the following usually comprise the responders, e.g. UNDP, DHA, WFP, UNHCR, UNICEF, WHO, ICRC, IFRC, NGOs, and increasingly, the military.

**Structure and Organisation of Emergency Logistics.**

The structure and organisation of logistics is based on the supply chain. Components of this chain are the following:
- Port of entry
- Primary warehouse
- Forward warehouse
- Terminal storage point.

There must be support by adequate facilities and equipment to carry out the following functions:
- Management
- Central support
- Procurement
- Port clearance
- Warehouse/storage
- Transport
- Scheduling
- Communications
- Commodity control
- Distribution control.

Three types of organisational structures:
- Loose structures (multi-organisational structures quickly developed following a sudden emergency)
- Unitary structures (a structure controlled by a single unit with a single individual ultimately responsible)
- Governmental structures (e.g. transport and warehouse services provided by the government).

**Development Policy and Relief Logistics**
Emergency relief logistics and development policy matters are closely related. Planning for relief as well as recovery capacity will require:
- Upgrading private transport
- Protection of vital supplies
- Upgrading of essential transport routes
- Investment in storage and handling facilities
- Training programmes.

Large scale logistics operations have widespread social and economic impacts which should be considered from the start.

**Logistics Preparedness**
Logistical aspects should be covered in national preparedness plans and logistical operations should be trained. The better the preparedness the more effective the logistical response to an emergency. There are roles for both the UNDMT and the national authorities in establishing logistics preparedness.

Logistics planning requires a thorough analysis of infrastructure vulnerability.

A review of available strategic resources will include:
- Building an inventory
- Reviewing the means of transport
- Examining sites
- Determining the availability of spare parts
• Reviewing port and airport capacity
• Exploring other transport options.

Existing government emergency logistics plans and preparedness should also be reviewed.

Where required, local infrastructure and institutions should be actively strengthened as a preparedness measure by:
• Physical protection of key structures
• Protection of supply systems
• Ensuring availability of vehicles and staff
• Ensuring capacity at ports and airports
• Establishing financial preparedness.

Coordination structures and information systems should be in place in advance of any emergency. These will help in the coordination of:
• Emergency information systems
• International requests
• Tracking relief supplies and pledges.

**Specific Preparedness Tasks**

Administrative and equipment support should be provided for by the UN Resident/Humanitarian Coordinator through the establishment of an internal or shared logistics support group.

Basic support systems should be pre-packaged to the extent possible, including:
• Telecommunications systems
• Procurement procedures
• Customs arrangements
• Commodities packaging standards
• Security arrangements.

Controlling and monitoring systems should be designed in advance.

Materials, personnel, and plans for immediate response to sudden emergencies should be pre-arranged and should include:
• Assessment needs
• “Lifeline” support.
Relations with government must be close. All aspects of preparedness plans should be thoroughly discussed.

Transfer and termination of logistics operations must be planned for from the beginning.

### L.3. Logistics Assessment Checklist

If there is a need for the UNDAC team to carry out an assessment of logistics capacities, a checklist to assist in this task is given below:

1. **Airports**
   - Identify the airport being assessed by:
     - Name.
     - Designator.
     - Location.
     - Elevation.
   - Describe the current condition of facilities.
   - Ascertain whether the airport is fully operational. Daylight hours only?
   - Furnish information on usable runway lengths and location(s).
   - Determine whether taxiways, parking areas, and cargo handling areas are intact.
   - Establish whether runway and approach lights are operating.
   - Specify which navigational aids are operating.
   - Describe available communications facilities.
   - Determine whether the terminal building is operating.
   - Check the availability and cost of aviation fuel.
   - Find out if facilities exist for mandatory aircrew rest.
   - Explore whether the cargo handling area can be lit for night cargo operations.
   - Determine what cargo handling equipment is available, including fuel and operators:
     - Forklifts (number, capacity).
     - Scissors lift (capacity).
     - Cargo dollies (number).
     - Trucks with drivers and laborers for hand unloading
- Determine what start-up equipment is available, including fuel and operators.
- Describe maintenance operations (facilities, personnel, hours).
- Outline what storage is available:
  - Covered?
  - At the airport? Off airport? How far?
  - Capacity and suitability for storage of foods or other perishables.

2. Civil Aviation
- Find out whether arrangements can be made for prompt overflight and landing clearances.
- Ascertain that the air controller service is functioning.
- Specify working hours for airport personnel.
- Explore having “no-objections” fees or “royalty” fees waived or paid locally.
- Find out if arrangements can be made to work around the clock, including customs.
- Identify personnel to tally and document cargo as it is received and transshipped.
- Ascertain that the host government will accept deliveries by means of military as well as civil aircraft.
- Describe security arrangements.
- Determine what repairs and auxiliary equipment would be needed to increase airport capacity. How soon can local authorities be expected to restore service?
- Determine if there are any local air carriers, their availability, and their rates.

3. Alternative Aircraft
- Identify any usable airports or suitable helicopter landing sites in the disaster zone.
- Determine the local availability and cost of helicopters and/or fixed wing aircraft.
- Estimate their capacity.
- Identify the owners/agents.
- Determine the availability and cost of fuel.

4. Seaports
- Identify the port being assessed by:
  - Name and location.
- Current description of the condition of the facilities.
- Whether the port is fully operational. Daylight hours only?
- Security fences/facilities.
- Percentage of port losses reported.
- Collection for port losses possible?

- Determine whether the disaster has altered any of the following physical characteristics of the port:
  - Depth of approach channels.
  - Harbor.
  - Turning basin.
  - **Alongside** piers/wharves.
  - Availability of lighters.

- Determine whether the disaster has blocked or damaged port facilities:
  - Locks.
  - Canals.
  - Piers/wharfs.
  - Sheds.
  - Bridges.
  - Water/fuel storage facilities.
  - Communications facilities.
  - Customs facilities.

- Describe the berths:
  - Number.
  - Length.
  - Draft alongside (high tide and low tide).
  - Served by rail? Road? Sheds? Lighters only?
  - Availability.
  - Check the availability and cost of fuel.

- Determine what cargo handling equipment is available, including condition, fuel, and operators.
  - Heavy lift cranes (number, capacity).
  - Container and pallet handling (with port equipment? with ship’s gear only?).

- Outline what storage is available:
  - Covered?
  - Hardstand space?
  - Capacity?
  - Quality?
  - Security?
- Find out if pilots, tugs, and line handlers are available.
- Specify the working hours for the port.
- Specify the working hours for customs.
- Determine whether arrangements can be made with the port and host-country authorities to obtain priority berthing for vessels delivering disaster relief shipments.
- Identify an adequate number of personnel to tally and document cargo as it is received and transshipped.
- Check the history of turnover time. What effect has the disaster had on turnover time?
- Determine what repairs and/or auxiliary equipment would be needed to increase the port’s capacity. How soon can local authorities be expected to restore service?

5. Transfer Points
- Identify transfer points by location.
- Determine whether surface transportation for cargo is available from airports and seaports:
  - Road?
  - Railroad?
  - Canal/river?
- Estimate the capacity of transfer points, including handling.
- Outline what storage is available.
- Describe security arrangements.
- Identify an adequate number of personnel to receive and document cargo for transshipment.

6. Trucking
- Describe damage to the road network as it relates to the possibility of delivering relief supplies by truck.
- Indicate any restrictions, such as weight, width, length, or height limitations at bridges, tunnels, etc.
- Determine whether it is possible to bypass damaged sections of the road network and what weight restrictions would apply.
- Determine whether containers can be moved inland.
  - 20-foot or 40-foot container sizes?
  - To the disaster site or to a transfer point?
- Check the availability and cost of trucks owned by the government of the affected country.
- Check the availability and cost of UN/PVO/NGO/IO-owned or operated vehicles.
• Check the availability and cost of commercial vehicles.
• Determine the types, sizes, and number of commercial vehicles available.
• Judge whether the relief program could or should contract for any of the above, trucks. What would be the freight rates per ton? What about collection for losses?
• Ascertain that maintenance facilities and spare parts are available.
• Outline measures to provide for security of cargo in transit.

7. Railroads
• Identify and locate any railroads in the disaster-stricken area. Assess their current condition.
• Describe any damage to the electrical power system.
• Identify any interdictions--damaged bridges and tracks, fallen trees, etc.
• Judge the reliability of the rail system.
• Determine whether cars can be made available for relief shipments on a priority basis.
• Determine the capacity and cost of rail shipments.
• Outline security measures to protect cargo in transit.

8. Warehousing
• Identify undamaged or damaged but usable warehouses located in reasonable proximity to the disaster site.
• Determine the capacity of these warehouses.
• Determine their availability over a specific period of time.
• Specify whether the warehouses are government, UN/PVO/NGO/IO, or privately owned.
• Determine whether they are staffed or not.
• Determine the cost per square meter.
• Assess the adequacy of the warehouses' construction:
  • Ventilation.
  • Lighting.
  • Hard floor.
  • Fireproofing.
  • Loading docks.
  • Condition of roof (check during day).
• Describe loading/unloading equipment that is available:
  • Pallets.
  • Forklifts and fuel for them.
• Ascertain that adequate security exists:
  - Perimeter fence.
  - Lighting.
  - Guards.
• Determine whether any refrigeration is available.
• Determine whether sorting and repackaging facilities exist.
• Determine whether fumigation is necessary and if it is available for food, medicines, etc.
• If assessing a functioning warehouse, determine:
  - Accounting and record keeping procedures.
  - Bin/stock cards on piles (they must match the warehouse register.
  - Physical inventory checks at random intervals.
  - Use of waybills.
  - Stacking methods.
  - Spacing system between rows.
  - Cleanliness.
  - Commodity handling system.
  - Reconstitution of damaged goods.
  - Prompt disposal of damaged goods.
  - First in/first out system.
M. Climate and Terrain
M. CLIMATE AND TERRAIN

M.1. Introduction (p. 2)
M.2. Climate and Terrain Zones (p.2)
M.3. Polar Regions (p.3)
  M.3.1. Travel (p. 4)
  M.3.2. Navigation (p.4)
  M.3.3. Clothing (p. 5)
  M.3.4. Footwear (p.5)
  M.3.5. Shelter (p.5)
  M.3.6. Fire (p.6)
  M.3.7. Water (p.6)
  M.3.8. Arctic Health (p.6)
M.4. High Altitude Regions (p.7)
  M.4.1. General (p.7)
  M.4.2. Effects of High Altitude (p.7)
  M.4.3. Effects of Low temperatures at High Altitude (p. 10)
  M.4.4. Operational Imperatives (p. 11)
M.5. Tropical Regions (p. 11)
  M.5.1. Shelter (p.13)
  M.5.2. Fire (p. 13)
  M.5.3. Food (p. 13)
  M.5.4. Dangers (p. 14)
  M.5.5. Travel in Jungles (p. 15)
  M.5.6. Navigation in Jungles (p. 16)
  M.5.7. Health and Sanitation (p.18)
M.6. Desert Regions (p. 19)
  M.6.1. Desert Conditions (p. 19)
  M.6.2. Water (p. 21)
  M.6.3. Shelter and Fire (p. 21)
  M.6.4. Clothing (p. 22)
  M.6.5. Food (p.23)
  M.6.6. Health (p.23)
  M.6.7. Don’ts while driving in the Desert (p.24)
M.1. Introduction

This chapter cannot provide a world geography, it can only summarise types of climate and terrain. It is vital to research conditions in areas the UNDAC team may operate in, but a knowledge of climate zones will help if accident throws you into unfamiliar territory.

Temperate climates cover much of the globe, and offer the be& chances for functioning without special skills or knowledge. These territories are also the most heavily urbanised. Heavy winter conditions may call for polar skills.

M.2. Climate and Terrain Zones

Polar Regions: Arctic, Antarctic, northern territories of Alaska, Canada, Greenland, Iceland, Scandinavia and the former USSR, but cold weather skills may be needed at high altitudes everywhere.

Tundra: Treeless zone south of the polar cap. The subsoil is permanently frozen and vegetation stunted.

Norther Coniferous Forest: Up to 1300 km (800 miles) deep, lies between arctic tundra and temperate lands. Winters are long and severe. Trees and plants flourish along the great rivers that flow to the Arctic Ocean. Game, ranging from elk and bear to squirrels and birds, is plentiful. Melted snow creates swamps in the brief summer. Fallen trees and dense growth make the going difficult and mosquitoes can be a nuisance. Movement is easier in winter. Ravel along the rivers, where fishing is good, making a raft from dead fall.

Deciduous Forest: Oak, beech, maple and hickory are the main species in America; oak, beech, chestnut and lime, in Eurasia. The rich soil supports many plants. Survival is easy, except in very high altitudes where tundra or snowfield conditions apply.

Temperate Grassland: Found in central continental areas of
North America and Eurasia. Hot summers, cold winters and moderate rainfall have made these the great food producing areas.

**Mediterranean Regions:** Lands bordering the Mediterranean are semi-arid, with long hot summers and short dry winters. Trees are few, water is scarce.

**Tropical Jungle:** Equatorial rain jungle, subtropical rain forest and montane forest all feature high rainfall and rugged mountains, which drain into large, swift-flowing rivers, with coastal and low-lying regions as swamp land.

**Savannah:** Tropical grassland found in Australia, Venezuela, Colombia, Brazil and Africa. Grass grows up to 3 m (10 ft). Temperatures are high all year round. Water is scarce, but where it is found there will be lush vegetation and plenty of wildlife.

**Desert:** One-fifth if the earth’s land surface is desert, of which only small parts are sand; most is flat gravel cut by dried-up water courses (wadis). Very high temperatures occur by day, falling to below freezing at night. Survival is difficult.

**High Altitude Mountains** There are large portion of Central Asia and the Himalayan Region as well as mountain ranges in South America where there is significant habitation in high altitude mountainous areas i.e. over 10,000 feet. Functioning at these altitudes means normally taking into account low atmospheric pressure, extreme cold and strong winds. Such areas require special acclimatisation procedures.

**M.3. Polar Regions**

Winter temperatures are well below freezing and hurricane force winds can whip snow 30 m (100 ft) into the air. A 32 kmph (20 mph) wind brings a -14°C (5°F) thermometer reading down to an actual temperature of -34°C (-30°F). Days vary from total darkness mid-winter to 24-hor daylight midsummer.
M.3.1. Travel

- Establish shelter as near to the aircraft or vehicle as possible. Move only if rescue improbable. Cold dulls the mind Plan while you can still think clearly.
- Navigation is difficult in featureless terrain, and the going treacherous. Don't move in a blizzard. Sea ice turns to slush in summer and the tundra is boggy.
- Don't make shelter near water, the habitat of black fly, mosquito and deerfly. Cover skin, wear a net over the head and bum green wood to keep them at bay.

M.3.2. Navigation

- Compasses are unreliable near the Poles so be guided by the constellations and travel by night. By day use the shadow stick method.
- Do not use icebergs or distant landmarks to fix direction: floes move constantly, and relative positions change. If breaking ice forces you to another floe, leap from and to a spot at least 60 cm (2 ft) from the edge.
- Observe birds: in the thaw wildfowl fly to land; seabirds fly out to sea by day, returning at night.
- Clouds over open water, timber or snow-free ground appear black below; over sea ice and snowfields, white. New ice produces greyish reflections, mottled ones indicate pack ice or drifted snow.
- Follow rivers: travel downstream by raft or on ice except in N. Siberia where rivers flow north. On frozen rivers keep to edges and outer curve on bends. Where rivers joint follow the outside edge or take to outer bank. If river has many bends, take to land.
- **ICE-COLD WATER IS A KILLER.** Falling into icy water knocks the breath out of you. The body loses muscular control, consciousness fades, death follows in 15-20 minutes. RESIST! Take action. Move fas for land. Roll in snow to absorb
M.3.3. Clothing

Severe cold freezes exposed flesh in minutes. Cover every part of the body. Wear a drawstring hood; a fur trim prevents breath freezing on the face and injuring the skin. If clothing has no drawstring, tie sleeves above cuffs, tuck trousers in to prevent heat escaping. If you sweat, loosen collar or cuffs. Or remove a layer. Outer garments should be wind proof, but not waterproof, which could trap vapour inside. Animal skins are ideal. Under layers should trap air for insulation. Wool is best for inner garments. It does not absorb water and is warm even when damp. Cotton absorbs moisture and rapidly loses heat when wet.

M.3.4. Footwear

- Mukluks, waterproof canvas boots with rubber soles, are ideal. They should have an insulated liner.
- Wear 3 pairs of socks, graded in size to fit over each other and not wrinkle. To improvise footwear use layers of fabric. Canvas seat covers make good boots.
- **SNOW SHOES**: Skiing is fine for firm snow but snow shoes are best in soft snow. Lift each foot without angling it, keeping shoe as flat to the ground as possible.

M.3.5. Shelter

- Get out of the wind! Look for natural shelter to improve on, but avoid sites where a snowdrift, avalanche or rock fall might bury you. Avoid snow-laden trees (branches may fall) unless lower boughs are supported.
- Don’t block every hole against draughts. You must have ventilation, especially if your shelter has a fire.
C.O.L.D. The key to keeping WARM
Keep it Clean-Dirt and grease block air spaces!
Avoid Overheating-Ventilate!
Wear it Loose-Allow air to circulate!
Keep it Dry-Outside and inside!

M.3.6. Fire
Fuel sources are limited: driftwood, seal and bird
fat, fuel from wreckage in extreme cold drain oil
from sump before it congeals. Can be used solid if
drained on ground. High octane fuel can be left in
the tanks.
On the tundra, willow, birch scrub and juniper may
be found.
Casiope is a low, spreading heather like plant with
tiny leaves and white bell-shaped flowers. It
contains so much resin it burns when wet.

M.3.7. Water
In summer water is plentiful. Pond water may look
brown and taste brackish but vegetation growing in
it keeps it fresh. If in doubt, boil it.
In winter melt ice and snow. Do not eat crushed ice,
it can injure your mouth and cause further
dehydration. Thaw snow enough to mould into a
ball before sucking it.
Remember if you are already cold and tired, eating
snow will further chill your body.

M.3.8. Arctic Health
Frostbite, hypothermia and snow blindness are the
main hazards. Efforts to exclude draughts in
shelters can lead to lack of oxygen and carbon
monoxide poisoning.
Thinking can become sluggish. Keep alert and
active, but avoid fatigue and conserve energy for
useful tasks. Sleep as much as possible - you won’t freeze in your sleep unless you are so exhausted you cannot regenerate the heat you lose to the air.

Exercise fingers and toes to improve circulation.

- Take precautions against frostbite.
- Avoid spilling petrol on bare flesh it will freeze at once and damage the skin.
- Don’t put off defecation - this can cause constipation. Try to time it conveniently before leaving your shelter so you can take waste out with you.
- Snow glare can cause blindness. Protect the eyes with goggles or a strip of cloth or dark with narrow slits cut for eyes. Blacken underneath the eye with charcoal to reduce glare further.

M.4. High Altitude Regions

M.4.1. General

It is possible that UNDAC missions may take you to altitudes over 9000 feet. These are considered High Altitude Regions and special attention to your well being has to be paid in such areas.

M.4.2. Effects of High Altitude

In medical terms High Altitude is generally accepted to be heights above 9000 ft (2700 m), and the resultant medical conditions are associated with these altitudes. On the other hand, Extreme Altitude is regarded as those areas above 18000-49000 ft (5500-5800 m). While man has survived, and lived at extreme altitudes there is no successful and permanent acclimatisation for such altitudes. There is a possibility of UNDAC teams being required to operate in High Altitudes and so an understanding of the health parameters of such terrain is essential.

Insufficient oxygen in the rarefied air at High Altitude
imposes certain stresses on the human body. And to overcome those some identifiable physiological changes occur which, if successful, lead to satisfactory acclimatisation of the solder. Failure to do so could prove life threatening. Other than the cold and the rarefied atmosphere, other contributors to illnesses peculiar to High Altitude are low humidity, solar and ultraviolet radiation.

Although there is as yet no universal classification of High Altitude medical problems, experience at these heights allows a tentative listing. Should the process of acclimatisation be affected in any way, the illnesses could vary from the acute to the chronic:

- **Acute Mountain Sickness (AMS):** a throbbing frontal headache that is aggravated by exertion and particularly in the mornings is the commonest ailment. Other symptoms include malaise, lassitude, disinclination to work, loss of appetite, nausea vomiting, shortness of breath on exertion and disturbed sleep. If untreated this may progress to...

- **High Altitude Pulmonary Oedema (HAPO).** Caused primarily by rapid ascent, cold, re-entry and exertion, it is potentially life threatening. Beginning with a headache, there is body ache, cough, breathlessness on exertion which is progressive, non-anginal chest pain, anorexia, disturbed sleep, vomiting and giddiness. At times a fever may be the presenting symptom. In severe cases there may be associated symptoms of...

- **High Altitude Cerebral Oedema (HACO),** the most dreaded but also the least common of high altitude illnesses. The onset is with AMS, and the alteration of consciousness is the most important feature of HACO. Complaints of dimness of vision, dizziness, vomiting and which may progress to stupor and coma.

- **Pulmonary Arterial Hypertension of High Altitude:** The onset is usually with effort
intolerance, anginal chest pain, haemoptysis and swelling of the feet and face along with diminution in the urine output.

- Chronic Mountain Sickness is largely restricted to young or middle-aged men and particularly amongst smokers. And the early and dominant symptoms are referable to the central nervous system with headache, somnolence, loss of memory, dizziness, paraesthesias and neuropsychiatric symptoms. Others symptoms include effort intolerance. Bleeding manifestations and later also mild cardiac failure.

High altitude illness unrelated to acclimatisation

- High altitude Retinopathy: About a third to almost half of those exposed to extreme high altitudes are likely to be affected by retinal haemorrhages. While the exact cause is not known, there is an increase in retinal blood flow with vasodilatation. In addition, sudden surges in blood pressure on exertion my aggravate or precipitate retinal haemorrhage. It can be resolved spontaneously.

- Snow Blindness is less common than is believed and is caused by the exposure to ultraviolet radiation is relatively higher at these altitudes, as well as the increased reflection of such radiation from the snow surface.

- Hypothermia is diagnosed when the core body temperature falls below 35°C, and below 25°C it is lethal. Up to 33°C the onset is subtle and there is a decrease in shivering. As the core temperature falls further the individual becomes careless about his clothing leading to a vicious circle. The individual becomes in cooperative, memory is affected, there is somnolence leading tu stupor, coma and finally death.
Local Cold Injury includes

a) **Chill blains:** the non-freezing injury to the skin occurs at temperatures just above freezing. The affected part is red and causes intense irritation.

b) **Trench Foot:** This occurs after prolonged contact with moist cold such as water or mud at temperatures above freezing.

c) **Frost Bite:** The most serious of these injuries usually occurs at temperatures below freezing, and is caused by the freezing of extracellular fluid with the formation of ice crystals. This is aggravated by freezing of water in the cells and inhibition of enzyme systems. The onset is usually insidious with pain and numbness followed by loss of sensation. The severity of Frost Bite depends upon the duration of exposure and the temperature, and at its most serious can lead to the loss of limbs.

M.4.3. Effects of Low Temperatures

The summer temperatures at high altitudes varies from 10° C to minus 20° C the winter average temperature bracket is minus 15° C to minus 35° C. Sometimes, the temperatures fall as low as minus 55° C. This combined with wind chill factor, creates extreme sub zero polar effects and causes:

a) A large number of cold injury casualties. It is essential to have special extreme cold clothing and special shelters for such environment.

b) Failure of equipment like radios because of cold arrest. Special extreme winterised equipment is necessary.

c) Failure of ‘over-snow’ vehs due to frozen system. This require special shelters, maintenance routines and expert manning of such vehicles.

d) Inability of the available helicopters to be able to undertake mission till late in the mornings, because of inability of the ground technical crew to do pre-flight servicing.
M.4.4. Operational Imperatives

The following operational imperatives emerge in high altitudes:

a) **Survival.** The focus of all logistic support these altitudes has to be foremost on survival in the extreme harsh environment providing the proper clothing, high value rations and safe and comfortable shelters. The environmental casualties rate is very high.

b) **Psychological Motivation.** A person who understand the environment, prepares for it properly and deals with his men with a positive frame of mind, will survive and perform well in the environment. Very careful and positive psychological motivation is essential.

c) **Training.** For the special environment of high altitudes, pre-induction training is a must.

d) **Logistics.** A sound logistics plan to support the team committed in the environment is a must. It must integrate all logistics resources and provide for adequate safety margins, to provide for disruptions due to prolonged spells of bad weather and other environmental hazards like avalanches.

e) **Acclimatisation.** It is imperative for all personnel operating at high altitudes to acclimatise. There is no cure for high Altitude sicknesses such as pulmonary oedema except moving the person to below 10,000 feet.

f) **Logistics Air Support.** The lifeline and the tactical capability of the team is entirely dependent on logistics air support based on a mix of aircraft, and helicopters. Adequate level of this support has to be ensured.

MS. Tropical Regions

Everything in the jungle thrives, including disease and parasites. Even if saturated by perspiration, clothing affords protection from stings and bites. Except at high altitudes,
Equatorial and subtropical regions are characterised by high temperatures, heavy rainfall and oppressive humidity. Violent storms may occur towards the end of the summer. In choosing camp sites make sure you are above potential flooding.

**Equatorial rain forests:** Temperatures range from 30° C (86° F) to 20° C (68° F) at night. Jungle trees rise from buttress roots to 60 m (200 ft). In this primary jungle the canopy prevents light reaching the jungle floor. It is relatively cool, with little undergrowth to hamper movement, but visibility is limited. It is easy to lose a sense of direction and difficult for rescuers to spot you.

**Secondary jungle:** Along river banks and the fringes of the jungle sunlight does penetrate to the floor and growth is prolific. Undergrowth reaches heights of 3 m (10 ft) in a year. Moving is slow, hot work, hacking a way with a parang or machete.

**Sub-tropical rain forests:** Found within 10° of the Equator, these forests have a season of reduced rainfall, even drought, with monsoons coming in cycles. More deciduous trees grow here and undergrowth is dense.

**Mountain forests:** At altitudes above 1000 m (3000 ft). The Ruwenzori Range of Central Africa is typical: a crater-like landscape covered in moss between ice-capped peaks. Plant growth is sparse, trees stunted and distorted. Low branches make the going hard. Nights are cold, days hot and misty. Survival is difficult: make your way down the slopes to tropical rain forest.

**Saltwater swamps:** In coastal areas subject to tidal flooding, mangrove trees thrive, reaching heights of 12 m (40 ft). Their tangled roots are an obstacle above and below the waterline. Visibility is low and passage difficult. Sometimes channels are wide enough to raft, but generally progress is on foot. You won’t starve - fish, molluscs, aquatic animals and vegetation are plentiful - but it is a hostile environment with water leeches, cayman and crocodiles. Where river channels intersect the swamp you may be able to make a raft. If forced to stay in a swamp determine the high-tide level by the line of
salt and debris on the trees, and fit a raised bed above it. Cover yourself for protection against ants and mosquitoes. Build your fire on a platform using standing deadwood for fuel. Decay is rapid in a swamp - choose wood that is not rotten.

**Freshwater swamps:** Found in low-lying inland areas, their thorny undergrowth makes the going difficult and reduces visibility - but survival is easy and swamps are often dotted with islands so you won't be chest deep in water all the time. There are often navigable channels and raw materials available from which to build a raft.

**M.5.1. Shelter**

There are ample materials for building shelter in most tropical regions. Where temperatures are high and shelters exposed to the sun, make roofs in two layers with an airspace 20-30 cm (8-12 in) between to aid cooling. Double layers of cloth will help keep out rain if angled.

**M.5.2. Fire**

Everything is likely to be damp. Take standing dead wood, shave off the outside and use that to start your fire. Dry bamboo and termite nests make good tinder.

**M.5.3. Food**

A wide variety of fruits, roots and leaves are available. Banana, papaya, mango and figs are easily recognised, but you may find the wealth of tropical foods bewildering. A wide range of mammals, reptiles, birds and fish can be hunted, trapped and fished. Fish are easily digested, but in the tropics they spoil quickly. Clean thoroughly, discard entrails and eat as soon as possible. Do not preserve them by smoking or drying.
Fish in slow-moving water may be infested with tapeworms and other human parasites: boil for 20 minutes. Water itself may be infected with amoebas which causes dysentery: always boil

M.5.4. Dangers

INSECT ATTACK
Slashing your way through the jungle you may disturb bee, wasp or hornet nests. Any bare skin is vulnerable to attack. Run! Don’t drop anything - you won’t want to go back for it. Goggles will protect the eyes. Insects, desperate for salt, will make for the sweaty parts of your body. Protect armpits and groin against their painful stings.

MOSQUITO PROTECTION
Wear a net of T-shirt over your head, especially at dawn and dusk. Better, take a strip of cloth 45 cm (18 in) deep and long enough to tie round your head; cut it to make a fringe of vertical strips hanging from a band that will dangle wound your face and over your neck. Keep covered at night, including your hands. Oil, fat or mud spread on hands and face may help repel insects. Use bamboo or a sapling to support a tent of clothing and large leaves rigged over your upper half. A smoky fire will help keep insects at bay.

COVER YOUR FEET
Good footwear and protection for the legs is essential. Wrap bark or cloth round legs and tie it to make puttees as a defence against leeches and centipedes.

BEWARE HAIRY CATERPILLARS
Always brush off in the direction they are travelling or small irritant hairs may stay in your skin can cause an itchy rash, which may fester in the heat.
BEWARE INVADERS
Keep clothing and footwear off the ground so that scorpions, snakes and spiders don’t creep in. Shake out clothes and check boots before putting them on; be wary when putting hands in pockets. Take care on waking: centipedes nestle for warmth in the more private body regions. Protect armpits and groin against stinging insects attracted by sweat.

LEECHES
Their bite is messy but not painful. Left alone they drop off when they have their fill. Do not pull them off the head may come off leaving the jaws in the bite, which could turn septic. Remove with a dab of salt, alcohol or a burning cigarette end, ember or flame.

BEWARE THE CANDIRU
This minute, almost transparent Amazonian catfish, about 2.5 cm (1 in) long, is reported to be able to swim up the urethra of a person urinating in the water where it gets stuck by its dorsal spine. The chance of this happening is remote, but don’t take the risk. Cover your genitals and don’t urinate in the water.

RIVERS DANGERS
Rivers can be home to dangerous creatures such as piranhas, stingrays and electric eels. Look out for crocodiles or alligators and take care in handling catfish, which have sharp dorsal fins and spines on their gill covers.

M.5.5. Travel in Jungles
- Ground observation in the jungle areas varies according to the type of vegetation. In some types
of jungle, the forest canopy is so thick that it cuts off most of sunlight and ground observation is limited to approximately 20 metres. In the jungle with a tangle of secondary growth, ground observation may be limited to 5 metres or less. In other types of jungle, the visibility may vary from 15 to 20 metres to as much as 100 metres.

Observation will be greatly restricted during the monsoon period and winter months due to heavy rain and ground fog which may persist in the valleys for several hours after sunrise.

The heights of ridges and hill offer slightly improved observation as the vegetation towards the heights is thinner than that found in the valleys.

Movement in the jungle, both on foot and in mechanical transport, is a slow and laborious process owing to the slush caused by the rains and the difficulty of leaving the track.

Movement on foot particularly poses a number of difficult problems. The route has to be carefully selected to avoid unnecessary climbs and descents and hacking through thick jungle foliage. The traveller is also subjected to the discomforts of high humidity specially when moving through cane and bamboo forests.

There is a tendency to under estimate the time taken to move between two points in the jungle. Since conditions of climate and terrain can cause wide variations in the time taken to complete a move, all moves in the jungle should be planned on the basis of time taken to move between the two points, rather than the distance between them.

M.5.6. Navigation in Jungles

Jungle navigation is not easy, but the difficulties are often overstated. Provided methodical map study and planning are undertaken, followed by careful use of the map, compass and protractor.

The elements of navigation are keeping direction and knowing the distance travelled. The ability to use the following aids as a collective means to
jungle navigation can only be gained from constant practice:

- **A watch.** Every jungle navigator must have a reliable, though, waterproof watch set to the correct time.

- **Maps** These may be reasonably accurate as regards features, eg, hills and streams. It should be borne in mind however, that most maps are produced from air photos which, when taken over areas of jungle, show the form of the tree canopy and not the ground formation. Therefore, small features such as cliffs and waterfalls often exist on the ground which are not shown on the map. Maps are often inaccurate as regards cultivation jungle boundaries, roads, tracks, villages and clearings because these features are subject to continual change. In some areas magnetic anomalies exist which are caused by minerals in the ground.

- **Air photographs** A valuable supplement to maps, and often the only means of bringing a map up to date, or of obtaining cover of unmapped areas. They are, however, of very limited use in jungle covered areas.

- **Compass** The compass is the most accurate means of maintaining direction. In some areas magnetic variation may be present due to the presence of minerals. Relay on the compass, avoid the temptation to use one’s sense of direction. No party should attempt to move in the jungle of direction. No party should attempt to move in the jungle without a compass, unless this is unavoidable and in an emergency.

- Distance travelled will vary with the physical condition, and will of the individual. The normal error is to over estimate the distance travelled, but time is a more practical measure of the going. The following may be regarded as a rough guide to the distance covered in one hour:

  a) through primary jungle 1000 to 2000 metres
M.5.7. Health and Sanitation

- In the jungle sanitation and personal hygiene are more important. Intestinal diseases are diseases usually transmitted by contaminated food or impure water. Contamination of the food may be caused by use of dirty utensils, flies or other such insects and food handlers.

- Water borne diseases may be caused by impure water which is used for drinking, cooking and bathing purposes. Examples of this type of disease are dysentery, cholera and so on.

- Insects and animal borne diseases are transmitted from man to man directly through bites of blood sucking insects like mosquitoes and tick. Disease of this type are malaria, yellow fever, filariasis and typhus.

- Fungus diseases merit special attention because the climate in the jungle favours the growth of microscopic plants called fungi which produce these diseases. Sweat soaked skin invites attack by fungus. The principal fungus diseases are ring worm and athletes foot.

- Every person is responsible for his own cleanliness and that of his surroundings. Frequent inspections of the body must be carried out for the lice or tick bites. Clothes impregnated with DBP are very effective against mite bites and reduce the incidence of typhus. All scratches and wounds must be attended to at an early stage. Excessive heat and humidity creates moist sweaty conditions because of which the scratches are likely to become septic. The body should be protected against insect bites by use of insect repellants or mosquito nets. Whenever

b) through primary jungle 700 to 1000 metres (cross grain)
c) through secondary jungle 500 to 800 metres.
d) through swamps 100 to 200 metres.
e) through tall grass 500 to 1000 metres.
possible, the body should be bathed and exposed to sun and air. The clothes should be loose fitting, clean and dry.

- When possible, the boots should be removed and the feet massaged and dusted with foot powder. Boots should be removed before sleeping.

M.6. Desert Regions

M.6.1. Desert conditions

The desert is a vast arid waste land with little vegetation and sparse population. It is generally featureless but it contains sand dunes, rocky outcrops and clay plains. The desert, therefore is not impossible and difficult except in stretches. The going is generally good over almost all types of terrain. This is particularly true when using tracked or half-tracked vehicles. Wheeled vehicles or four-wheel drive category can also be driven over most desert terrain provided the drivers are well trained. However, areas of soft sand and these areas which collect water due to rainfall become impassable to traffic for certain duration of time.

Sand dunes can be anything from 70 to 100 metres in height and 3 to 5 kilometres in length. Distance between dunes may vary from 400 to 1200 metres. The steep portion of a sand dune is normally referred to as its knuckle and the gradual portion as its fingers. It is essential that the configuration of sand dunes be clearly understood. Sand dunes areas provide the greatest obstacles to mobility.

**Rocky Outcrops.** These outcrops can be from 50 to 100 metres in height and 3 to 5 kilometres in length. Their ingredients are generally weathered rocks of sedimentary nature and hard gravel. This material is the main item of road construction in the area. The going in these areas is generally good. Although digging in such areas is difficult due to the soil conditions, sangars can be constructed quite easily.

**Clay Plain.** These are open plains found in depressions due to the deposition of clay from the flow of rain water. The going
none at all, it may be in torrential downpours which create flash floods, before being quickly absorbed. Dust or sand storms reduce visibility. Protection is needed against sand entering every orifice.

M.6.2. Water

Water is vital. If you have it, ration it immediately. If you are stranded by mechanical failure during a desert crossing, you will have planned your route with an awareness of oases, wells and waterholes. Wells may require a container lowered on a line to reach water. Small waterholes in wadi (watercourse) bottoms are often seasonal. They are usually covered with a stone or brushwood.

Away from known waterholes, dig at the lowest point of the outside bend of a dry stream bed or the lowest point between dunes. Do not dig in the heat of day - you'll sweat liquid you may not be able to replace. Always balance fluid loss against possible gain.

Life expectancy depends on the water available and your ability to minimise perspiration. Without water you will last 2 days at 48°C (120°F) if you rest in the shade and do nothing. If you must walk to safety the distance you cover will relate to the water available. With none, a temperature of 48°C, walking at night and resting by day, you could cover 40 km (25 miles). Walking by day you would cover 8 km (5 miles) before collapse. At 48°C with 2 litres (4 pints) of water you might cover 56 km (35 miles) and last 3 days.

Drink 1.5 litres for every 2 lost (3:4 pints). Less fluid will not result in less sweat. If more fluid is drunk than needed it will be excreted and used to no purpose.

M.6.3. Shelter and Fire

Find immediate shade. In the evening cool build a shelter. Do not stay in a metal vehicle or plane. Use it to support a shelter or make use of the shadow beneath an aircraft’s wing. Pile
rocks to make a windbreak and make use of wadi walls (except when flash floods seem likely). Use the double-layer technique to aid cooling. If using fabrics, leave bottom edges lifted and loose by day to increase air circulation. Weight them down with rocks at night. Avoid lying directly on hot ground: air can circulate under a raised bed.

You will need fire for warmth at night and for boiling water. Smoke will be useful for signalling. Desert scrub is dry and burns easily. If the land is totally barren, vehicle fuel and oil mixed with sand in a container will burn. Animal dung is also flammable.

M.6.4. Clothing

Clothing helps reduce fluid loss and gives protection from sunburn and insect bites, as well as warmth at night. Clothes should be light and loose fitting, with air space between the garments and the body. Copy the flowing, layered garments of the Arab world. Trousers give more protection from insects and guard against serious sunburn on the legs. Cover the head and feet.

Keep covered! Apart from risking severe sunburn, an uncovered body will lose sweat by evaporation. Keep clothing loose with a layer of insulating air. Sweating will then cool you more efficiently.

Headgear: A hat with a piece of cloth attached to the back will protect but, better still, copy arab head-wear: make a handkerchief into a wad on top of the head, fold diagonally a piece of cloth about 120 cm (4 ft) square, place it over the handkerchief, long edge forward, and secure with a cord tied round head. This traps pockets of air, and protects from sand. Wrap round the face for warmth at night.

Eye protection: Sunglasses may not be enough. Soot from the fire smeared below the eyes will reduce glare. Shield eyes from glare and windborne sand with a strip of material. Cut
narrow slits to see through.

**Footwear:** Do not walk barefoot until your feet have hardened or they will burn and blister. Do not leave tops of feet exposed. **Puttees** keep sand out of boots; wrap them round the feet over open sandals.

**M.6.5. Food**

Heat causes loss of appetite - don’t force yourself to eat. **Protein** foods increase metabolic heat and water loss. If water is scarce, keep eating to a minimum and try to eat only moisture-containing foods, e.g. fruit and vegetables. Food spoils quickly in the desert. Once open, eat stores at once or keep covered and shaded.

Vegetation is scarce, but deserts often support a variety of animal life. Insects, reptiles, rodents and some small mammals burrow or hide during the day. Large mammals are an indication that there is water close at hand.

**M.6.6. Health**

Most desert illnesses are caused by excessive exposure to sun and heat. They can be avoided by keeping head and body covered and remaining in the shade.

- Constipation and pain in passing urine are common and salt deficiency can lead to cramps.

- Heavy sweating coupled with garments that rub can block the sweat glands and result in an uncomfortable skin irritation known as prickly heat.

- Heat cramps, leading to heat exhaustion, heat stroke and serious sunburn are all dangers. A gradual increase in activity and daily exposure to the sun will build up a **defence**, provided that plenty of drinking water is available.

- Keep moist areas of the body - crevices of armpits,
groin and toes - clean and dry to prevent infection.

**DESSERT SORES** Even the most trivial would will become infected if not dealt with straight away. Pulled out thorns as soon as possible. Where the skin is broken a large and painful sore may develop which could prevent walking. Bandage all cuts with clean dressings and use what medical aids are available.

**M.6.7. Don’ts while Driving in the Desert**

a) Don’t break the continuity of motion.
b) Don’t accelerate when wheels have lost contact with the ground.
c) Don’t drive in low gear unnecessarily.
d) Don’t allow engines to overheat.
e) Don’t apply brakes abruptly in soft sand but allow the vehicle to roll to a halt.
f) Don’t overtake in sandy patches.
g) Don’t follow the tracks of vehicles in front in sandy patches.
h) Don’t turn sharply in soft sand.
i) Don’t drive too closely on the tail of the vehicle in front.
j) Don’t drive right up to the vehicle in front which is stuck or you will get stuck yourself.
k) Don’t halt your vehicle while crossing a soft sandy patch.
l) Don’t overload your vehicle.
N. References
# N. REFERENCES

## N.1. Conversion

### Table to Metric System

<table>
<thead>
<tr>
<th>Metric to English</th>
<th>English to Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td></td>
</tr>
<tr>
<td>1 cm = 0.394 inches</td>
<td>1 inch = 2.54 cm</td>
</tr>
<tr>
<td>1 m = 39.4 inches</td>
<td>1 foot = 30.5 cm</td>
</tr>
<tr>
<td>1 ft = 3.28 feet</td>
<td>1 foot = 0.305 m</td>
</tr>
<tr>
<td>1 yard = 1.09 yards</td>
<td>1 yard = 0.914 m</td>
</tr>
<tr>
<td>1 mile = 0.621 miles</td>
<td>1 mile = 1.609 km</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td></td>
</tr>
<tr>
<td>1 g = 0.035 ounces</td>
<td>1 ounce = 28.3 g</td>
</tr>
<tr>
<td>1 kg = 2.2 pounds</td>
<td>1 pound = 454 g</td>
</tr>
<tr>
<td>1 tonne = 2200 pounds</td>
<td>1 pound = 0.454 kg</td>
</tr>
<tr>
<td>1 tonne = 0.984 tons</td>
<td>1 ton (US) = 1.02 tonnes</td>
</tr>
<tr>
<td><strong>Surface</strong></td>
<td></td>
</tr>
<tr>
<td>1 cm(^2) = 0.155 sq in</td>
<td>1 sq inch = 6.45 cm(^2)</td>
</tr>
<tr>
<td>1 m(^2) = 10.76 sq ft</td>
<td>1 sq ft = 929 cm(^2)</td>
</tr>
<tr>
<td>1 ft(^2) = 0.305 m(^2)</td>
<td>1 sq ft = 0.093 m(^2)</td>
</tr>
<tr>
<td>1 yard(^2) = 1.2 sq yd</td>
<td>1 sq yard = 0.836 m(^2)</td>
</tr>
<tr>
<td>1 acre = 4.047 ha</td>
<td>1 acre = 0.405 ha</td>
</tr>
<tr>
<td>1 ha = 0.836 m(^2)</td>
<td>1 sq mile = 2.59 km(^2)</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td></td>
</tr>
<tr>
<td>1 cm(^3) = 0.061 cu in</td>
<td>1 cu inch = 16.4 cm(^3)</td>
</tr>
<tr>
<td>1 m(^3) = 35.3 cu ft</td>
<td>1 cu ft = 0.028 m(^3)</td>
</tr>
<tr>
<td>1 ft(^3) = 0.028 m(^3)</td>
<td>1 cu yard = 0.765 m(^3)</td>
</tr>
<tr>
<td>1 yard(^3) = 1.31 cu yd</td>
<td>1 fl once = 28.4 ml</td>
</tr>
<tr>
<td>1 fl pt = 0.568 l</td>
<td>1 pint = 0.568 l</td>
</tr>
<tr>
<td>1 US gal = 3.785 l</td>
<td>1 UK gal = 4.55 l</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td></td>
</tr>
<tr>
<td>(Celsius (\times 1.8)) + 32 = Fahrenheit</td>
<td>(Fahrenheit (-32)) (\times 0.555) = Celsius</td>
</tr>
</tbody>
</table>
## Characteristics of Radio and Satellite Communications

<table>
<thead>
<tr>
<th>Type and Range</th>
<th>Equipment and Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>VHF/UR, three miles, line-of-sight</td>
<td>Hand-held or mobile units; antenna size and terrain have effect on range. Use in coastal coordination, personal security, and first-aid communications.</td>
</tr>
<tr>
<td>VHF/UR, with repeater, wider range</td>
<td>Same as above, but with a repeater station placed in the highest possible location.</td>
</tr>
<tr>
<td>HF (shortwave), regional to worldwide</td>
<td>Mobile stations (various size and base stations). Range depends on antenna used. Use for regional communications, 50-1,400 miles.</td>
</tr>
<tr>
<td>HF (shortwave/data), regional to worldwide</td>
<td>Base station includes modem, laptop computer, power supply, and antenna. Needs qualified operator. Data links with similar stations worldwide.</td>
</tr>
<tr>
<td>Standard A, worldwide satellite terminal</td>
<td>Terminal in a suitcase; with parabolic antenna. Accessories in a separate box of 60 pounds. Use for phone, fax, and e-mail.</td>
</tr>
<tr>
<td>Standard B, worldwide satellite terminal</td>
<td>Terminal in a suitcase; includes laptop computer, printer, and omnidirectional antenna. Built-in battery (4 hours standby). Use to send and receive e-mail and send fax, no phone.</td>
</tr>
<tr>
<td>Standard C, worldwide satellite terminal</td>
<td>Attache case with flat antenna in lid. Use for phone, fax, and e-mail. Requires separate laptop computer or fax machine.</td>
</tr>
</tbody>
</table>

Note: Satellite terminals listed here are INMARSAT.
<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Fuel Type</th>
<th>Cruising Speed (knots)</th>
<th>Runway Length (ft.)</th>
<th>Cargo Weight (lbs.)</th>
<th>Cargo Volume (cu. ft.)</th>
<th>Door Size (H x W in inches)</th>
<th>Pallet Size (H x W in inches)</th>
<th>Pallet Qty.</th>
<th>Container Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-5</td>
<td>Jet</td>
<td>423</td>
<td>7,700</td>
<td>130,000</td>
<td>13,000</td>
<td>150 x 228</td>
<td>88 x 108</td>
<td>36</td>
<td>open pallet</td>
</tr>
<tr>
<td>C-17</td>
<td>Jet</td>
<td>410</td>
<td>4,500</td>
<td>90,000</td>
<td>20,900</td>
<td>126 x 216</td>
<td>88 x 108</td>
<td>18</td>
<td>open pallet</td>
</tr>
<tr>
<td>C-131B</td>
<td>Jet</td>
<td>410</td>
<td>6,300</td>
<td>40,000</td>
<td>4,500</td>
<td>106 x 123</td>
<td>88 x 108</td>
<td>11</td>
<td>open pallet</td>
</tr>
<tr>
<td>C-130</td>
<td>Jet</td>
<td>280</td>
<td>3,000</td>
<td>25,000</td>
<td>2,000</td>
<td>108 x 123</td>
<td>88 x 108</td>
<td>6</td>
<td>all</td>
</tr>
<tr>
<td>Antonov 124</td>
<td>Jet</td>
<td>450</td>
<td>10,000</td>
<td>300,000</td>
<td>3</td>
<td>173 x 238</td>
<td>all</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Beach 18</td>
<td>Avgas</td>
<td>135</td>
<td>1,800</td>
<td>2,500</td>
<td>285</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>all</td>
</tr>
<tr>
<td>Beach 99</td>
<td>Jet</td>
<td>225</td>
<td>1,750</td>
<td>5,000</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>B-777/797</td>
<td>Avgas</td>
<td>220</td>
<td>5,000</td>
<td>32,000</td>
<td>n/a</td>
<td>173 x 162</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>B-707-320C</td>
<td>Jet</td>
<td>400</td>
<td>8,000</td>
<td>80,000</td>
<td>6,000</td>
<td>88 x 134</td>
<td>88 x 108 x 125</td>
<td>13</td>
<td>all</td>
</tr>
<tr>
<td>B-727-100</td>
<td>Jet</td>
<td>495</td>
<td>7,000</td>
<td>35,000</td>
<td>8,100</td>
<td>88 x 134</td>
<td>88 x 125</td>
<td>9</td>
<td>A, A-2</td>
</tr>
<tr>
<td>B-727-200</td>
<td>k t</td>
<td>495</td>
<td>8,300</td>
<td>55,000</td>
<td>8,100</td>
<td>120 x 134</td>
<td>88 x 125</td>
<td>30</td>
<td>A, A-2</td>
</tr>
<tr>
<td>B-747-400</td>
<td>k t</td>
<td>490</td>
<td>9,400</td>
<td>223,000</td>
<td>20,750</td>
<td>n/a</td>
<td>88 x 125</td>
<td>29</td>
<td>A, A-2</td>
</tr>
<tr>
<td>B-747-200</td>
<td>Jet</td>
<td>400</td>
<td>10,700</td>
<td>229,000</td>
<td>22,175</td>
<td>d a</td>
<td>88 x 125</td>
<td>37</td>
<td>A, A-2</td>
</tr>
<tr>
<td>Casa C-222</td>
<td>Jet</td>
<td>195</td>
<td>2,500</td>
<td>4,000</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Cessna 340 A</td>
<td>Jet</td>
<td>195</td>
<td>2,500</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>(Propjet)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cessna 414</td>
<td>Jet</td>
<td>200</td>
<td>2,400</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Aircraft Type</td>
<td>Engine Type</td>
<td>Speed (Kt)</td>
<td>Cruise Range (M)</td>
<td>Cargo Weight (Lb)</td>
<td>Cargo Volume (Cu Ft)</td>
<td>Door Size (In)</td>
<td>Pallet Size (In)</td>
<td>Container Types</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------</td>
<td>------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>----------------------</td>
<td>----------------</td>
<td>------------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>Cessna 421</td>
<td>Propeller</td>
<td>240</td>
<td>1,900</td>
<td>3,500</td>
<td>78 x 140</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>Cessna 208</td>
<td>Propeller</td>
<td>300</td>
<td>1,900</td>
<td>3,500</td>
<td>88 x 108/118</td>
<td>7</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>Cessna 338</td>
<td>Turboprop</td>
<td>310</td>
<td>2,000</td>
<td>4,500</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>Cessna 418</td>
<td>Turboprop</td>
<td>275</td>
<td>1,900</td>
<td>3,500</td>
<td>88 x 108/118</td>
<td>7</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>DHC-4 Otter (Project)</td>
<td>Turboprop</td>
<td>310</td>
<td>2,000</td>
<td>4,500</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>Cessna 422</td>
<td>Propeller</td>
<td>280</td>
<td>1,900</td>
<td>3,500</td>
<td>88 x 108/118</td>
<td>7</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>L-120-30 Hercules</td>
<td>Propeller</td>
<td>4,000</td>
<td>2,000</td>
<td>4,000</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>L-100-30 Helldive</td>
<td>Propeller</td>
<td>4,000</td>
<td>2,000</td>
<td>4,000</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>L-100-20 Hercules</td>
<td>Propeller</td>
<td>4,000</td>
<td>2,000</td>
<td>4,000</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>L-100-10 Hercules</td>
<td>Propeller</td>
<td>4,000</td>
<td>2,000</td>
<td>4,000</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>L-55D Jet</td>
<td>Jet</td>
<td>275</td>
<td>1,900</td>
<td>3,500</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>L-55D Jet</td>
<td>Jet</td>
<td>275</td>
<td>1,900</td>
<td>3,500</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>F-27 (Prop)</td>
<td>Jet</td>
<td>310</td>
<td>2,000</td>
<td>4,500</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>F-27 (Prop)</td>
<td>Jet</td>
<td>310</td>
<td>2,000</td>
<td>4,500</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
<tr>
<td>F-27 (Prop)</td>
<td>Jet</td>
<td>310</td>
<td>2,000</td>
<td>4,500</td>
<td>108 x 120</td>
<td>6</td>
<td>Open Pallet</td>
<td>Straight Load</td>
<td></td>
</tr>
</tbody>
</table>

N.3. Characteristics of Aircraft that may be used during Disaster Operations:

- Straight Load
- Open Pallet
- Cargo Loading
- Door Size
- Pallet Size
- Container Types
N.3. Characteristics of Aircraft that may be used during Disaster Operations

<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Fuel Type</th>
<th>Cruise Speed (knots)</th>
<th>Cargo Weight (lbs)</th>
<th>Cargo Volume (cu ft)</th>
<th>Pallet Size (L x W x H in.)</th>
<th>Pallet Qty.</th>
<th>Container Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cessna 207</td>
<td>Avgas</td>
<td>130</td>
<td>1,000</td>
<td>2,500</td>
<td>340</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Caravan</td>
<td>Avgas</td>
<td>130</td>
<td>1,000</td>
<td>2,500</td>
<td>340</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Turbo Porter</td>
<td>Avgas</td>
<td>130</td>
<td>620</td>
<td>1,400</td>
<td>160</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>HiLo Courier</td>
<td>Avgas</td>
<td>130</td>
<td>610</td>
<td>1,200</td>
<td>140</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Dash 8</td>
<td>Jet</td>
<td>225</td>
<td>2,200</td>
<td>11,300</td>
<td>2,100</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Dash 8</td>
<td>Jet</td>
<td>225</td>
<td>2,200</td>
<td>11,300</td>
<td>2,100</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Phantom 76</td>
<td>Jet</td>
<td>430</td>
<td>2,900</td>
<td>7,500</td>
<td>1,400</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>DC-6 51F</td>
<td>Jet</td>
<td>480</td>
<td>5,000</td>
<td>61,000</td>
<td>8,300</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>DC-6 55F</td>
<td>Jet</td>
<td>480</td>
<td>5,000</td>
<td>61,000</td>
<td>8,300</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>DC-8 75F</td>
<td>Jet</td>
<td>480</td>
<td>8,000</td>
<td>96,000</td>
<td>9,400</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>DC-8 61F</td>
<td>Jet</td>
<td>480</td>
<td>8,000</td>
<td>96,000</td>
<td>9,400</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>DC-8 63F</td>
<td>Jet</td>
<td>480</td>
<td>8,000</td>
<td>96,000</td>
<td>9,400</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>DC-8 70F</td>
<td>Jet</td>
<td>480</td>
<td>8,000</td>
<td>96,000</td>
<td>9,400</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>DC-9</td>
<td>Jet</td>
<td>450</td>
<td>7,000</td>
<td>43,000</td>
<td>7,000</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
### Helicopter Type Characteristics

<table>
<thead>
<tr>
<th>Helicopter Type</th>
<th>Fuel Type</th>
<th>Cruising Speed (knots)</th>
<th>Internal Cargo Weight (lbs.)</th>
<th>External Cargo Weight (lbs.)</th>
<th>No. of passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-204</td>
<td>Jet</td>
<td>100</td>
<td>2,600</td>
<td>3,100</td>
<td>10</td>
</tr>
<tr>
<td>B-205</td>
<td>Jet</td>
<td>100</td>
<td>2,600</td>
<td>3,100</td>
<td>14</td>
</tr>
<tr>
<td>B-206B</td>
<td>Jet</td>
<td>100</td>
<td>760</td>
<td>91</td>
<td>4</td>
</tr>
<tr>
<td>B-206L</td>
<td>Jet</td>
<td>110</td>
<td>970</td>
<td>970</td>
<td>6</td>
</tr>
<tr>
<td>B-212</td>
<td>Jet</td>
<td>100</td>
<td>2,500</td>
<td>3,100</td>
<td>14</td>
</tr>
<tr>
<td>B-214</td>
<td>Jet</td>
<td>100</td>
<td>3,000</td>
<td>7,000</td>
<td>12</td>
</tr>
<tr>
<td>A-STAR</td>
<td>Jet</td>
<td>125</td>
<td>1,000</td>
<td>1,400</td>
<td>5</td>
</tr>
<tr>
<td>Allouette II SA 318C</td>
<td>Jet</td>
<td>95</td>
<td>900</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Hughes 500C</td>
<td>Jet</td>
<td>125</td>
<td>700</td>
<td>900</td>
<td>4</td>
</tr>
<tr>
<td>Hughes 500D</td>
<td>Jet</td>
<td>125</td>
<td>700</td>
<td>900</td>
<td>4</td>
</tr>
<tr>
<td>Allouette III</td>
<td>Jet</td>
<td>110</td>
<td>1,400</td>
<td>1,600</td>
<td>6</td>
</tr>
<tr>
<td>Lama SA 315B</td>
<td>Jet</td>
<td>100</td>
<td>1,400</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>BV-107</td>
<td>Jet</td>
<td>125</td>
<td>7,000</td>
<td>9,000</td>
<td>Cargo only</td>
</tr>
<tr>
<td>BV-234</td>
<td>Jet</td>
<td>30</td>
<td>22,500</td>
<td>22,500</td>
<td>44</td>
</tr>
<tr>
<td>Hiller FH 1100</td>
<td>Jet</td>
<td>105</td>
<td>700</td>
<td>900</td>
<td>4</td>
</tr>
<tr>
<td>Bell G-47</td>
<td>Av/Gas</td>
<td>75</td>
<td>800</td>
<td>1,000</td>
<td>2</td>
</tr>
</tbody>
</table>
Aircraft may be loaded in four ways:

- **Bulk Loaded-Cargo** is loaded on the floor and held in place by nets, straps, or ropes.
- **Palletized—Cargo** is preloaded onto pallets; held in place by nets, straps, or ropes; and then loaded onto the aircraft.
- **Containerized-Cargo** is preloaded into closed containers and then loaded onto the aircraft.
- **External (helicopters only)—Cargo** is placed in a net or suspended from a line and picked up and moved by the helicopter using a belly hook.

Bulk loading may increase the usable cargo space on an aircraft; however, securing cargo in place may be more difficult. Bulk loading also slows loading and offloading, sorting, distribution, and customs processing.

**Palletizing cargo** is the method most often used to move OFDA commodities. OFDA usually uses DOD (U.S. Air Force) aircraft for short-time frame disaster support, and the DOD’s preferred method of cargo packaging is using pallets and netting. Commercial aircraft can also use pallets.

Military pallets, officially called dual rail 463L pallets (nicknamed “cookie sheets”), measure 88 x 108 inches, are made of aluminum, and weigh 356 pounds. The loaded pallets can range in weight from 2,000 to 6,000 pounds. These pallets are reusable and must be returned. Do not leave them! They are used on the C-5s, C-17s, C-141s, C-130s, and some commercial aircraft. For logistical planning purposes, when building pallets, limit the height of a stack to 96 inches for these aircraft unless authorized to stack higher by the crew chief.

The size of commercial pallets varies, but is most often 88 x 108 inches or 88 x 125 inches. They are used on DC-8s, B-727s, DC-10s, and B-747s and weigh over 300 pounds. These pallets are also reusable. Commercial Hercules also use a pallet that is 88 x 118 inches.

It is possible to build up pallets on the aircraft, but it is more difficult and very time-consuming. Remember, flight crew duty time is ticking!
**Containerizing cargo** is a method used to load large commercial aircraft such as 747s and DC-10s. Cargo containers come in a great variety of shapes and sizes, and their maximum loaded weights can range from less than 1,000 pounds to 25,000 pounds. Each type is designed to be loaded and offloaded with cargo in place using a mechanized loading system or a forklift. Containerizing is very difficult and time-consuming, and sometimes it is impossible to hand-load or unload containers once they are on the aircraft.

If a forklift will be used to load or offload containers or pallets, make sure that the forklift can carry the largest pallet, has tines long enough to counterbalance the weight, and that the highest point of the forklift is lower than that portion of the aircraft (wing, tail, or door in open position) where it must move to retrieve the container or pallet.

**External loading** of cargo is done with helicopters. Helicopters normally can lift and move more cargo externally (slinging) than internally. The external cargo is loaded into specially made nets that are connected to a cargo hook on the belly of the helicopter. Cargo may also be suspended on cables (lead lines). Make sure lead lines and nets are approved for slinging cargo.

Remember: Pallets, containers, nets, and lead lines are reusable. They may also need to be returned quickly to their point of origin so they can be used for loading more cargo. Always think in terms of “back hauling” cargo equipment for reuse or when it is no longer needed.

Printed by 0 & M Office Equipment Ltd
Telephone: +44 (0)20 8643 4481
Facsimile: +44 (0)20 8643 7500