Humanitarian Information Management

A focus on the role of Information Management Officers

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This document defines the broad concepts and role of Information Management in the context of a humanitarian response. It provides recommendations on ways forward for strengthening information management, and concludes with overarching guidance on the role of IM within the context of a typical humanitarian programme cycle.

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1 Information management in humanitarian action

Making sense of the complexity of a humanitarian situation – to describe the needs of the affected population, to understand and quantify the capacity to respond, to support the planning of a coordinated response and monitor its overall impact – creates considerable demands on the coordination system to generate large quantities of information for decision making. To be effective, information must be managed.

Information management means the collection, analysis, reporting, storage and sharing of humanitarian information in a coordinated, systematic and transparent way. There are three broad levels of (humanitarian) information management (Figure 1-1).

![Figure 1-1 Levels of information management - Strategic, Technical, Operational](image)

At a strategic level an IM workplan and strategy for the cluster or AoR must be developed. The IM workplan will outline the critical reporting outputs and dates (of SitReps, dashboards, OCHA 3Ws, Cluster meetings, bulletins, etc) as well as key IM-specific meetings (e.g. OCHA IMWGs, assessments planning groups, monitoring groups, etc.).

A good IM strategy should include an assessment of the IM environment, which defines the existing capacity for collecting, recording and sharing information in the cluster, within partner organisations and within existing government line ministries; as well as a review of existing, pre-crisis information. The strategy should identify current or future bottlenecks or resource issues for delivering on the outputs of the IM workplan and options for addressing bottlenecks and resource limitations.

The strategy will consider simplification of information collection systems and limiting all collection to priority, mission-critical information, as well as guidance for recruiting additional IM support.

At a technical level information management is critical for ensuring that practical and easy-to-use systems to collect, interpret and disseminate information are identified and, where necessary, adapted to the context. In many situations, governments will already have information management capacity and systems in place which must be recognised and adopted. It is incumbent on an IMO to bridge the
flow of information between the needs of the Cluster/AoR coordination effort and any existing in-country capacities and systems.

At an operational level information management is critical for collecting a minimum level of information to support decision making in an emergency response. Operational IM approaches will be expanded upon later in this section, however, in summary an information management officer should ensure:

1. General contact lists are maintained and shared.
2. Geographic locations of partner organizations are maintained and shared.
3. An information reporting calendar is maintained and used to develop IM/Cluster workplans.
4. Selection of measurable indicators for use in needs assessment and monitoring.
5. Partners are able to report their activity targets and progress in agreed formats (e.g. 4Ws).
6. Lists of previous and planned needs assessments are maintained in an assessment registry.
7. Meeting schedules, agendas and minutes are maintained and shared.
8. Analysis of gathered information is relevant, timely and shared for use in:
   a. Needs assessment reports
   b. Development or revision of strategic and cluster response plans
   c. Reporting on response targets, progress and gaps.
9. All relevant, sharable information is maintained on websites and in regular bulletins or reports and, equally, sensitive information is maintained and securely protected.

Done well, information management provides a transparent, defensible evidence base for decision making and for demonstrating results. It does not replace critical thinking, experience or reasoned decision making; information management is there to support.
2 Overview of IM support to the Humanitarian Programme Cycle

2.1 Introduction

The Humanitarian Programme Cycle (HPC) is an important part of the Transformative Agenda (TA) which the Inter Agency Standing Committee (IASC) initiated in 2011 and which oversaw the development of guidance in coordination, leadership and accountability. The HPC serves as a guide for all crises. In principal it highlights the need to:

1. Prepare as much as possible before an emergency strikes
2. Plan the response based on evidence
3. Set objectives early and ensure that they drive the response
4. Monitor the impact of the response

Preparedness will be considered in a later section, but, for now we are assuming that an emergency has hit and you, the Information Management Officer (IMO) has been deployed to the field. The principal focus of the IMOs will be gathering information and monitoring the response, but the broad sequence of events that an IMO supports is:

2.2 The Humanitarian Programme Cycle

We will see later that assessments conducted in the immediate phases of an emergency lead to the definition and proposal of response projects with output-level indicators and targets. Those indicators and targets form the basis of a Strategic Response Plan. That succession of events is part of a cycle of linked processes known as the Humanitarian Programme Cycle (Figure 2.1).
2.3 Strategic Response Plan

The Strategic Response Plan (SRP) is the cornerstone of a humanitarian response. The SRP summarises the emergency context, sets preliminary objectives and lists considerations that will condition the ability of the response to meet the humanitarian needs effectively.

The SRP—to be developed by the Humanitarian Country Team (HCT) within the first phases of a new or escalated emergency—will be informed by a commonly defined scenario (Strategic Statement); an initial multi-cluster needs assessment; and any on-going sectoral/cluster assessments where available.

The SRP will set out clear strategic objectives for the international response in support of national efforts including a plan of action to achieve them. At this stage, Cluster and AoRs define their sectoral objectives to meet the strategic level objectives followed by project level activities and targets. Clusters also propose output and outcome indicators for monitoring progress towards those targets.

The SRP sets the foundation for what information is to be collected, which defines the overarching framework for the major work of an Information Management Officer (IMO). Figure 2.2 provides examples of project-level output indicators and targets linked to the higher level strategic objectives (a more complete example is found in Appendix Table 3.1). Of importance to the work of an IMO, the output-level indicators are tracked against targets in tools referred to most often as the 3W.

Figure 2.2 SRP results chain (examples for Education)

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2 [http://www.humanitarianresponse.info/coordination/humanitarian-leadership](http://www.humanitarianresponse.info/coordination/humanitarian-leadership)

3 3W is the generic name for a ‘Who does What, and Where’ matrix developed most often in an Excel spreadsheet. When monitoring indicators, the 3W tools extend to include the target population figures (whom) and the when, in terms of when activities were delivered and/or planned. Expanded 3W tools for monitoring are often still referred to as ‘the 3W’ tool, or sometimes a 4W. Some Clusters call this an Activity Tracking matrix. Names vary but the purpose does not.
2.4 How are project-level outputs and targets determined for the SRP?

We have already noted the importance of assessing the situation and planning a response based on evidence. Needs assessments are conducted to produce that evidence and determines the scope and scale of any given emergency and informs the definition of project outputs and targets for the SRP.

The level of assessment precision shifts from broad-brush, more generalised (often qualitative) analyses in the first few days of an emergency to increasing levels of geographic and sectoral detail (often increasingly quantitative) as an emergency unfolds.

The Multi-Cluster/Sector Initial Rapid Assessment (MIRA) manual\(^4\) outlines an approach to undertake a joint multi-sector assessment in the earliest days of a crisis or change in the context, and guides subsequent in-depth sectoral assessments. The MIRA is an example of an initial, ‘broad-brush’ assessment, as such it should not be expected to provide detailed information for the design of localized response projects.

Precise figures on affected population numbers and their specific sectoral needs might only become available after an SRP is issued; for the SRP, target figures are typically derived from estimates based on the MIRA Report (day 14), any ongoing sectoral assessment (early findings), a comparison of known affected areas with pre-emergency census/baseline data, and expert judgement from sectoral specialists who can make sense of the available information and who can estimate likely levels of impact.

2.5 Monitoring the response

Once the SRP is agreed it forms the basis of a funding appeal to donors. This leads to projects being funded and mobilised. The work of the IMO is then largely dedicated to monitoring the response plan, or more specifically, on monitoring the SRP activities and indicators.

Regular monitoring of agreed indicators\(^5\) informs on-going decision-making and demonstrates results – or more specifically provides the evidence to demonstrate progress towards the SRP targets. Done well, it can also contribute to greater transparency and accountability, both to the affected people and within the system: Cluster partners, HCT, donors, public.

An information management system to record and analyse that information is, therefore, critical to the coordination of a response and requires a dedicated and trained Information Management Officer (IMO) to manage such systems. The design and agreement with Cluster partners on tools to track progress is led by the IMO during the project planning (SRP) phase.

\(^4\) [https://assessments.humanitarianresponse.info/](https://assessments.humanitarianresponse.info/)

\(^5\) As well as tracking financial, human and material resources, and analysing gaps;
2.6 What will an IMO be expected to do?

Information Management Officers are deployed throughout an emergency. Precise tasks will depend on which phase the humanitarian programme cycle is at when they arrive – and also depends on what systems are already in place and the level of existing IM capacity.

Figure 2.3 represents a general schema approximately relating to the first month of an emergency. The subsequent sections will step through the various stages and indicate the generic tools and approaches that an IMO will be required to follow.

The following link provides an easy to navigate link to a typical timeline of information management milestones in the context of a generic emergency context. It contains further links to relevant resources where available:

http://goo.gl/X1o557

Please share comments and suggestions for additions and edits to Gavin Wood: gawood@unicef.org
Figure 2-3: Expected IMO tasks depending on when they arrive during an emergency.
Needs assessment information provides critical evidence on which a sound response plan is based. An IMO plays a vital role in sourcing, collating and organising baseline data in a format that allows discussion and ranking, and leads to prioritising needs.

**Needs Assessments**

When deployed, IMOs will support assessments and analysis to varying degrees of involvement depending on the level of existing assessment capacity in each Cluster.

Being well versed in assessment procedures is critical even in a support role. See ‘useful resources’ for more information on specific tools and guidance.

This document provides an overview of the role of an IMO during different assessments phases.

- **Phase 1** – The Situation Analysis is the first output of the assessment process and should be produced within 72 hours of an emergency. It represents an overview of available secondary data and early primary data. The Situational Analysis informs the Flash appeal and the subsequent assessment phases. The IMO has a role in sourcing, collating and organising existing, secondary data. See guidance and templates on Situational Analysis referred to in the ‘useful resources’ section.
• **Phase 2** – Joint Rapid Assessments are designed to support the Humanitarian Country Team (HCT) in further developing a shared understanding of the impact and evolution of a crisis. Based on the MIRA approach, including expert judgement, a joint needs assessment analysis is produced to inform the SRP. An IMO has a role in setting up prioritisation systems for condensing large amounts of humanitarian information into a format that assists comparison, discussion and ranking, and leads to establishing priority needs. An IMO with assessment training also can play a role in identifying realistic indicators (see Indicator Registry) and formulating questions that can be used to capture the relevant data.

• **Phase 3** – as the operating environment and resources allow, initial assessments are followed by further in-depth assessments. These are often carried out by individual sectors/Clusters or organisations and are used to inform the design of localized response projects. In some instances in-depth assessments start in parallel to Phase I and Phase II. Any early findings should be used in the joint analysis of Phase 2 (e.g. when compiling the HNO). Where possible, in-depth assessment should be coordinated to take place at the same time and in the same locations. All assessment information should be shared with the relevant coordination groups in a timely manner and in a format that can be readily used by other humanitarian agencies; an IMO may be required to maintain assessment registries, collate and share information accordingly.

**Needs Assessments in large sudden onset emergencies**

In a new emergency, Phase I and Phase II assessments use the MIRA approach. Before any primary data collection – the process of carrying out assessment surveys to collect information from the field – it is important to understand what we already know about an emergency. Often resources are wasted on collecting information that already exists. The IMO is of critical importance in the MIRA approach in order to collate, organise and support analysis existing information (called ‘secondary data analysis’) before being involved in the indicator selection and design of questionnaires (see MIRA guidance). S/he also plays a role in analysing the primary data collected through the MIRA and contextualising the analysis presented in the final report through the use of both secondary and primary data.

**Needs Assessments in on-going emergencies**

The Humanitarian Needs Overview (HNO) builds on the MIRA Framework and incorporates assessment processes but also monitoring data, including partner reports from ‘who is doing what and where?’ systems. Similar to rapid onset, the role of the IMO is pivotal in collating and organising the various sources of information that feed the process (see HNO guidance).

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**Useful resources**

**Situational Analysis:**
https://assessments.humanitarianresponse.info/guidance#SituationalAnalysis

**Humanitarian Needs Overview (HNO):**
https://assessments.humanitarianresponse.info/guidance

**MIRA Guidance:**
https://assessments.humanitarianresponse.info/guidance

**Sphere for Assessments:**
http://www.acaps.org/resources/cats/downloader/gega_draft_1.0/148

**Indicator Registry:**
https://ir.humanitarianresponse.info/

**Common Operational Datasets (CODS):**
https://cod.humanitarianresponse.info/about-codfod

**Future developments**

Useful initiatives to look out for in the future that can support IM during assessments.

**Humanitarian Exchange Language (HXL):**
http://hxl.humanitarianresponse.info/

**KoBoCAT:**
The Strategic Response Plan sets the foundation for what information is to be collected. It defines project activities, indicators and targets, and defines the overarching framework for the work of an Information Management Officer.

**Strategic Response Planning**

The SRP is led by the HC/RC with active participation of the HCT, supported by Clusters and OCHA.

During SRP development, Cluster and AoRs define their sectoral objectives to meet the strategic level objectives followed by project level activities.

Clusters also propose output and outcome indicators for monitoring progress towards those targets. The selection of indicators is supported by the use of the Humanitarian Indicators Registry and reference to SPHERE, INEE and Child Protection Minimum Standards (see useful resources)

It is not possible to identify in advance what the most useful indicators will be. Final agreement of indicators will depend on the situation; the Indicator Registry is an important starting point.

Final agreement of indicators is based on an understanding of the likely availability of information needed to measure them, and how and from whom that information will be collected.

An effective IMO will support the coordinator in selecting appropriate indicators.

It is important to prepare the ‘Who does what and where?’ tools at this stage to ensure all activities and associated indicators are captured.
Below is an example of the levels within a strategic response plan, from strategic outcomes down to project level outputs.

The project level activities and associated output indicators should be transferred by the IMO to the Cluster 4W tools in preparation for routine, periodic monitoring. A typical 4W will include as a minimum:

<table>
<thead>
<tr>
<th>WWWW</th>
<th>Information required</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who</td>
<td>1. Implementing Organisation</td>
<td>Plan International</td>
</tr>
<tr>
<td></td>
<td>2. Fund manager</td>
<td>UNICEF</td>
</tr>
<tr>
<td>Where</td>
<td>3. Province</td>
<td>Eastern Samar</td>
</tr>
<tr>
<td></td>
<td>4. District</td>
<td>Hernani</td>
</tr>
<tr>
<td>What</td>
<td>5. Project output indicator</td>
<td># of damaged classrooms repaired</td>
</tr>
<tr>
<td></td>
<td>6. Indicator target</td>
<td>28 (classrooms)</td>
</tr>
<tr>
<td></td>
<td>7. Reached # (or %)</td>
<td>17 (61%)</td>
</tr>
<tr>
<td></td>
<td>8. Date reached</td>
<td>27/12/2014</td>
</tr>
</tbody>
</table>

The geographical level of detail (the ‘where’) is something that is agreed according to coordination requirements but also a review of the IM environment and the IM capacity available to record and share information; the basic data structure is the same in all responses and is agreed in advance with Cluster partners.

In order to complete the bigger picture, IMOs will also be required to attempt to gather 4W information from external partners who are not part of the SRP or sit outside the Clusters, including government, military and any other non-cluster national and international organisations operating in the response. It is advised that IMOs keep track of all indicators and targets (using the same basic 4W system).
Implementation and Monitoring

The basis of a robust implementation and monitoring framework will already exist if the SRP process has been informed by good needs assessments and prioritisation, and if Cluster projects have been designed to link back to the Strategic Objectives with clear, relevant activities and measureable output level indicators and targets.

During SRP development, Cluster and AoRs define their sectoral objectives (with Outcome level indicators) to meet the strategic level objectives followed by project level activities (with Output level indicators). Targets are also set and agreed. You will work closely with the Cluster/AoR coordinator in developing the cluster sections of the SRP and monitoring and ensuring there is a clear results chain up to the strategic objectives.

In order to enable effective Information Management throughout the evolution of a crisis, it is critical to ensure that we, as IMOs, are included in both the development of the SRP (when indicators are being developed) and on the finalisation of the Monitoring Guidance when monitoring and reporting roles and responsibilities, reporting frequencies, are agreed.

This is also the time when monitoring tools are either developed or adapted. For example, the 4W tools prepared during the SRP development phase become the basic level of monitoring tool for collecting and reporting monitoring information at the output level – typically a 4W tool will.

Different organisations already have their own systems for collecting 4W information; some countries have established national systems for reporting; ideally if all actors can report in the same system the work of an IMO is simplified. However, such unification is unlikely and until such a time when systems can speak to one another and exchange basic information regardless of the differences in data collection systems, an IMO will spend significant time collecting, cleaning, organising, storing and reporting on the basic 4W information from the various sources and systems.
While strategic response planning and response monitoring are situated in two distinct places along the humanitarian programme cycle, it is essential that they be viewed in relation to one another.

The preparation for response monitoring is embedded in the processes for developing the SRP and as such is done at the time of drafting the SRP.

The key components on the monitoring framework should include agreement on:

- **Data Collection** – Who are the different entities responsible for providing data and aggregating data?

- **Analysis** – What will be analysed: indicator data, any other qualitative data, feedback from affected population, any update on the humanitarian context, needs analysis, etc. Who will perform the analysis?

- **Key Actions** – How will findings from the analysis of monitoring information be used?

- **Reporting** – How will findings from analysis be shared for feedback before seeking endorsement? How will endorsed findings be shared? How will the findings be packaged and disseminated? What is the agreed frequency of reporting?

**Useful resources**

**Response Monitoring Guidance:**

**Periodic monitoring report guidance:**

**Indicator Registry:**
https://ir.humanitarianresponse.info/
1. Typhoon-affected people meet their immediate food needs,
2. Prevent increases in mortality and morbidity
3. Avoid nutritional deterioration, and build food security in ways
Appendix 3.1
6. Cross cutting issues
and local government services including basic
education and a strengthened protective environment.
7. Cross cutting issues
protective and sustainable shelter solutions.

1.2 Level of rice, maize, vegetable production
compared to a normal year in affected areas
Region VIII: 8.5% (wasting)
Region VII: 5.3% (wasting)
Region VI: 7.8% (wasting)

1.3 Prevalence of global acute malnutrition in
children of all ages, with access to basic
sanitation, hygiene, and health services.
3.1 Percentage reduction of affected people
in affected areas with improved shelter,
farming (farming/fisheries).
3.2 Number of affected farmers with key agricultural assets repaired (such as irrigation
facilities, tools).
3.2.1 Number of affected farmers receiving agricultural inputs (such as seeds and tools) 633,000
3.2.2 Number of supplementary hardware interventions that contribute to durable
housing, including tools, wall and structural materials.

2.1 Number of households that sustained
house damage that are currently living in
safe, habitable emergency shelter
300,000
2.2 Number of households that sustained
house damage from the typhoon that are
currently living in unsafe, habitable dwelling
500,000

3. Percentage of population living in
displacement sites with improved shelter;
using conditions and displacement management
100% Monthly

5.4 % of affected women and men in rural areas who have regained or
their teachers
2.96 (Baseline pre-disaster)

6.1 People receiving cold water
1.2 million
6.1.2 People with handwashing (fa) and latrines
360,000
6.1.3 Number of persons reached with cash transfers disaggregated by vulnerability
1.2 million
6.1.4 Number of persons reached with cash transfers disaggregated by vulnerability
200,000
6.2 % of affected women and men in rural areas who have regained or
dairy farming (farmers/fishers).

3.1 Percentage reduction of affected people
vulnerable to malaria* "includes non-pregnant women and children under 5, and pregnant women anytime in pregnancy" 100%
Quarterly reporting
3.2 Number of affected women who requiring assistance (includes women in the age 10-49 or
mothers of children under 5) with provision of
medical care.
3.2.1 Number of affected women requiring assistance (includes women in the age 10-49 or
mothers of children under 5) with provision of medical care.
3.2.2 Number of women who requiring assistance (includes women in the age 10-49 or
mothers of children under 5) with provision of medical care.
3.2.3 Number of women who requiring assistance (includes women in the age 10-49 or
mothers of children under 5) with provision of medical care.
3.2.4 Number of women who requiring assistance (includes women in the age 10-49 or
mothers of children under 5) with provision of medical care.
3.3 Number of women who requiring assistance (includes women in the age 10-49 or
mothers of children under 5) with provision of medical care.

5.1.1 Number of affected women and girls with access to
primary and secondary education.
5.1.2 Number of affected women and girls with access to
primary and secondary education.
5.1.3 Number of affected women and girls with access to
primary and secondary education.
5.1.4 Number of affected women and girls with access to
primary and secondary education.
5.2 Number of children with access to
primary and secondary education.
5.2.1 Number of children with access to
primary and secondary education.
5.2.2 Number of children with access to
primary and secondary education.
5.2.3 Number of children with access to
primary and secondary education.
5.2.4 Number of children with access to
primary and secondary education.

6.3.1 Number of familes with access to
public health services.
6.3.2 Number of families with access to
public health services.
6.3.3 Number of families with access to
public health services.
6.3.4 Number of families with access to
public health services.
6.3.5 Number of families with access to
public health services.

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