Data and Information Management

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Key points

- IM strategy fosters collaboration across humanitarian agencies and partners and should be developed in consultation with all stakeholders
- The Strategy is a road map which outlines how you plan to collate, collect, and analyze operational data
- Distinguish between the policies and principles that apply for sharing personal vs. non-personal data
- Collect only the required data, collect it once, re-use often, re-use what is available and use everything you collect
- Identify benefits and risks and apply appropriate and feasible mitigation and prevention measures before sharing data

1. Overview

Data and Information Management is a critical component of humanitarian response and disaster management. It is the process to gather, store, clean, analyze, share, and use data and information to enable evidence-informed action in a coordinated, systematic, and responsible way. It ensures accountability and enables humanitarian support to reach people we serve.

This entry covers refugee emergencies.

2. Relevance for emergency operations

The data and IM strategy should be developed during the first six weeks of a refugee emergency and updated depending on needs.
Data collection in emergencies must adhere to ethical principles, including obtaining informed consent, protecting the privacy and dignity of individuals, and ensuring data security.

Information on the Operational Data Portal is publicly available. This means that it is available to everyone on the Internet, not only humanitarian actors. It is therefore vital to ensure that information and data are of good quality and have been formally cleared for dissemination.

3. Main guidance

1. Information and Data Management Strategy

An information and data management strategy defines the purposes, outputs, time frames and responsibilities for all operational information systems in an emergency. The information and data management strategy will provide a broad overview of how information systems relate to one another, and which organizations are stakeholders in which systems, allowing the Information Management Team to better coordinate information. The strategy will also help identify whether there are information gaps and duplications or redundancies between systems.

To develop an information/data management strategy, one needs to answer the following questions:

- What are the information gaps?
- What types of analysis products are needed? e.g. Comprehensive Overview of the Response to Emergencies (CORE)
- What is the geographic coverage of the system?
- Who are the focal points responsible for implementing each activity, tool, or process?
- What methods should be used to obtain the data?
- What human resources are required to run the systems?
- What is the frequency of reporting from each system?
- When should each system be implemented?

During planning, one needs to consider some of the following factors, which will affect the design of the information and data management systems:

- What is the scale of displacement?
- Is there secondary displacement?
- Do we have physical access to the population and the sites? Security?
- Is there a likelihood of return?
- What are the IM activities of others (Government, humanitarian, or private actors)?
- Is there humanitarian space (government and non-state armed actors’ position)?
- Is a technical solution and the required data literacy available?
- What is the amount of information already available?
- What are the information gaps and what types of analysis/reporting products are needed? e.g. CORE
- What resources (staffing, budget etc.) are required to run the activity?
- What are the data protection requirements for each activity?
- What is the data sharing needs for each system?
2. **Emergency Data Collection**

Data collection in emergencies is a critical process that involves systematically gathering information to assess the situation, needs, and vulnerabilities of affected populations during humanitarian crises. The collected data serves as a foundation for informed decision-making, efficient resource allocation, and effective humanitarian response. In humanitarian context, primary data is normally data which has been acquired directly through a registration, profiling or survey/needs assessment exercise (NARE/MIRA).

Data collection should be guided by specific objectives, which may include determining the scale and scope of the emergency, assessing immediate needs, identifying vulnerable populations, and prioritizing response efforts.

To collect high-quality data that is relevant to your purposes, follow these four steps.

1. Define the aim of your data collection.
2. Choose your data collection method.
3. Plan your data collection procedures.
4. Collect the data.

Before starting any new data collection, it is recommended to always review data that has been collected, collated, and analysed by other agencies, institutions, or bodies (secondary data review). Secondary data provides background of pre-crisis situation, identifies likely issues (vulnerable groups), helps to plan primary data collection, provides a baseline for primary data collection results and to triangulate primary data.

Primary data is data collected directly through first-hand experience, for instance using Key Informants, observation, focus group discussions, surveys, pre-screening, group/individual registration or other methods that involve direct contact with the respondents. It is useful to gather the most recent information, triangulate secondary data and fill a gap where secondary data is missing.

Data responsibility is a key approach to data and information management in all response contexts, including refugee situations. Responsible data management means that personal data and non-personal data is managed in a safe, ethical, and effective way for the operational response, in accordance with established frameworks for personal data protection. It is about principled approaches and ensuring we ‘do no harm’ while maximizing the benefits of data in the response. For more guidance on the principles and actions for data responsibility, see the 2023 IASC Operational Guidance.

Where data management involves the processing of personal data of refugees, host communities or other forcibly displaced and stateless persons, UNHCR’s data protection and privacy framework applies, the General Policy on Personal Data Protection and Privacy (GDPP). For all policies, guidance and tools related to data protection, see the dedicated entry on Data protection and information security.

Metadata (data that describes data itself) is an important component of data collection. Metadata allows for identification of the source of the data in the event of queries and can give
users interpreting the data an idea of how reliable or current the data. Below are some important pieces of metadata that should be collected and stored:

- data collection date(s)
- data collection source
- data provider (if different from source)
- locations described
- method of acquisition
- publication source, if applicable

Below are some of the situations when data collection should be considered:

- Start of an emergency
- Beginning of the programming cycle or when decisions are being made
- When something has changed
- When information is out-of-date

UNHCR Kobo is a data collection platform and suite of tools designed for collecting, managing, and analysing data for assessments and humanitarian projects. It provides features and functionalities that facilitates design, deployment and analysis of surveys and forms in various context. UNHCR’s own instance of Kobo is available at KoboToolbox (unhcr.org). Kobo has centralized public repository of question blocks and survey templates that are accessible to all registered users on the UNHCR Kobo instance located in the Kobo Library. The templates facilitate process of creating new surveys by re-using questions and forms for various data collection exercises.

3. Dissemination of Emergency Products

Data and information are shared among humanitarian agencies, government entities, and other stakeholders to facilitate coordination and avoid duplication of efforts. Standardized information-sharing protocols should be in place for the data sharing. Prioritizing the establishment of an Information Sharing Protocol (ISP) at the outset of an emergency helps raise awareness of data responsibility and lays the foundation for additional actions at all levels of a response. Data should be shared to:

- avoid duplicative efforts in primary data collection.
- create a bigger pool of available data for joint analysis, enhanced evidence based to understand, plan, and respond.
- create a bigger pool of actors who can act on the data (who can respond to the issues raised).
- deliver a quicker and better response, better protection, and solutions outcomes for people we serve.

UNHCR’s Operational Data Portal (ODP) is its flagship public website for disseminating detailed datasets and information products on emergencies that are aimed at partners and decision-makers. Many UNHCR operations already have an Operational Data Portal page, but the speed at which data and information are published there may increase in an emergency. An emergency may also result in the creation of a new Situation View in the Operational Data
The Operational Data Portal (ODP) is an important resource for internal personnel too, to see the latest population figures and other information that has been publicly released. UNHCR partners are also able to share their documents and activities on the ODP.

All information posted on the ODP must go through a defined external clearance process in-country. The ODP is a high traffic public website, so care and attention to posting only cleared data is important. Due to the fast changes in an emergency, external clearance procedures should be rapid and priority activities for those involved.

The former HumanitarianResponse.info platform, now called ReliefWeb Response is a service provided by OCHA, dedicated to support the coordination and information-sharing in natural disaster and internal displacement situations. Depending on the context, ReliefWeb Response might be used in parallel with the Operational Data Portal.

The Humanitarian Data Exchange (HDX) is an open platform for sharing data. The goal of HDX is to make humanitarian data easy to find and use for analysis. Launched in July 2014, HDX has been accessed by users in over 200 countries and territories. Data shared on HDX must not be personal or sensitive.

**Checklist**

- Ensure information and data are of good quality and are formally cleared for dissemination in the Operational Data Portal
- Assess data sensitivity in a context for different types of data/datasets to ensure no harm to any person, including the source of the information, or negative impact on organization capacity to carry out its activities or public perceptions of that organization (including reputational damage)
- Engage affected communities in data collection processes
- Cross-check information from multiple sources, conduct data audits, and verify data accuracy before posting in the Operation Data Portal

**4. Learning and field practices**

Protection Information Management (PIM) Process - PIM Guide
5. Links

UNHCR Kobo Server The Humanitarian Data Exchange (HDX) Operational Data Portal

6. Main contacts

Information Management: hqim@unhcr.org

Kobo Support: kobohq@unhcr.org

Operational Data Portal Support: webportal@unhcr.org