DANISH REFUGEE COUNCIL

IMS Learning Brief

March 2021

«New technologies and data sources are helping us to make faster, more informed decisions and we are reaching more people with assistance every year. However, the ways in which data is collected, shared and used by individual organizations and across the humanitarian system can present challenges to the privacy and security of affected people.»

Mark Lowcock, Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, United Nations in Inter-Agency Standing Committee (IASC) Operational Guidance on Data Responsibility in Humanitarian Action, IASC, 2021.

«Gathering and analysing data – to study the consequences of crises and carry out activities in response – is an essential element of humanitarian work. It helps to ensure the relevance and effectiveness of such work, and enables accountability.»

Acquiring and Analysing Data in Support of Evidence-based Decisions: A Guide for Humanitarian Work, International Committee of the Red Cross, 2017

«Information Management is perhaps the newest and most rapidly growing area of humanitarian work.»

SOHP - THE STATE OF HUMANITARIAN PROFESSIONS 2020, Bioforce 2020

INTRODUCTION

Information Management Systems (IMS) have gained prominence in the humanitarian sector and are emerging as modes of strategic leverage for organisations who are able to tap into the potential of their humanitarian data. Information management systems and data analysis are not just technical novelties but concern the very essence of humanitarianism, which should be founded on a strong evidence base, and be rooted in the principles of impartiality and do no harm.

Information Management across the Danish Refugee Council (DRC) is crucial to ensuring that the data we collect can be turned into information, and personal and institutional knowledge that informs and strengthens how we provide support to the communities we work with.

This Learning brief has been developed to correspond with the IMS Learning Report which provides substantive insights and further use case examples on IMS phases and processes.

The information used to develop this learning report was based on a series of four technical discussions hosted by the MEAL team over the course of October 2020 and included participation from colleagues at HQ, Regional and Country Office level, who represented core areas of the organisation, including, Global IT, Global Protection, MEAL and Information Management.

The aim of the Learning brief is to clearly articulate a number of key challenges encountered in setting up IM(S)ystems within DRC and also a substantive number of opportunities identified by colleagues at HQ, Regional and Country Office level to support your operations IMS journey. Towards the end of the brief are a number of resources maintained by DRC HQ colleagues have been listed to encourage further collaboration on Information Management systems.

GLOSSARY OF TERMS AND DEFINITIONS

Please note, while there is no single definition of Information Management System as such, for the purpose of this paper, the following definitions are used to define Information Management (IM) and IMS (Information Management Systems) and delineate the scope of this document.

INFORMATION/DATA MANAGEMENT (*in humanitarian context*) is the capture, handling, storage, analysis and dissemination of data pertaining specifically to operations and to populations of concern, including demographic and statistical information. It involves information on needs and conditions as well as geo-referenced information. It also involves information on protection and sector-specific concerns related to needs, delivery and impact in a spectrum of issues, including health, nutrition, water/sanitation, core relief items, shelter, community-based response, registration, tracking and responding to sexual and gender-based violence (SGBV), as well as concerns relating to protection site management.

Source: UNHCR Information Management Toolkit.

 INFORMATION MANAGEMENT SYSTEM *(working definition)* is a principled, systematic and organized way of dealing with the capture, handling, storage, analysis and dissemination of operational and programmatic information pertaining to humanitarian context, programmes and populations of concern. Information Management Systems can be defined and organized by outlining three interconnected disciplines:
*   **People** (including adequate knowledge, skills and attitudes);
*   **Processes** (workflows and tasks, with SOPs and guidance);
*   **Tools** (on-line and offline platforms, surveys, questionnaires, aps, data handling software).

SCOPE OF INFORMATION MANAGEMENT (in humanitarian context) ranges given the different perspectives and different information needs. DRC evidence framework outlines scope of IM by distinguishing data and information with regards to:
*   **context** (context, situation, operational environment);
*   **needs** (specific to populations of concern) and;
*   **performance** (including programme performance and results).

POLITICAL AND OPERATIONAL ENVIRONMENT

CHALLENGES	OPPORTUNITIES
Exploring and understanding the political and operational context in any DRC operation should inform the design of the IMS and its future use. Many governments as well as local de facto authorities disallow direct data collection from people of concern, while others restrict mobile data collection (e.g. disabled GPS tracking or biometrics data collection). Laws and practices governing personal data should be respected, regardless of how complex they are, while ensuring that DRC does not put the affected population, DRC staff, or others at risk through the collection, analysis, storage, use and disposal of data and information. Technical requirements of different systems should match operational capacity and competencies e.g. access to electricity and Internet and availability of staff with proficiency in the use of different devices (often in English language).	✓ Explore government and local government policies in relation to data collection, data protection and use of data and information with a focus on existing and anticipated limitations. ✓ Verify what cluster reporting mechanisms, or cluster IMS working groups or existing guidance exist and which are obligatory and which ones are voluntary. ✓ To ensure that the expectations of the wider organisation and donor reporting requirements can be fulfilled, DRC should negotiate funding of existing and newly developed IM solutions to ensure expectations by the donor and DRC are met. ✓ Assess risk related to data protection, potential impact of data collection and opportunities arising from improved IMS.

DONOR REQUIREMENTS

CHALLENGES	OPPORTUNITIES
Donor requirements vary between different countries, ranging from expectation of basic estimates of people reached figures per activities (and output level data), to robust data verifying outcome statements and theory-based intervention logic. Several donors, including DG ECHO, Dutch MFA, UNHCR and others require reporting against their own set of indicators, and their own data disaggregation standards, contributing to a more complex ecosystem. Furthermore, the same donor might have different requirements in different countries and they are likely to change over time. Despite this, more frequently, donors are willing to accept organisational indicators as long as they are clear and accompanied with a robust monitoring and information systems. The DRC strategy 2025 will aim to establish common results and a reporting framework which clarifies core indicators and thus improve the harmonization of indicators within and between countries and regions	✓ Agree and standardise with existing and potential donors what level of data is expected to be reported on, taking into consideration Personally Identifiable Information (PII) that may be shared, records of distributions of cash or goods, referrals or IATI reporting. ✓ As much as possible, standardize programme processes, registration forms, templates and records as well as indicators. ✓ Utilising the common data standard of International Aid Transparency Initiative (IATI) to standardise reporting requirements can help ensure that there is a consistent way in which the data can be collected and allow for a more systematic type of analysis. ✓ Designed IM systems should allow for the full range of modifications of the type of data collected, stored and processed. Data collection forms, or indicator templates, surveys should be easily modifiable given the fact that information needs might change rapidly.

SOFTWARE CONSIDERATION

CHALLENGES	OPPORTUNITIES
The software market offers limited product selection addressing specific information and data management needs and there isn't one comprehensive solution for humanitarian INGOs that would cater for the vast array of information needs. There is overall learning across humanitarian sector that using off-the-shelf or third-party software is the right approach [1]. Developing a bespoke system, based on internal capacity often increases the risks, including delays to the implementation of an IMS. An *en suite* approach [2] allows the integration of several different IT solutions or platforms, based on developed and tested software for specific use. In the MEAL and Cash & Voucher Assistance (CVA) sphere alone, there has been a proliferation of IM solutions, each of which is somehow unique but none of which is all-encompassing.	✓ Consult broadly with peers from other organisations as well as internally within DRC, including across countries, regions and HQ staff for advice and support. ✓ Consider existing sectoral best-practice IMS that will cater for some of the needs and offers options of connecting between the various databases and platforms. Look into joint intersectoral platforms such as Primero for case management software. ✓ Feasibility studies may be a worthwhile investment. ✓ In accordance with DRC best practice, certain software options are not recommended as storage solutions, these are: Dropbox, Google Drive, Google Docs.

[1] See Learning Report for details
[2] A software suite or application suite represents a system of connected software, programmes or IM systems/databases.

DEFINING INFORMATION NEEDS

CHALLENGES	OPPORTUNITIES
When determining the scope of IMS it is important to define data, information and analysis needs concretely and define the purpose of the IMS[3]. Investment decisions should be accompanied by defined requirements for the system, with a clearly stated and strong focus on the **minimum requirements**. A broad range of perceived needs and an over-ambitious comprehensive scope of imagined IMS can be a serious obstacle to pursue the project. Focusing on critical needs might help with a successful design and implementation within a reasonable time frame and financial resources committed. Putting in place an Information Management System (IMS) should be based on a **defined purpose** and followed by an adequate design phase. Project development, including software selection, configuration and testing should be based on identified needs of end-users and planning that process alongside implementation is a challenge on its own.	✓ The minimum requirements will vary depending on the programmatic scope, project portfolio and overall country office strategy. They should be defined specifically for the dedicated offices and teams. ✓ Critical needs must be highlighted (IT Security, data protection and programmes involving large, sensitive datasets). ✓ Identifying a longer list of requirements and functions can be accompanied by qualifying these needs as 'must have' and 'optional'. Tender documents can help assess if the proposed solutions meet full scope of critical (must have) needs and what other needs are covered. ✓ Consider flexibility of the system and ability to adjust to the future information needs as well as harmonisation or interoperability of the different systems to allow data analysis across platforms, and potentially with external partners and stakeholders.

IM STRATEGY AND INVESTMENT PLANS

CHALLENGES	OPPORTUNITIES
One of the larger challenges for any process of engaging with the development and investment in IMS is connecting the internal information needs with the external environment and building consensus about and buy-in for future IMS solutions. While initial agreements are oral and based on meetings and workshops, they should quickly be transferred into a simple and straightforward strategy and investment plan. Investments also require assigning responsible project/programme managers in charge of the overall implementation as well as allocating staff time and clarifying their responsibilities to support the process. Uneven level of skills/competencies among staff, including technical and managerial staff will further exacerbate the work on IM solutions. Thus, awareness raising, basic but essential communication and needs to go out to management, programme, grants and support services colleagues.	✓ Based on a context analysis define the basic parameters, limitations and opportunities for improving IMS and how that may position DRC vis-à-vis other partners and constituencies. ✓ Use ongoing or planned evaluations to feed into the decision-making process. Add IM to the scope of ongoing evaluations of overall programme effectiveness frameworks to identify gaps and weaknesses. ✓ Recruit and/or appoint a specific IM specialist to manage the process/project. ✓ Allocate funds in grants/project proposals and develop a co-funding strategy with a long enough time-span, taking into account likely delays. Include IM in the budget, with costs for consultancy, design, roll-out, development and maintenance.

TECHNICAL SOLUTIONS AND PROCUREMENT PROCESSES

CHALLENGES	OPPORTUNITIES
Selecting a technical solution has the potential to unravel a number of dilemmas, and further considerations in determining which requirements are included and which are not. Various approaches exist ranging between: a) hiring a dedicated developer (EAGL RO); b) contracting a consultant or consultants to develop a bespoke system (DRC Lebanon, Syria, Jordan, and Turkey); c) subscribing to a Software as a Service package (DRC Yemen and Jordan) with varying degrees of customisation available or d) picking an off-the-shelf product. Each comes with dilemmas. The procurement standards oblige teams to carry out tenders, and getting high quality bids might be tricky in some contexts/countries. At the different stages of the process, it might be inevitable to hire external support and consultants, which on its own is challenging. When deciding about the investment, consider maintenance of the system in the future, both in terms of staff, technical capacity and resources. This includes budgeting for licensing, staff, training as well as other potential costs.	✓ Consider various set-ups for developing IMS. Developing bespoke systems and hiring a dedicated developer is generally not advised unless there is a clear capacity and funding secure for years to come. ✓ Build systems based on existing programmatic or monitoring and evaluation staff capacities as well as existing system(s), whether digitalized or not. Invest in sustainable solutions that will work beyond contract duration of individual staff. ✓ Having a demonstration stage in the hiring process helps to filter out the options that are applicable. ✓ Consider use of software products such as: PowerBi (with reduced licensing costs for DRC) and programming via APIs to connect various IM solutions and platforms. ✓ Whenever feasible use inter-agency coordination and standardised systems (Microsoft, KoBo). Always consider data privacy and protection protocols prioritising the do no harm approach for People of Concern and the principle of "do no digital harm". ✓ Recurrent costs should be budgeted from early on for a period of 1-2 years. ✓ When entering into a third-party partnership take care of delivery plan for support conditions and maintenance.

TESTING AND IMPLEMENTATION PROCESS

CHALLENGES	OPPORTUNITIES
Design and development of the IMS happens in parallel to humanitarian programme implementation and requires some level of time commitment to ensure it can be successful in the future.	✓ Piloting and testing are likely to help understand the core gaps and needs and inform next steps. Identify the type of data, the sector, field location or project which allows testing envisaged IM solutions
Poor planning of implementation and a lack of phased approach may easily lead to implementation fatigue during the early stages, especially if there are bugs or unresolved technical issues.	✓ One tested approach is to sequence development of tools workflows, forms and data processing sector by sector, starting with the ones that have defined SOPs and an established practice amongst staff[4].
Comprehensive IMS implementation is likely to create a burden on already stretched resources of the organization. Investment in IMS can be most successful if guided by a "**start small**" approach, with an emphasis on critical parts of the system and simple solutions, rather than a complex and comprehensive approach. Planning for core modules and add on functions may pay off when the operation has the potential for scaling up and fundraising for the IMS development.	✓ Check connectivity assessments with your local IT colleagues or get in touch with HQ IT.
	✓ Set a mechanism or simple Excel file to plan future tools, functionalities and developments in the pipeline.
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FINANCIAL AND HUMAN RESOURCES CRITICAL TO SUCCESSFUL IMS IMPLEMENTATION

CHALLENGES	OPPORTUNITIES
It is not uncommon that resources, including envisaged **time and funds**, do not allow for full-scale implementation on IMS. While the scope might have been defined well and decisions have been taken, often new factors arise which require adaptation.	✓ Ensure Senior Management ownership and support. Management ownership and support is needed throughout the implementation of the project and should follow any investment decisions. This includes mobilization of CO personnel, readiness for changing practices and dedication of time for deploying the system.
During the development process teams may face changes in programme activities, portfo-lio, and modalities of implementation which might complicate the deployment of IMS.	✓ Invest in what you need. It's not uncommon for such projects that resources, including dedicated time, do not allow for a full-scale wish-list. In such cases, invest in what is critical for effective operation.
If programming involves partners, it is important to consider whether and how they are going to use the system. Additionally, if data needs to be shared amongst partners, there should be a data protection agreement in place which reflects the respective parties' arrangement with respect to gaining People of Concern consent, governance, processing and sharing (if necessary) of personal data.	✓ Put in place adequate staff with the necessary competencies and establish division of labour between Programme, MEAL and IT personnel.
	✓ When working in partnerships, take care of MoUs and specific provisions in terms of informed consent and data sharing.
Over-dependence on technical solutions risks diminishment of necessary human involvement throughout the IM process (e.g. analytical framework definition, system design, data collection, analysis interpretation).	✓ Identify the training needs the IMS solution involves beforehand and adequately plan training sessions & capacity building support.
	✓ Take care of good documentation during design, including documenting decisions.

ORGANISATION CULTURE

CHALLENGES	OPPORTUNITIES
Any new investments and **change of practices require a roll-out strategy, support for launching the new system,** and addressing and managing potential discomfort and/or resistance of the personnel affected by change. There is often an under-estimation as to how much these processes cost and how much time they require to be fully implemented.	✓ Allow good time for implementation and address change management.
	✓ Trainings should combine both technical features as well as changes in programming, proce-dures and SOPs.
Trainings should combine both technical features as well as changes in programming, procedures and SOPs. Roll-out should contribute to building of the capacity of the CO to integrate IM solutions rather than overburdening it and in the end enhance efficiency, relevance and effectiveness of programme response.	✓ Do not overestimate your staff IM capacity. Even if you think that the system that you are creating will be intuitive and accessible it will create problems. Refresher training or support may be needed.
	✓ Roll-out should contribute to building of the capacity of the CO to integrate IM solutions rather than overburdening it.
Another challenge is to attract staff with IM skillsets in humanitarian sector to help manage and roll-out the system and many of the skilled staff expressing preference for work in the private sector.	✓ Incorporate IMS training into onboarding processes adequate for the post.
	✓ Consider barriers to adopting the system, including organisational culture and support the process with adequate change management approach.

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[4] (Yet, data collected for a specific sector needs should connect with the other database)

🛡 DATA PROTECTION AND DATA RESPONSIBILITY

CHALLENGES	OPPORTUNITIES
Do No Harm implies that humanitarian organisations protect data of the People of Concern. Yet, data protection is a complex matter and is subject to different laws and regulations. Teams involved in IMS face various challenges ranging from legal questions to operational aspects. Some of them include: identifying which data protection protocols to follow across the operations (GDPR vs. Cloud Act); considering hosting arrangements which are not consistent and require HQ guidance; or lack of standardised approaches, leading to colleagues creating workarounds and last but not least access to systems creating risk for data being collected and stored incorrectly. Data responsibility encompasses wide array of policies and actions to ensure a more ethical approach to data management and requires commitment from the organization and the staff.	✓ Schedule in time to reflect and incorporate within your respective Teams DRC's Handbook on Data Protection. Invest time capacity building. ✓ Consult the IASC Operational Guidance on Data Responsibility in Humanitarian Action, including recommended actions and proposed approaches and tools e.g. Data Responsibility Diagnostic Template. ✓ Include data protection considerations in SOPs and guidelines for IMS. ✓ Perform Data Protection Impact Assessments and repeat them periodically. ✓ Explore the PIM guide and the Data Sharing Agreements[5]. ✓ Follow organisation developments, including the scheduled and coordinated roll out of the General Data Protection Regulation (GDPR) across the DRC operations. ✓ Tap into the opportunity of consolidation exercise of the different systems that are in use within DRC's corporate IT infrastructure.

FURTHER RESOURCES:

- Checkout the full Learning Report for additional details, insights and definitions.

- Follow DRC HQ Insite page and Sharepoint space dedicated to IM tools, support and additional resources which can be accessed here.

- Join and follow announcements, questions and comments on DRC's Informal Information Management Yammer Group

- For discussions in the wider community, follow: Nethope (https://nethope.org/), ICT works (www.ictworks.org/), or Monitoring, Evaluation, Research, and Learning Tech (https://merltech.org/).

[5] IASC Operational Guidance on Data Responsibility in Humanitarian Action (Feb. 2021) and Handbook on Data protection in humanitarian action https://www.dropbox.com/s/9ppuuk8g9iqfg26/Handbook%20on%20data%20protection%20in%20humanitarian%20action.pdf

Give feedback and get in touch

Whether you have found this resource useful or not, we would love to hear back from you.

Please send us your feedback: Take 1-2 minutes to fill in this 10-question survey.

Feel free to reach out to: mel@drc.ngo