Humanitarian Information Management: profiles, skills & knowledge

OCHA Field Information Services (FIS)

Based on research by the inter-agency information management working group (IMWG)

October 2017 – Feedback to rajagopalan@un.org
The Information Management Working Group (IMWG) is an inter-agency forum of information management focal points from the UN and NGO community. In 2017, the IMWG examined the different skills and competencies of IM field staff and found many similarities. Based on this research, eight profiles were identified that represent common areas of work on information management in humanitarian emergencies.

A Profile is the combination of competencies and personality traits associated with a specific set of IM responsibilities. They can be broadly categorized as technical profiles (e.g. Data Manager) that require knowledge of specific technologies or software, and non-technical profiles (e.g. Coordinator) that rely more on 'soft-skills'.

A Role reflects that often we need one person to cover multiple profiles. For example an information manager working by themselves in a remote field location may need to work with local counterparts, manage and analyze data, and produce maps and infographics. This role would draw on several profiles, including Coordinator, Data Manager, Analyst and Visualiser. People with a diverse mix of technical and soft-skills are referred to as IM Generalists.
PROFILE SHEETS AND HOW TO READ THEM
RESPONSIBILITIES
A summary of the role and responsibilities associated with the profile

PERSONALITY TRAITS
Key personality traits that are associated with success

COMPETENCIES
Measurable skills, behaviours, experience, education and knowledge required to work effectively
The Administrator is responsible for ensuring basic administration for organizations/cluster and the basic requirements at each step of the information management cycle. This person should have the overall short term and long term vision with regards to the course of the system.

Administrators are dynamic and agreeable, inventive and interested in improving their own skills. They are self-organised and structured with an eye to detail and potential connections, able to prioritise amid a myriad of tasks, and perform under pressure. Administrators are oriented to continuous system improvements and have the ability to grasp the bigger picture.

**TECHNICAL SKILLS** • Identifies basic requirements at each stage of IM cycle • Ensures simple technological solutions to underpin IM steps • Identifies system requirements and linkages between systems • Ensures required improvements in different systems to support decision-making • Diagnoses impediments to internal IM systems

**KNOWLEDGE** • Functions and principles of M&E within the Programme Cycle • Key sectoral norms & standards with regards to IM • Protection principles • Data collection, management, analysis processes

**INTERPERSONAL SKILLS** • Can scope and manage IM expectations • Effective consensus building and conflict management between relevant stakeholders
The analyst uses qualitative and quantitative data and information to support evidence-based decision-making. They work closely with subject-matter experts to ensure their analysis is placed in context, and with decision-makers to ensure that findings lead to appropriate action. They are expert users of database and statistical tools and methods, and in presenting data and information in ways that are readily understood.

Analysts are curious individuals who are comfortable questioning conventional wisdom and following evidence to see where it leads. They are open-minded and eager to explore new areas of enquiry, but also conscious of bias and the limitations of information. They seek out experts to find a deeper understanding of an issue. They can translate complex analysis and large amounts of data into simple and accurate findings and products. They are proactive advocates of their research and findings and vocal in challenging assumptions.

**TECHNICAL SKILLS**  • Applies techniques, methods and tools to explore quantitative and qualitative data  • Apply strategies to find, describe, explain and interpret relationship between data  • Use appropriate processes to translate the analysis into appropriate products  • Formulate alternative explanations based data

**KNOWLEDGE**  • Sources of errors and cognitive biases  • Ways to mitigate the effects of sources of errors  • Approaches for designing data collection and analysis

**INTERPERSONAL SKILLS**  • Challenge own and others’ assumptions  • Thinks independently and dares to disagree with group opinion  • Willingness to adapt to different operational contexts and priorities
The Coordinator is often the manager of a larger IM team and acts as an advisor on information management to senior staff such as a head of agency. They establish strategy, recruit and manage staff, and oversee the day-to-day running of the IM team. They provide a link between technical IM specialists and subject-matter experts, ensuring that the IM team is working on issues that address the needs of the response. Coordinators work closely with counterparts in other agencies to ensure information and data and shared and integrated.

Coordinators are able to see the bigger picture of the response. They are strategic thinkers, good planners and capable at managing projects and people. They are comfortable working with a wide range of actors at every level of seniority and are vocal advocates when they need to be.

**TECHNICAL SKILLS** • Coordinate joint (inter-agency) analysis • Knowledge of best practices and standards regarding indicators • Able to ensure that CODs meet minimum standards in topology and attributes

**KNOWLEDGE** • IASC IM cycle • Humanitarian financing • Humanitarian sector standards • Emergency Response Preparedness (ERP) • Minimum Preparedness Actions (MPAs) for IM • Situational awareness

**INTERPERSONAL SKILLS** • Fosters dialogue • Facilitates a team approach • Interpret messages and respond appropriately • Collaborate with stakeholders to avoid duplication & maximize resources • Collect, analyse and disseminate relevant information to colleagues and partners
The Data Manager is responsible for collecting, organizing and analyzing data to enable evidence-based planning and decision-making. Working with subject matter experts, they ensure good practice in the design of information systems, advise on survey design, manage data collection and processing and provide technical support for analysis. They are expert users of database and spreadsheet software.

Data Managers are planners and organizers, designing systems that will ensure that data and findings are accurate and usable. They are detail-oriented and committed to careful quality control to catch any error or inconsistency.

**TECHNICAL SKILLS**
- Using spreadsheets and databases for data collection, storage, analysis and sharing
- Knowledge in computer programming language skills
- Technical help to field missions on data collection and storing
- Proactively identify gaps in data and inform a plan to address those gaps

**KNOWLEDGE**
- Understand how data management fits in the different steps of IM cycle
- Structure relevant for the Secondary Data Review (SDR) in sudden and protracted crises
- IATI standards, data privacy protocols, SSO solutions, Open Data

**INTERPERSONAL SKILLS**
- Flexibility to adapt the data management system and associated processes to the contextual demands
The Mapper uses geography to link datasets to places and populations, using geospatial analysis to analyse relationships and reveal new understanding. They overlay baseline data with information from surveys, satellites, partners and other sources, and use a wide range of analysis techniques. They excel at presenting complex information in easy to understand formats, providing decision-makers with new understanding and powerful tools for advocacy. They are expert users of GIS and database software.

The Mapper recognizes the importance of clean, accurate and well-organized data and invest time and effort into building a solid foundation for future work. They are creative and adaptable and use different skills, tools and information sources to solve problems and answer challenging questions. They are detail oriented and take pride in products that are accurate and easily understood.

**TECHNICAL SKILLS** • Identify information gaps • Identify secondary data sources • Manipulate, clean, and render data in tabular tools • Applying analytical frameworks to process complex geo-spatial analysis for decision making • Script languages to process and visualize geo-spatial data • Organize geodatabase storage to established standards

**KNOWLEDGE** • Prioritizing data needs • Identify appropriate audiences • Identify the most effective formats • Train IM colleagues on basic practices of making maps in easy formats

**INTERPERSONAL SKILLS** • Communicate principles of effective visualization to stakeholders • Build and ensure colleagues’ data literacy • Support colleagues in different phases of the data and IM lifecycle
The Reporter is responsible for preparing products that are informed by a variety of trusted sources and types of data, tailoring to the purposes for targeted audiences and channels, giving due consideration to confidentiality, consent, and protection issues, and integrates gender perspectives and SAAD.

Reporters are able to work under constant pressure and tight deadlines, and prioritize multiple tasks with competing deadlines. They are attentive to detail, and quick to spot and correct errors/inconsistencies. Solution-driven, reporters are creative persons who are pragmatic and can design products to meet specific needs in a given context.

**TECHNICAL SKILLS** • Identify information needs of audience • Apply drafting and editing skills • Monitor the information landscape to identify and capture useful information / data • Assess the relevance and reliability of information and sources • Analyse data to describe, explain, interpret, predict, and prescribe

**KNOWLEDGE** • Knowledge of reporting practices • Good practices in writing and editing • Knowledge of sector-specific humanitarian issues • Maintains situational awareness • Knowledge of key data sources, both internal and external

**INTERPERSONAL SKILLS** • Build and maintain information networks • Build consensus between stakeholders • Translate technical and non-technical knowledge
VISUALISER

The Visualizer produces information products (maps, reports, charts, promotional materials, infographics, posters and presentations) for targeted audiences to support situational awareness, advocacy, planning and decision-making. They are expert users of graphic design software and understand how to present information in creative and effective ways.

Visualizers are creative, analytical, proactive and detail-oriented. They are able to make complex ideas accessible to non-specialists and are committed to producing quality information products that address the specific needs of clients and audiences. They are welcoming of constructive feedback and comfortable working to tight deadlines and under pressure.

TECHNICAL SKILLS • Compile the identified datasets • Develop and manage datasets • Clean datasets • Analyze the datasets • Develop style guidelines • Proficiency in graphic design software • Modulate design and key messaging of products • Produce quality and timely information products based on the needs of the identified audience

KNOWLEDGE • Prioritizing data needs • Identify appropriate audiences • Identify most effective formats • Identify Data Sources

INTERPERSONAL SKILLS • Communicate principles of effective visualization to stakeholders • Build capacity of colleagues to perform basic visualization products • Identify the visualization needs of sub-national offices
The Web Manager works closely with clients to identify their needs and build appropriate web products and services. They ensure that the web services they manage are well maintained and current, and adapt over time to the needs of users. They are experts in web development and related technologies, content management systems and workflows.

Web Managers are attentive to detail and quick to spot and correct errors. They are always looking for opportunities to improve the user experience. They are creative and driven to design products that meet the needs of their clients. They are naturally collaborative and work in an open and inclusive manner.

**TECHNICAL SKILLS** • Ensure systems incorporate agreed upon taxonomies in order to provide access to information and knowledge • Install and configure CMS and other systems related to websites and web development • Develop appropriate operational database solutions • Website coding/design skills and high level proficiency with web design platforms

**KNOWLEDGE** • CMS systems, mailing lists, taxonomy / meta-tagging, etc. • Displaying and integrating multimedia • Familiarity with web hosting and server management • Exposing data and integration websites through API web services

**INTERPERSONAL SKILLS** • Work as part of a creative team (to create wireframes, storyboards, and prototypes and propose design options)