Country Level Minimum Common Operational Datasets

Introduction
The purpose of this document is to list the minimum set of operational geospatial datasets that will be compiled and maintained by OCHA field and regional offices on behalf of the humanitarian community. This responsibility is assigned to OCHA under the *Operational Guidance on Responsibilities of Cluster/Sector Leads & OCHA in Information Management.*

Background
OCHA has the mandated responsibility within the UN system for developing and improving baseline data on regions and countries affected by humanitarian crisis.[1] A core component of this is the use, exchange and management of information relating to the location of, and relationships between, geographical features using geospatial information technology tools such as Geographic Information Systems, satellite imagery and image processing software as well as Global Navigation Satellite Systems.

During the initial response to a humanitarian emergency, accessing accurate and timely geospatial information on the affected region or country is critical; without the availability of common baseline geospatial data, resources which otherwise could be allocated for processing information on the affected population and needs, is spent identifying, collecting and processing geospatial data essential for the conduct of relief operations. In chronic emergencies, conflict or poor governance often means that data is unreliable, or if it is available, it is invariably out of date as populations move, infrastructure is destroyed and new settlements are established.

In order to mitigate the above and improve the predictability of geospatial data in emergencies, OCHA, in consultation and partnership with the Cluster/Sector leads, is committed to making best efforts to source and maintain minimum operational geospatial data sets at the country and regional level.

Minimum Operational Datasets
To harmonize the use of geospatial data at the country level, as well as between the field, regional and Agency HQs, a minimum set of authoritative geospatial datasets is to be progressively compiled and maintained by OCHA field and regional offices on behalf of the humanitarian community. OCHA Regional Offices also have the responsibility to progressively compile datasets within their region for countries that do not have an OCHA or GIS capacity.

A list of core datasets identified as required minimum is provided in Table One. The major themes for minimum core datasets are: settlements/demographics, Government administrative infrastructure (boundaries & administrative centres); and accessibility (road network, ports, railroads, etc).

Table One: Minimum Common Operational Datasets

Category	Data layer	Recommended scale of source material
Political/ Administrative boundaries	Country boundaries Admin level 1 Admin level 2 Admin level 3 Admin level 4	1:250K
Populated places (with attributes including: latitude/longitude, alternative names, population figures, classification)	Settlements	1:100K – 1:250K
Transportation network	Roads Railways	1:250K
Transportation infrastructure	Airports/Helipads Seaports	1:250K
Hydrology	Rivers Lakes	1:250K
City maps	Scanned city maps	1:10K

[1] A/RES/46/182, Strengthening of the Coordination of Humanitarian Emergency Assistance of the United Nations

In addition to the minimum set of authoritative geospatial datasets detailed in table one; in consultation with Cluster/Sector leads, OCHA may source and maintain a number optional datasets on behalf of the humanitarian community at the country level. These are listed in Table Two. The capacity of OCHA to do so will depend on the availability and quality of the data and the prevailing geospatial information management environment.

Table Two: Optional Datasets

Category	Data layer	Recommended scale of source material
Marine	Coast lines	1:250K
Terrain	Elevation	1:250K
National map series	Scanned toposheets	1:50K - 1:250K
Satellite imagery	Landsat, ASTER, Ikonos, Quickbird imagery	Various
Natural hazards[2]	Various	Various
Thematic	Various	Various

Access and Use of Datasets
The associated metadata for the minimum and optional datasets is to be made accessible through GeoNetwork http://geonetwork.unocha.org/. Use of the data by end-users within the humanitarian community is governed by the usage and copyright restrictions of the data provider.

Adherence to Standards adopted by Coordination Bodies and Authorized Entities.
To facilitate data sharing and ease of data integration, OCHA will adhere to field data collection, data encoding and data exchange standards as well as standard data models adopted by the United Nations Geographic Information Working Group (UNGIWG), the Geographic Information Support Team (GIST) and relevant competent national authorities.

Terms and Definitions
Geographic Information Systems: a GIS is a system of hardware, software and procedures to facilitate the management, manipulation, analysis, modelling, representation and display of geo-referenced data to solve complex problems regarding planning and management of resources (NCGIA, 1990).

Geospatial data: any data or information pertaining to a geographical location, regardless of its form or medium, which is or has been electronically generated by, transmitted via, received by, processed by, or represented in a GIS resource.

GeoNetwork: is a standardized and decentralized spatial information management environment, designed to enable access to geo-referenced databases, cartographic products and related metadata from a variety of sources, enhancing the spatial information exchange and sharing between organizations and their audience, using the capacities of the internet. This approach of geographic information management aims at facilitating a wide community of spatial information users to have easy and timely access to available spatial data and to existing thematic maps that might support informed decision making.[3]

Metadata: Metadata is a summary document providing content, quality, type, creation, and spatial information about a data set.

References
ST/SGB/2004/15 Use of information and communication technology resources and data
ISO 19115:2003 Geographic Information – Metadata
OCHA Policy Instruction, *Geographic Information Systems and Geospatial Data Management*

Contact
The contact for this policy is the Manager, Field Information Services Unit, OCHA, New York.

[2] For an example of natural hazard mapping, visit OCHA ROAP Map centre (http://ochaonline2.un.org/Default.aspx?tabid=3780)
[3] http://geonetwork.unocha.org/mapsondemand/srv/en/about