Background information

The Global Logistics Cluster Support Cell (GLCSC) GIS unit provides logistical decision-making support tools to the humanitarian community during emergency operations through the acquisition, compilation and dissemination of timely and accurate geographic information on the status of logistical assets and infrastructure.

ONGOING ACTIVITIES

The GLCSC GIS unit's activities focus on

1. Logistics emergency preparedness and tools development
2. Field operational support
3. Trainings and partnerships
4. Dissemination of geo-spatial information to the humanitarian community

1. *Logistics emergency preparedness and tools development*

Logistics emergency preparedness depends on up-to-date data collected from various sources, with information from the field being the most important and valuable. Therefore the GLCSC GIS team continuously compiles and integrates new geographic data relevant to logistics infrastructure in the countries of concern identified by the humanitarian community.

All these data are centralized in the WFP Spatial Data Infrastructure (SDI) database. The Logistics Cluster maintains and updates the transport related part (SDI-T). SDI-T is the core database providing data on roads and other logistics infrastructure such as aerodromes, ports, bridges, railways, waterways, obstacles and warehouses. Transport overview methodology, procedures and standards for symbology and typology have already been defined and are used during each field emergency operation.
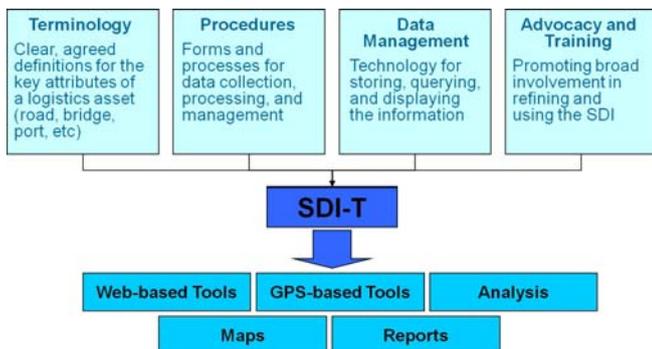
In order to make this logistics information available for any member of the humanitarian community who would need it when an emergency arises, general logistics planning maps for the countries of concern are regularly updated and published.

General Logistics Planning Map for Niger

The GLCSC GIS team in Rome develops operational systems and tools to assist humanitarian organizations to optimize their preparedness and emergency response.

The SDI-T Geoportal is a WFP web-based platform created by the Logistics Cluster. A geoportal is a web platform used to find geospatial information and to access the geographic tools needed to display, edit and analyze these data. The SDI-T version allows users with Internet access anywhere in the world to visualize and download transport data such as roads, airports and ports from the SDI-T database.

SDI-T Geoportal overview for Haiti

In addition, all GIS field staff can now update the database directly through the Geoportal, thus improving the workflow of collecting, updating, and sharing the latest relevant data.

Logistics Cluster Snapshot
Geo-Spatial Information

2. _Field operational support_

Besides preparing for future emergencies, the GLCSC GIS team aims to respond immediately to meet maps and data requirements in the event of an emergency.

During operations, the Logistics Cluster GIS staff, either from the field or from the headquarters, produces printed copies of all relevant maps. The main map products depict:

- Concept of operations
- Logistics corridors and warehouses assets
- Road conditions (with bridges and obstacles)
- Sea operations
- UNHAS helicopter deliveries
- Supply routes, warehouses and transport assets
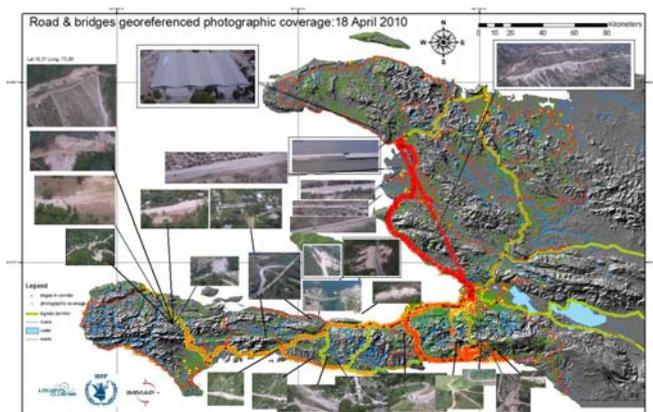- WFP preparedness figures
- Aerial survey: roads and bridges

Map of supply routes and warehouses assets

Specific projects such as an aerial survey of logistic infrastructure focused on bridges, roads and associated obstacles, or high risk areas can also sometimes be implemented as necessary.

Aerial survey of roads and bridges

Geographical information reporting by logistics staff is currently being made more widespread through the use of the Geoportal. Information on logistics infrastructure and its status can now be shared, displayed and updated in a much more efficient way and in real time.
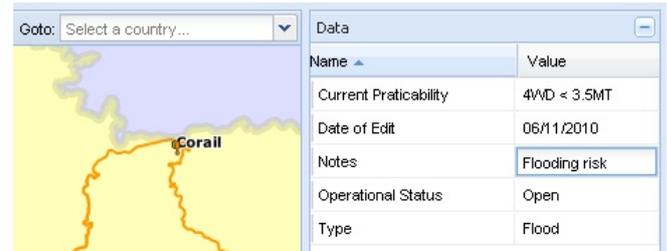
Field staff can now update road obstacles for instance

Moreover, initially created as a response to some specific field needs, an easy-to-use map export tool now allows all users to create and print maps of areas of interest showing chosen logistics information at any time.
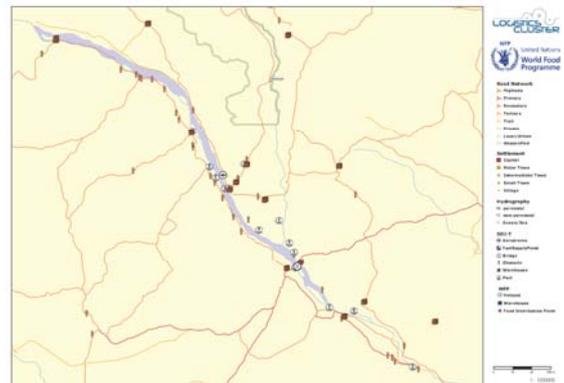
User-made map showing ports, airports, roads, obstacles and warehouses for an area of Mozambique

3. _Trainings and partnerships_

As part of its normative guidance role the Logistics Cluster GIS unit is also active in the organisation of capacity building and training programmes. This ensures that the Logistics Cluster can hand over its work to suitable partners when withdrawing from a country at the end of an operation.

In order to improve the quality of the SDI-T data, the GLCSC provides trainings to logisticians likely to be deployed within the Logistics Cluster. Through stand-by partners induction training, Logistics Response Team training and other trainings at the headquarters and regional levels, non-GIS staff can get acquainted with GPS use, with editing through the Geoportal and with standardised data collection about logistics infrastructures before being deployed.
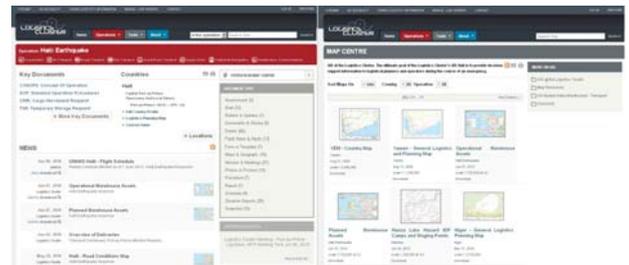
Geo-Spatial Information

SDI-T road assessment form

When Logistics Cluster GIS capacity is present, sessions on how to use SDI-T assessment forms and GPS tracking for logistics infrastructure data collection can also be organised for the wider humanitarian community directly in the field.

Data collection training

4. *Dissemination of geo-spatial information*

In some crisis areas (Afghanistan, Liberia, Gaza, southern Sudan, and more recently Haiti) the GLCSC has worked with partners to conduct road mapping exercises, often providing the first reliable road maps in decades.

The dissemination of the geo-spatial information is done in a direct way through Logistics Cluster meetings organized in the field on a daily or weekly basis depending upon the level of the emergency. The latest updated maps are regularly shared with all Cluster members.

Logistics Cluster meeting

All the GLCSC geo-spatial products (such as maps, SHP and KML files) are published on crisis-specific map catalogue pages on the Logistics Cluster website, on the WFP EPweb map centre, and on Reliefweb.

www.logcluster.org/tools/mapcentre

Logistics Cluster website,
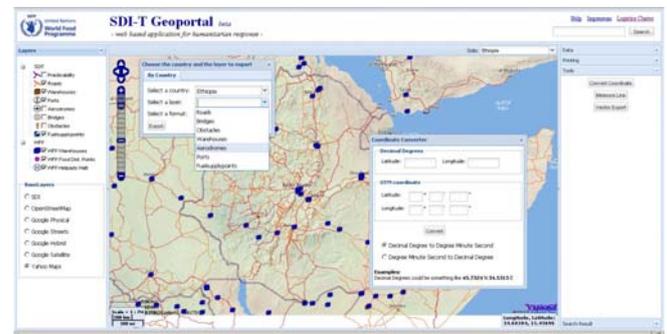*Haiti operation page on the left, Map Centre on the right.*

Hard copy maps can be collected by humanitarian agencies either at the headquarters or at the Logistics Cluster base when GIS capacity is present.

SDI-T public data can be exported at the country level directly from the Geoportal. Provided KML and KMZ can be viewed freely through Google Earth without any specific GIS software while shapefiles are also available for GIS specialists.

For further information please refer to the Logistics Cluster webpage: **www.logcluster.org**
Or send an email to: maps@logcluster.org

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