Access to geographic data to enhance the ICRC’s humanitarian response and reporting
The **ICRC** strives to assist and protect the victims of armed conflict and internal violence.
Context and Needs

• 80 contexts or countries with key operations like Afghanistan, DRC, Colombia, Ukraine,...

• 10 majors sectors of intervention (Detention, Protecting civilians, Health, Food Security, Water and Habitat...)

• Institutional dataset for consultations + sudden-onset emergencies

• Tool responding to the needs in different humanitarian responses and for different user groups (thematic, sector, countries, confidentiality,...)
To improve the ICRC's response to people's needs in its various humanitarian operations, the ICRC is increasingly turning to geographic information systems (GIS).
GIS Human resources: delivering geolocation information

<2003
2006
2009
2012-2014

11,0000 Potential users

GIS Staff at the HQ (50% interns)
GIS technician in the field (from the Water and Habitat Department)

2004
Mapping

2007
GIS Corporate Guideline

2011
Geoportal/webserver

2013
Mapsearch Thematic Kiosks

Geospatial World forum 05-09 May 2014, Geneva
GIS and mapping services provided

• Production of maps (Paper, Geoportal, thematic Geoportal..)
• Advise units on how to put their data on maps
• Maintain the ICRC Geo-referential Data (country, borders, admin01, sites, premises, recipients, places, projects)
• Providing GIS supported structural assistance to water authorities and, planned for 2015, to detention authorities
Transversality: managing geographic reference data for other databases systems

Admin01 «Recipient place» (Where? What?)

ICRC Presence and Premises

Operational units

..

Humanitarian Operations

Assistance Protection Reporting

Assistance Detention Protection Logistic Reporting Donors

Operation Security Finance Logistic Environment Reporting

Operation Finance Reporting

Geospatial World forum 05-09 May 2014, Geneva
Paper Maps

Customized maps:
- Basemaps
- Operational maps
- Other thematic maps
Geoportal

a merge of all humanitarian layers of interest in one space for an operation pictures

- ICRC presence / National Society Presence
- ICRC operational areas and Priority areas, areas of responsibility
- ICRC Water and Habitat Projects
- ICRC «recipients places» where we deliver assistance and protection
- ICRC Human resources and Finance
- ICRC Logistics (premises, warehouses)
- Satellite Images

- Displaced Population
- Transport infrastructure
In a few clicks the operational picture is on the map
With the details needed

<table>
<thead>
<tr>
<th>Project Number</th>
<th>YE-ADE-ASSENG-13-4-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location Name</td>
<td>Landa Viver</td>
</tr>
<tr>
<td>Actual Start Date</td>
<td>11 May 2013</td>
</tr>
<tr>
<td>Actual End Date</td>
<td>17 February 2014</td>
</tr>
</tbody>
</table>
Map - Archive

Finding a map and geographical content?
Maps off the shelf on 24h/24…7/7?

- Paper maps
- Geoportal Layer
User profile joining the ICRC Geoportal

- Water and Habitat Engineer
- Logisticians
- Finances
- Protection/Detention
- Health
- Human Resources
- Juristic Conflict Definition
- ‘NRBC’

ICRC Geoportal
All connected from the field to HQ

Geospatial World forum 05-09 May 2014, Geneva
Thematic Geoportals
Reporting Geoportal

http://www.icrcproject.org/app/2013-annual-report-map/

Geospatial World forum 05-09 may 2014, Geneva
Thematic Geoportals

- Urban Water Geoportal
- Detention Data Geoportal
- Premises Management
- Emergency Mapfolio
  (based on the American Red Cross...)
**Geoportal vs. Thematic Geoportal**

- Same ArcGIS server consumed in various applications
- For an internal use and ICRC staff member access

<table>
<thead>
<tr>
<th>Geoportal</th>
<th>Thematic Geoportal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main ICRC geographic information in one portal</td>
<td>Different applications focusing on specific topics</td>
</tr>
<tr>
<td>Accessible to everyone internally</td>
<td>Dedicated to specific user groups</td>
</tr>
<tr>
<td>Variety/ abundance of layers</td>
<td>Few layers easy to browse</td>
</tr>
<tr>
<td>Good for operational picture</td>
<td>…</td>
</tr>
</tbody>
</table>

They complement each other
Challenges

- Users and access
- Abundance of layers
- On-going layers
- Fragmented data for the global picture
- Sensitivity of data vs. making data accessible to anyone
Partners

ESRI ecosystem for a better aggregation from the field to the HQ

Development of web applications, based on ESRI technology with our counterpart Arxit
Where to go?

- Consolidating and aggregating the data on time remains a challenge.

- Integrating maps in BI application.

- Going slowly to open data and being able to share where the ICRC is working for a better reporting and transparency?