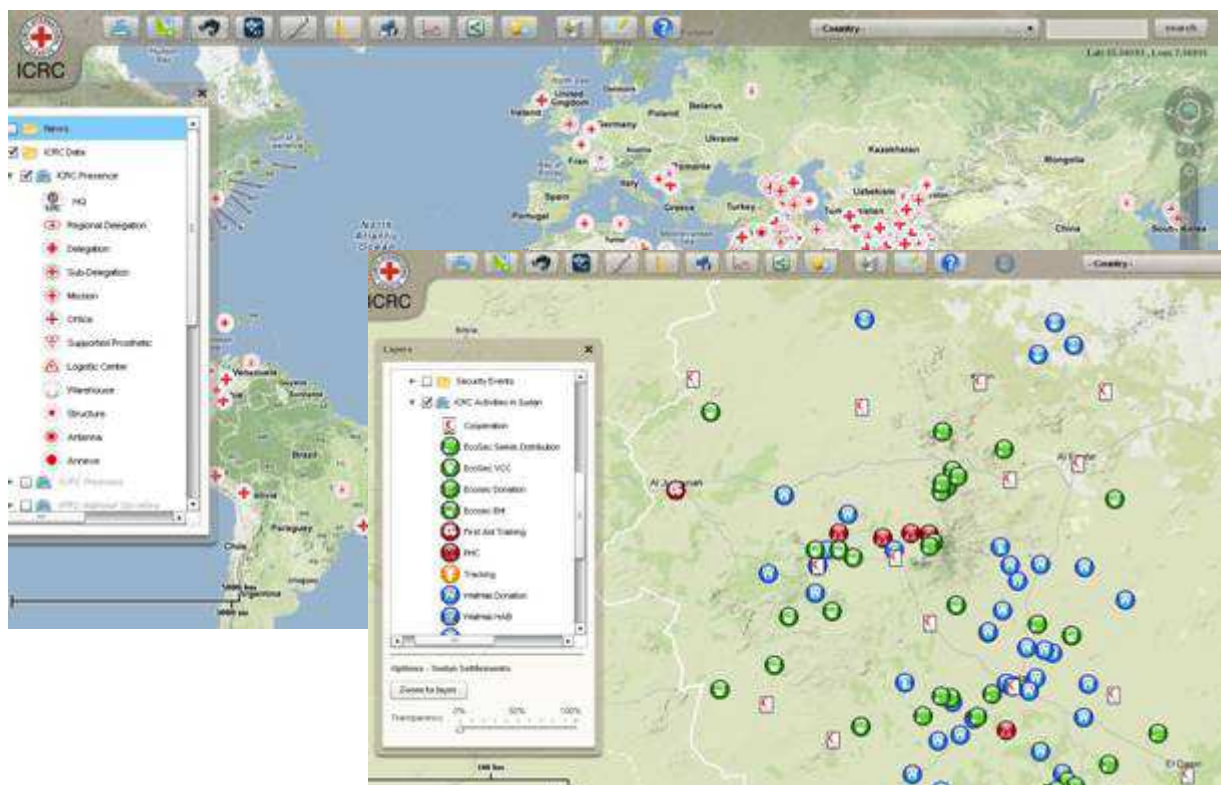




ICRC

For Internal Use

ICRC GIS MAPPING CORPORATE DESIGN GUIDELINES



Internal Document
OP_ASSIST_EH / HQ_GVA
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Version 4

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1. FOREWORD

As an institutional tool, Geographic Information Systems (GIS) are increasingly used to support ICRC operations. Although often under Wathab management, this tool is a service for all requesting departments.

This document is intended primarily to guide the GIS officer in setting up his/her GIS structure. His/her supervisor should also read it, since some issues require special user rights as well as confidential information management.

In this document, GIS officer is referred to the person in charge of GIS in the delegation, which is normally a delegation employee under the supervision of the Wathab Coordinator.

GIS - and more particularly its final products, maps - are not only analysis tools but also, and above all, communication products within the ICRC and towards the exterior (other organizations, website, donors, etc.). These guidelines are intended to be used as general guidance for data organization and map production, in order to ensure a consistent visual identity for all ICRC GIS products. Please also refer to the "Visual Identity, Corporate Design Guidelines", available on the COM toolbox or www.icrc.org/visual-identity

ICRC Delegations: this layer is produced by COM_PMD the unit producing the appeals, mid-term maps. The delegations location is established on a country-scale and is not geographically correct. It is to be used to locate delegations from neighbouring countries.

During the past years of GIS maps production, concern has increased regarding maps containing sensitive issues and their related risks. Thus before producing any maps (electronic or hard copy), particular attention should be paid.

A consultation between OP ASSIST EH and OP DIR GLOB was made.

Maps showing sensitive issues (security, geographical location of political groups...) with references to the ICRC (logo) could present possible risks to either fall into the wrong hands or, in the worst case, be found with an ICRC delegation "checked" by persons belonging to these groups, knowing that the main suspicion against (Western) humanitarians is that they taking part in the war or that they "spy" in them under the cover of humanitarian action.

The following measures were discussed:

- Such maps would be "neutralized" (information on ICRC delegations etc removed, other references to ICRC removed);
- A less specific name for armed groups: like armed opposition (AO) in Afghanistan, Regional Jihadi Network (RJN) instead of Al-Qaida in the Islamic Magreb (AQIM) in the Sahel;
- These maps should not be transmitted via Intranet, or should be transmitted with password;
- The use of these maps should be restricted in the delegations and ICRC units in the field (e.g. only with the head of delegation/unit, use restricted to the office)

Because of the Geoportal and the new version of ArcGIS 10.0 including more options to customise your map this is the fourth version of the guidelines.

2. OVERVIEW

2.1. GIS file structure template

(See Chapter 3 for details)

With ArcGIS 10.0 and the geoportal data must be organized in a geodatabase. We do not use anymore as much as possible the shapefile.

The GIS folder should be organized in such a way to:

- enable data to be traced easily;
- exchange data between HQ, Regional delegation and other GIS focal points.

Data are organized into two main folders : "**2012**" and "**others**", and into two main geodatabases: "**Country_LiveData.gdb**" and "**Country_References.gdb**".

→ Into the root Country folder, we can find the **Country_LiveData.gdb** which should be sent every quarter and **Country_References.gdb** should not vary too much over time, and should be sent once a year to HQ.

The "**2012**" folder is the workspace for a year and it contains the yearly backup of the Country_LiveData.gdb renamed as **Country_Data_2012.gdb** made at the end of each year.

The "**others**" folder contains all basic layers produced by other organizations. It is not necessarily used as reference but kept for information.

For your mxd, save the relative path names to data sources.

At each time you create a new map, you upload it on the Geoportal. Then we can have a world catalog of reference maps centralized and available for every one on the field and in HQ.

2 times per year, Q2 and Q4 reference maps have to be updated and uploaded on the Geoportal.

(See [part 2.5](#) for Q2 and Q4 reference maps)

2.2. Map layout/template

(See Chapter 4 for details)

ICRC map templates can be found in ICRC_Semiology/templates, as mxd files. These templates include the minimum information that should be represented on the map: title, scale, disclaimer, etc. They should be adapted to each map.

Templates exist in A4, A3, A2 and A0 formats, landscape or portrait. Chapter 4 describes the map specifications: colour combinations, font size, symbols (cf assistance activities, Doctrine 49).

Maps should preferably be created **in a format A4** that can be printed at the delegation. This is the most asking format.

Map content – some general rules:

- Do not overload the map with information: it can distract the reader from the main subject. Keep thematic map to one theme at a time.
- Keep all map text readable in one direction, i.e. no need to turn map in order to read text.

- Consider having a version that can be easily read in black/ white (not everyone has access to a colour printer).
- Use the most as possible the Base map Light Gray Canvas. The simpler base map in order to highlight main information.
- Images (satellite, toposheet, etc.) can be very informative, but they may obscure symbols or map themes and dilute the information. If you decide to use background image, apply the transparency option on the overlaying polygons.

"Draft" and "For internal use" should be mentioned on the map. The draft mention should stay on until the map is validated by the person who ordered the map (coordinator, delegate, HoD...) and by removing it, the ICRC logo appears. Name of the GIS officer and unit should not appear as well until validation and only if necessary.

Sensitive maps should be password protected and in pdf format (not jpg). In this case, name of the GIS officer, unit and ICRC logo should not appear at all. Paper version, if existing, should be kept by the requiring person.

Note as well that for IFRC has map templates that can be shared with National Societies. If the ICRC GIS officer supports the national society in GIS, he/she should make sure that the national society also gets in touch with IFRC.

2.3. Map and project file naming conventions

(See Chapter 5 for details)

This naming convention was created to standardize storage of projects and maps. It follows a defined structure and makes each map output and mxd unique with an institutional reference, facilitates map requests, allows for an institutional memory (created and stored in Lotus Notes) and helps the GIS officer and users to trace the project (mxd) and map products (jpg, pdf, etc.).

If modifications are made over time to the same thematic maps, only the date is changed on the filename. If modifications are made to the representation of the theme, keywords are added at the end of the filename.

The mxd and the name of the pdf should contain the exact title of the map. It will facilitate the map requests. The reference number and the date must necessarily appear on the map to trace it easily.

2.4. ICRC stylesheet

(See Chapter 6 for details)

This stylesheet is intended to accompany the set of map templates, ESRI styles and map creation guidelines.

In order to harmonize and facilitate representation of ICRC activities, the ICRC stylesheet compiles field activities for each unit (Ecossec, Health and Wathab) and general information, in accordance with Doctrine 49. Please use the new v10 ICRC Stylesheet.

This list is a suggestion but is not exhaustive. Each map will need adjustment to suit the content.

In this new version, "3D" type symbols were created. These can be also used to customize kml on Google Earth. The ICRC activities symbols exist in round, square, in green, blue, orange, red, white and brown without shadow in emf format (in the stylesheet) and with shadow in png format for the kml.

The recommended colours for basemaps are showed in Map Specifications (p. 26). These can be also found in the ICRC_stylesheet_v10.

Other ICRC colours are those used in the ICRC colour chart.pdf (cf "Visual Identity, Corporate Design Guidelines"). This palette is included in the ICRC stylesheet in the fill symbols list. Three colour ramps contain the 39 colours from the chart (13 each). These can be used when you need to represent polygons adjacent to each other.

The stylesheet elements are appropriate for an A4 map format. Symbols can be in(de)creased in size according to specific needs.

2.5. Q2 and Q4 reference maps & Examples

In this chapter, map samples demonstrate how to use the ICRC stylesheet.

These samples represent the minimum set of maps that should be produced at first and regularly updated (Q2 & Q4):

- General base map (Q2 & Q4)
 - Political/geographical: administrative units, roads, rivers, ICRC delegations, main towns, etc.
- Activities map (Q2 & Q4)
 - General: regrouping all units
 - Details: by unit
- Thematic maps
 - Security
 - IDPs
 - Beneficiaries
 - Clans/tribes
 - National society & ICRC
 - ...
- Web maps
- Map as posters

2.6. Use ArcGIS Online Base Map

Prefer use the base map ***Light Gray Canvas*** or ***Shaded Relief*** for your maps, the most simple and detailed. However depending of the scale kindly a proposition of using the ArcGIS Online Base Map:



Light Gray Canvas

World

World Physical Map



Light Gray Canvas

National



Terrain



Light Gray Canvas

Regional



Bing Maps Road



Light Gray Canvas

City



Topographic



Light Gray Canvas

Detail



OpenStreetMap



Imagery

3. GIS FILE STRUCTURE TEMPLATE

Within your GIS folder, separate by "year", "others", and contains Country_LiveData.gdb and Country_References.gdb.



Into the root Country folder, the **Country_LiveData.gdb** should be sent every quarter. **Country_References.gdb** should not vary too much over time, and should be sent once a year to HQ.

The "2012" folder is the workspace for a year and it contains the yearly backup of the Country_LiveData.gdb renamed as **Country_Data_2012.gdb** made at the end of each year.

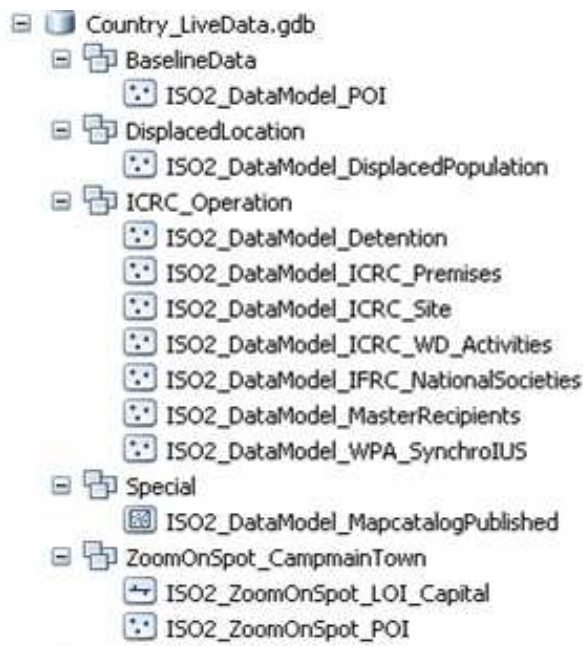
The "others" folder contains all basic layers produced by other organizations. It is not necessarily used as reference but kept for information.

Structure of the geodatabases :

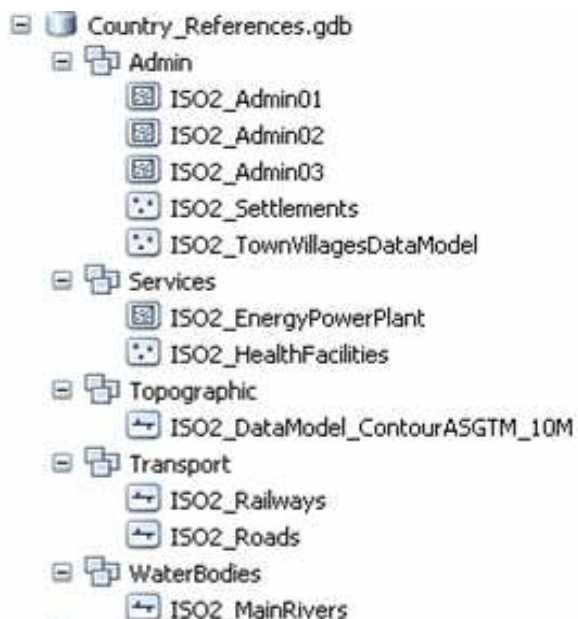
The geodatabases below are the templates for your country.

When the layers are mentioned as DataModel, you must not change the structure, the field or others things in order to publish your data on the geoportal. For other layers feel free to create your own fields or to add some layers. These 2 geodatabases should be now your work space for your data.

Country_LiveData.gdb contains the data regularly updated. A backup should be done each year and renamed as **Country_Data_YYYY.gdb**. Every quarter the data should be sent to GVA.



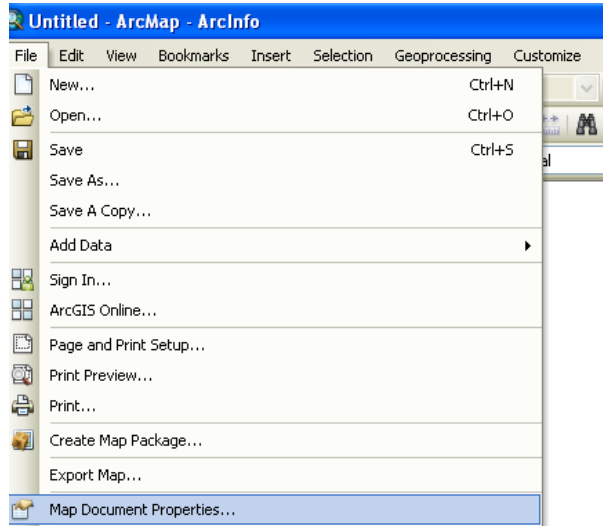
Country_References.gdb contains the data that do not vary too much. Each year, the geodatabase should be sent to GVA.



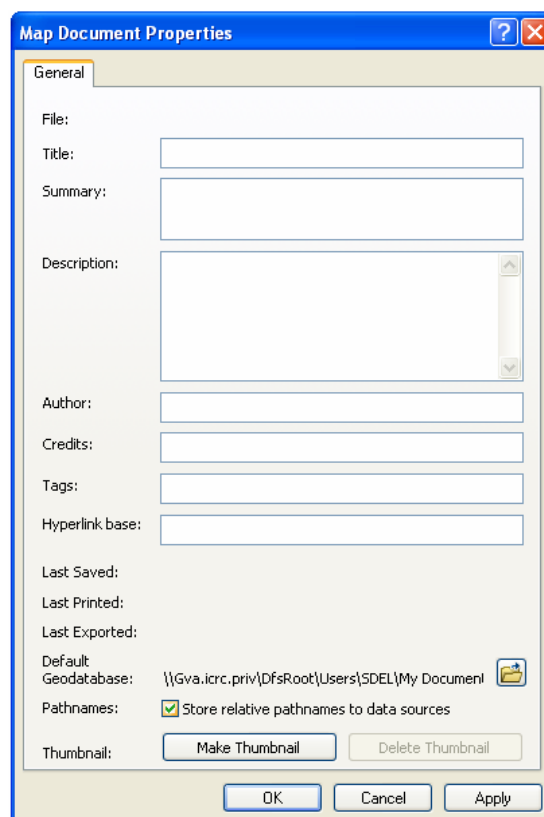
3.1.How to save your mxd and add metadata

Your map document should be saved with relative path names to data sources in order to ease the exchange of data between HQ, Regional delegation and other GIS focal points.

1. Open "Document Properties" by selecting File/Documents Properties...



2. Edit information in the window and save
3. Click on " Store relative path names to data sources."

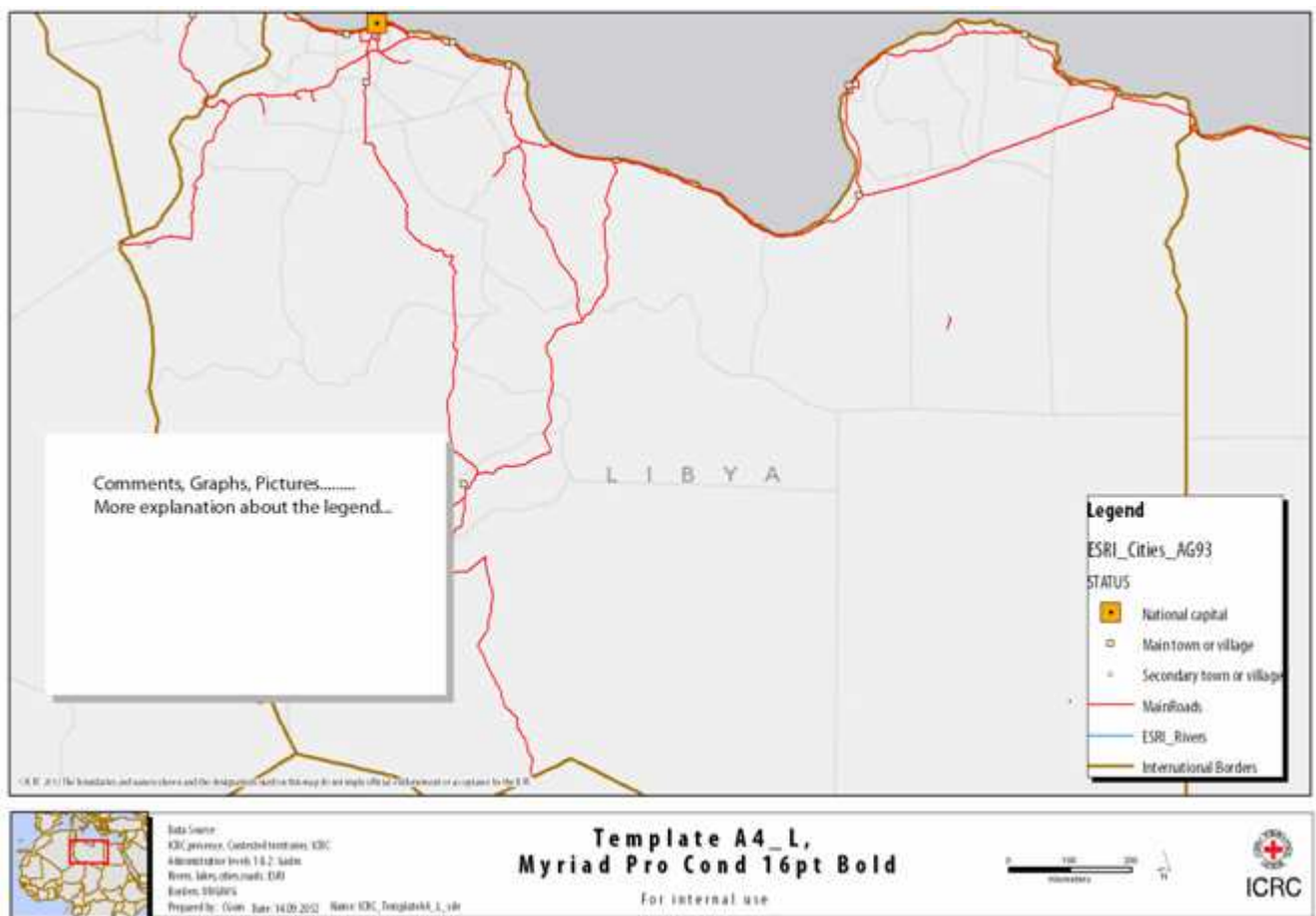


4. MAP LAYOUT/TEMPLATE

With ArcGIS10.0 mxt does not exist, you cannot open it. Use a mxd as a template with the minimum information that should appear. Once you add a new layer, you can save your mxd.

Minimum information that should appear in the map frame:

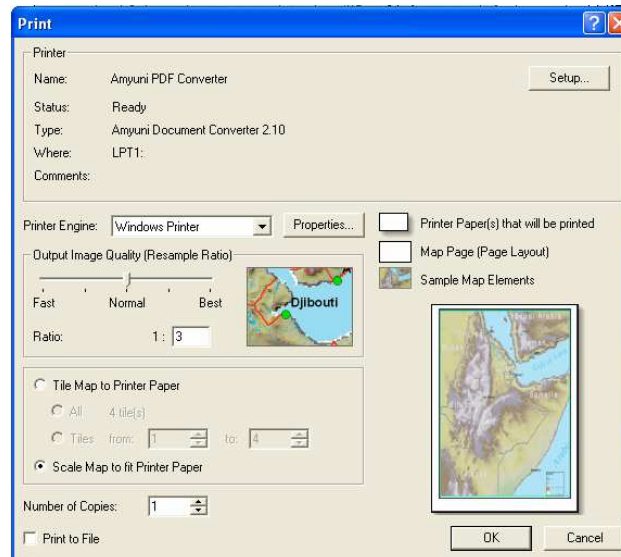
1. Title: descriptive about the content: country and/or region/area; descriptive subtitle: thematic content, date if necessary
2. Scale bar (in kilometres) (cf stylesheet)
3. Scale text, mention the format as it can be confusing for users if, for example, an A3 map is printed on A4 format
4. North arrow (cf stylesheet)
5. General location map: show the region or district covered by the map, e.g.: country of interest highlighted in red, area of interest highlighted by a red/black polygon
6. Data source: specify the sources of all data you used to create the map
7. Map filing name (see below); author: mention producing unit (ex: OP_ASSIST_EH) and the date of map production, by whom it was validated
8. Draft replaces ICRC logo until validation (see below)
9. Disclaimer



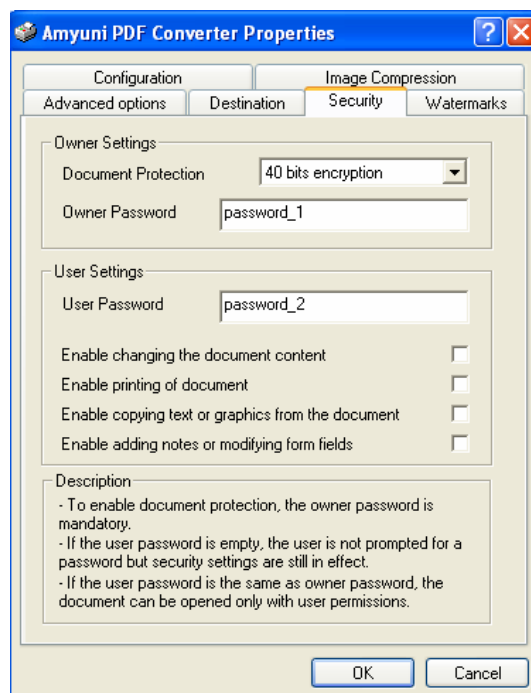
4.1. How to export your document in pdf

In general, you can export the maps in jpg: it is easier to include in a document or powerpoint presentation. Pdf documents present the advantage to be smaller (kb) and can be password-protected.

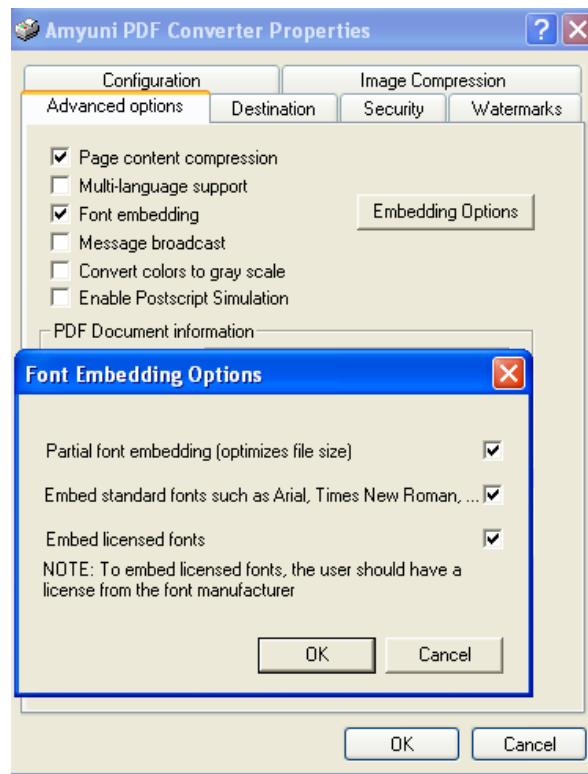
1. Do not export the map, but print it in Amyuni PDF:



2. If you want to add a password-protect to your PDF, select Menu File/Page and Setup and then Properties. Select the window: Security
 - Choose Document Protection
 - Choose Owner password
 - Choose another password for User password if you would like the user to have particular rights.



3. In pdf, some symbols might not be read by others: the other users might not have all the same fonts installed. To avoid it, PDF files should be saved with options:



4. If the quality of PDF is always bad, or if a problem is persisting: export your map in PNG or JPEG and after that print it in PDF.

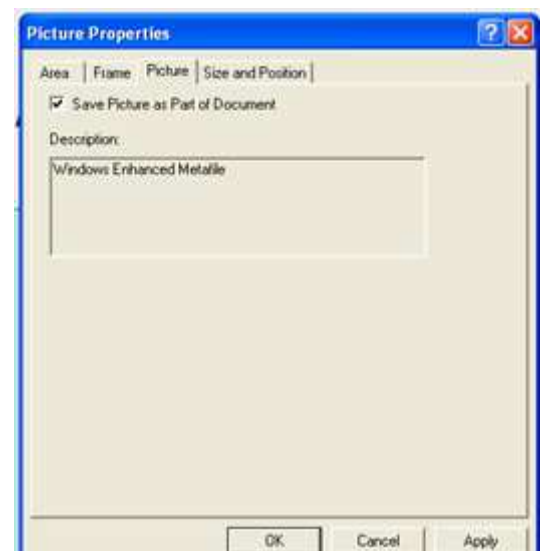
4.2. How to install Myriad Pro Fonts

The recommended font for your map document is the font Myriad Pro Cond. You can find it in FINE DOC, chapter 8. 4.14: "Installation Conditions", last bullet point: Install additional Fonts (Myriad Pro).

There are copyrights on the font. To install a new font, you do not need to have administrator rights, you can be logged on as user. Follow the instructions given.

4.3. How to add graphics/pictures

When you add graphics/pictures on your map, in the image properties: tick the option: save picture as part of document.



5. MAP AND PROJECT FILE NAMING CONVENTION

Filenames are created from the General Register in Lotus Notes.

If you do not have access to the General Register, request the rights. If it is not possible, your coordinator should create file numbers for you.

In Lotus Notes:



1. Date: Create a new document in the General Register: the date is automatically the current day date
2. Format: let by default the electronic document
3. For Action / To: department/unit that asked you for the map
4. Initiator: WATHAB GIS (or other unit GIS)
5. Sender: your name
6. Subject: description of the map content; start systematically with "Map" (for easy search)
7. Confidentiality Level: I-Internal
8. Doc Ref will be created after saving the formulary: this is the one that you will use as the first characters of your filename

The screenshot shows a Lotus Notes form with the following fields and annotations:

- Doc Ref:** OP_ASSIST_EH 12/00105 (Annotation 8)
- Date:** 06.07.2012 (Annotation 1)
- Format:** E - Email / Electronic Document (Annotation 2)
- Doctype:** Image and Graph
- For Action / To:** Caroline Vauthey/OP_CENSUD/GVA/ICRC (Annotation 3)
- For Info / Cc:** (empty)
- Initiator:** Caroline Vauthey (Annotation 4)
- Sender:** Sylvie De Laborderie De Labrouhe/OP_ASSIST_EH/GVA/ICRC (Annotation 5)
- Subject:** MAP:ICRC Presence CENSUD (Annotation 6)
- Confidentiality Level:** I - Internal (Annotation 7)
- Filing:** (empty)
- Remarks:** (empty)
- Status:** Active

Naming:

- Doc Ref number (e.g.: EH12000105)
- Then use 2 characters for name of country of interest (cf ICRC_Ctry_iso2.xls),
- 3 characters for category: e.g.: GEN: general; ACT: activity; THM: thematic
- 2 or 3 characters for type: e.g.: BM: basemap; ASS: assistance; WTH: Wathab; SEC: security; POP: population, etc.
- Title: The Title of the map
- Size: A4, A3, etc.
- Format: Landscape, Portrait
- 6 characters: date: DDMMYY



NO SPACE in the name of document

DOCREF_NB	ISO2_Country	TYPE	SUBJECT	TITLE	SIZE	FORMAT	DATE	EXTENSION
ERB12675	IQ	ACT	WTH	Wathab-BaghdadGovernoratePriorityAreasfor_PfR2013	A3	L	100712	.PDF
		GEN-GENERAL	BM-BASEMAP OU-OPERATIONAL UNITS		A4 A3 A2 A1 A0	L-Landscape P-Portrait	DDMMYY	*.PDF *.PNG *.PPT
		ACT-ACTIVITY	ASS-ASSISTANCE WTH-WATHAB ECO-ECOSSEC PRT-PROTECTION LOG-LOGISTIC OTH-OTHER					
		THM-THEMATIC	SEC-SECURITY GOL-GEOLOGY POP-POPULATION WPT-WATER POINTS WTN WATER NETWORK LUS-LANDUSE VUN-VULNERABILITY					

For this map, it would be:

ERB12675_IQ_ACT_WTH_Wathab-BaghdadGovernoratePriorityAreasfor_PfR2013_A3L_100712.pdf
> map produced by Erbil delegation, wathab activity for PfR 2013, size A3, Landscape format, made 10th July 2012.

Other examples

AMM12811_SY_THM_BM_A4L_160512_Hama Governorate.pdf: map produced by Amman regional delegation: Thematic basemap of Syria showing Hama Governorate, A4 Landscape format, made 16th May 2012.

DAM12377_SY_ACT_ECO_EcoSec Intervention_A4LC_020412.pdf: map produced by Damas delegation activity map showing EcoSec Intervention in Syria; A4 Landscape format, made 02nd April 2012.

EHG11195-WD-ACT-SFD-2012_PRP-PPT-091111.png: map produced by OP_ASSIST_EH, Geneva HQ, World map of SFD activities in 2012 made 09th November 2011 for a PPT presentation.

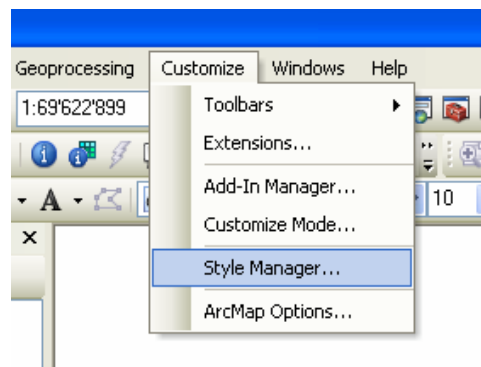
6. ICRC STYLESHEETS

One global ICRC stylesheet has been created: **ICRC_StyleSheet_v10.Style**. This is the only to be used ! It contains the old stylesheets:

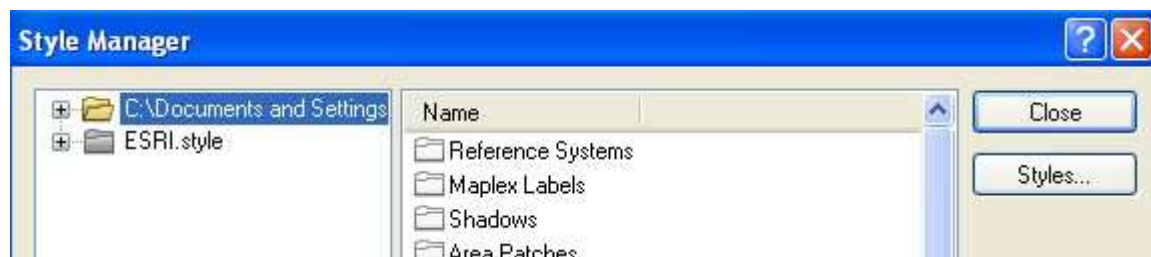
- *ICRC_delegations*: symbols for the delegation, subdelegations etc.
- *ICRC_delegations_BW*: symbols for the delegation in black/white
- *ICRC_maps*: symbols illustrating ICRC activities and towns, roads, rivers
- *ICRC_maps_neg*: symbols illustrating ICRC activities in negative
- *ICRC_maps_May2010*: new symbols set illustrating ICRC activities
- *ICRC_Colorramps_1*: colour ramp using ICRC colours
- *ICRC_Colorramps_2*: colour ramp using ICRC colours
- *ICRC_Colorramps_3*: colour ramp using ICRC colours

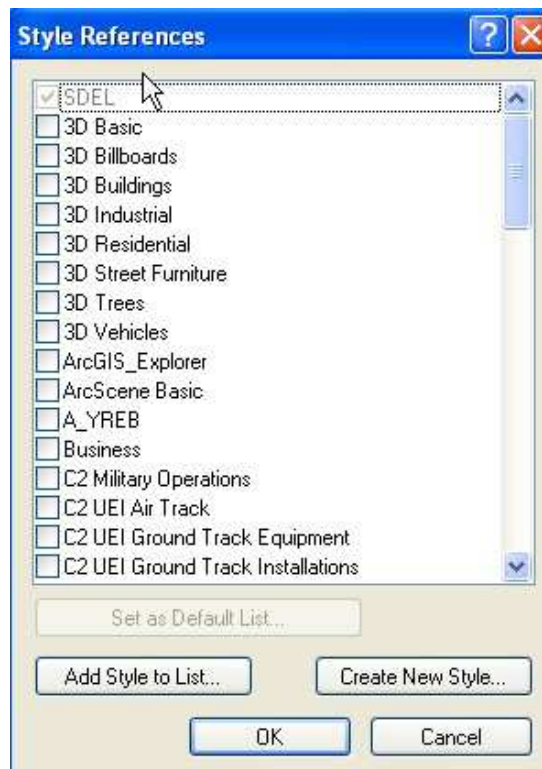
6.1. How to install the stylesheet:

1. Open "Customize" > "Style Manager" in ArcMap

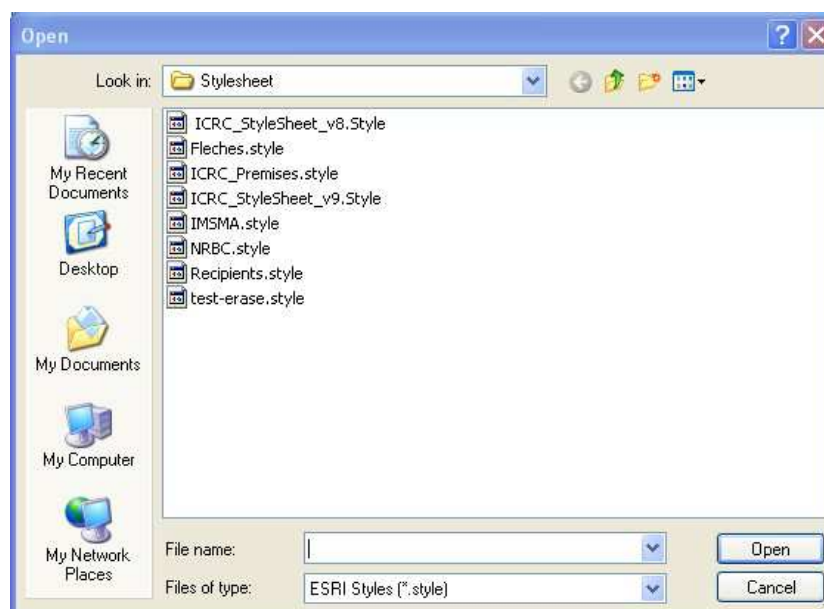


2. Click on "Styles"



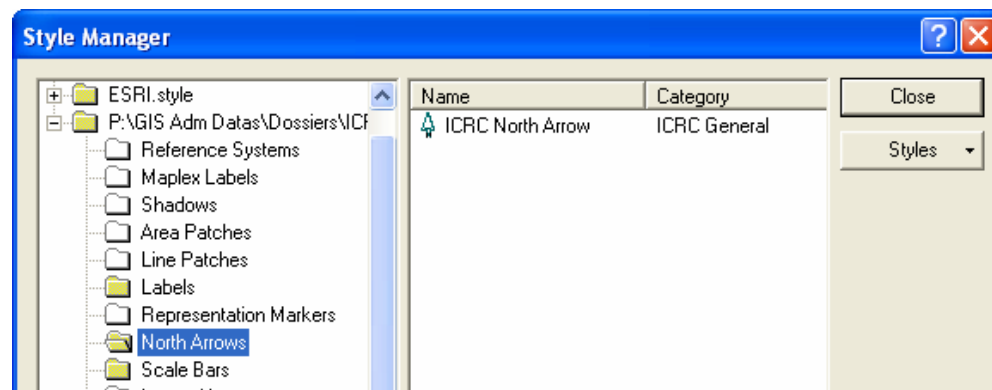


3. Click on Add Style to List, browse to the received style-folder (ICRC stylesheet.style) and open it



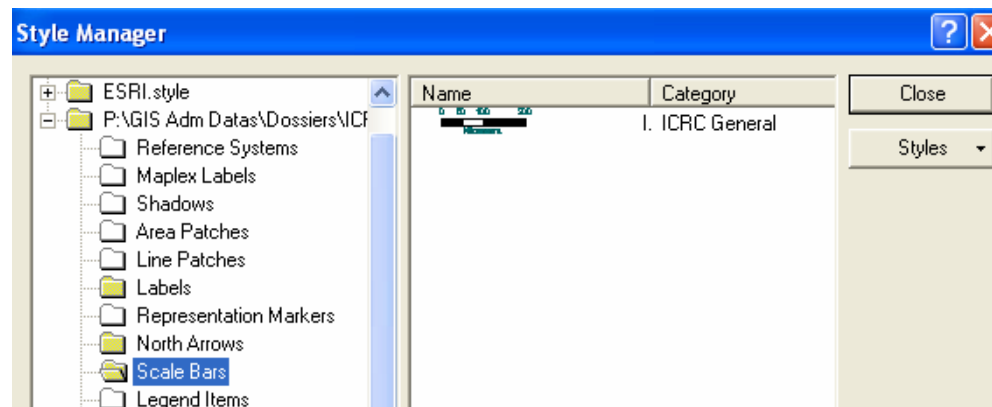
In this stylesheet, several objects were defined:

- 1 north arrow

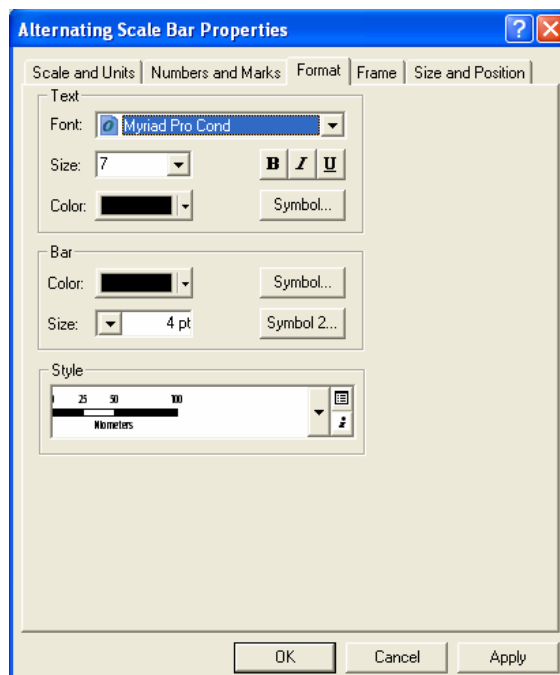


- 1 scale bar:

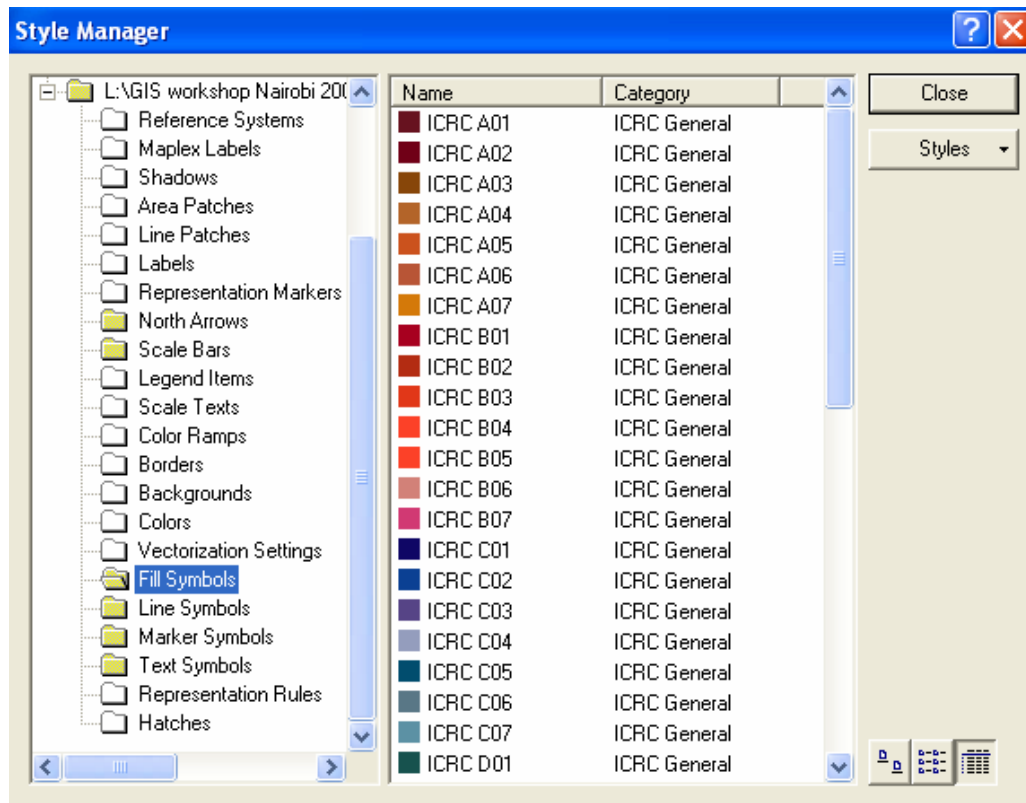
Font: Myriad Pro Cond 7pt; bar size: 4pt, in kilometers



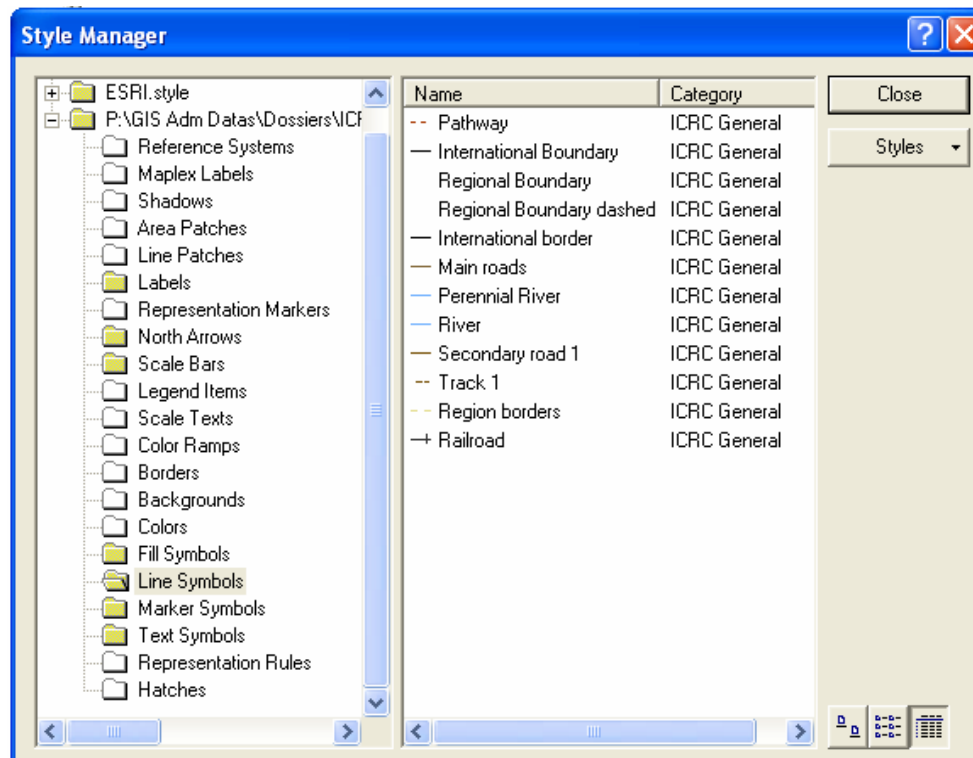
When inserting the ICRC scale bar, set the font Myriad Pro Cond, 7pt and Bar size to 4 pt



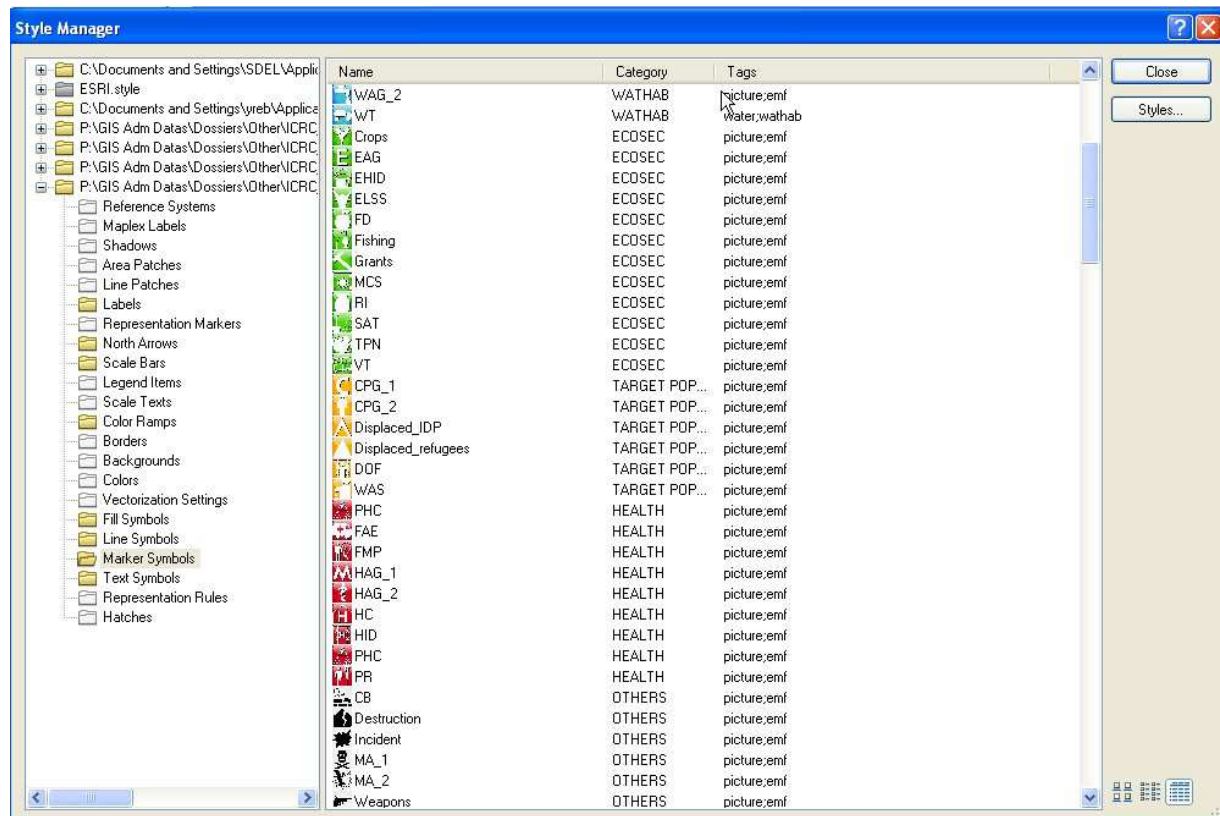
- Fill symbols for ICRC colour chart and countries of interest and neighbouring countries, etc.



- Line symbols for borders, roads, rivers, etc.



- Marker symbols for the different ICRC activities, classified per category (cf doctrine 49) and for capital, main town, and settlements.



As there are many marker symbols, you can select only the category you are interested in when you use the symbol selector.

The stylesheet is more and more defined to represent the ICRC features. Find below the new rule of using symbols in the map:

ICRC DATA : SQUARE SYMBOLS

EXTERNAL DATA: ROUND SYMBOLS

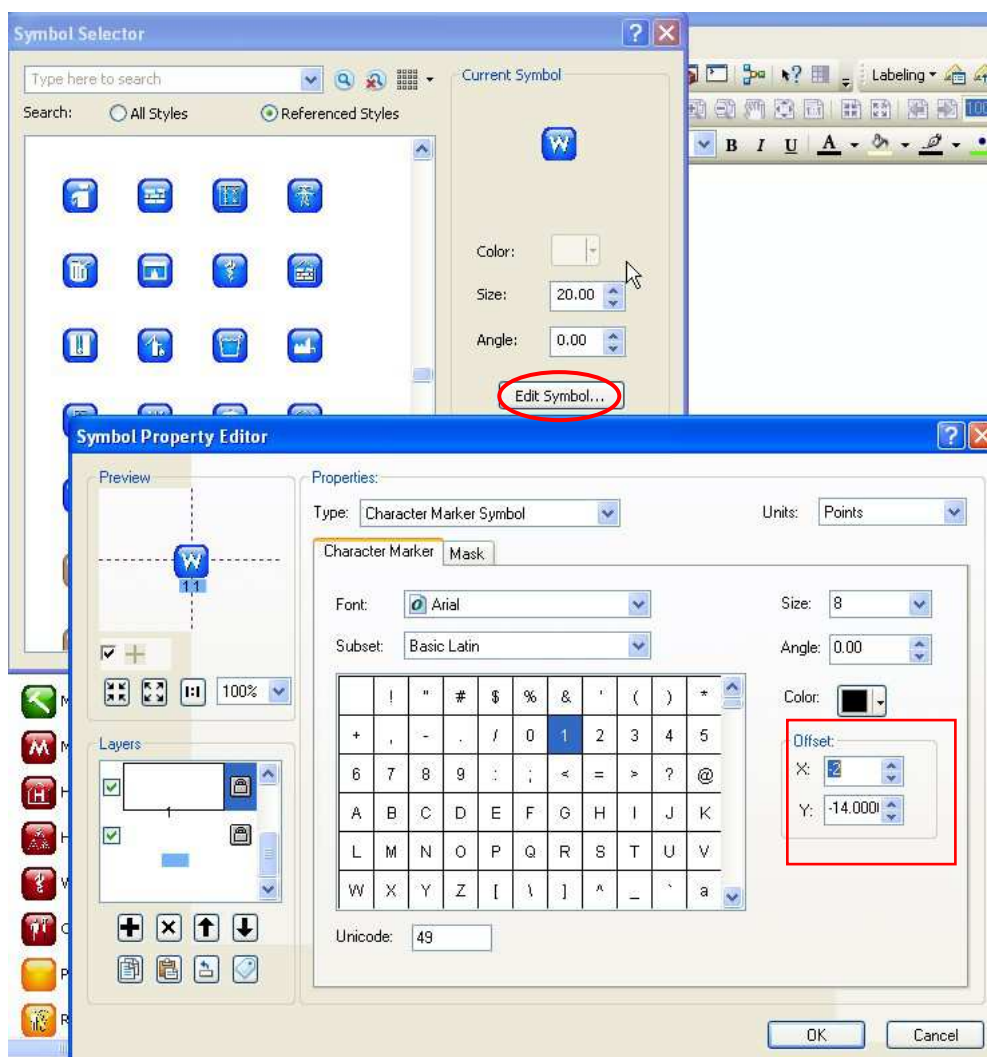


You can find in the [*LayerStyle_Template.mxd*](#) the different styles (.lyr) to use.

It concerns ICRC Activities, ICRC Premises, IFRC National Society, ICRC Recipient Places

The ICRC symbols in the stylesheet exist in one colour but could be customized with a colour background according to the activity status.

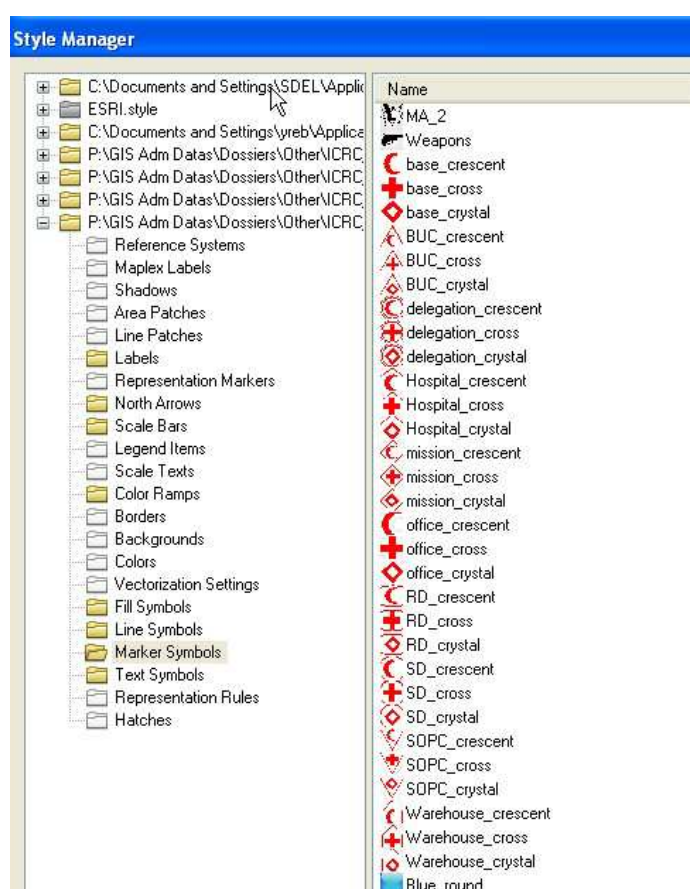
1. Select the symbol -> properties
2. Select a colour for the background / or add information like date



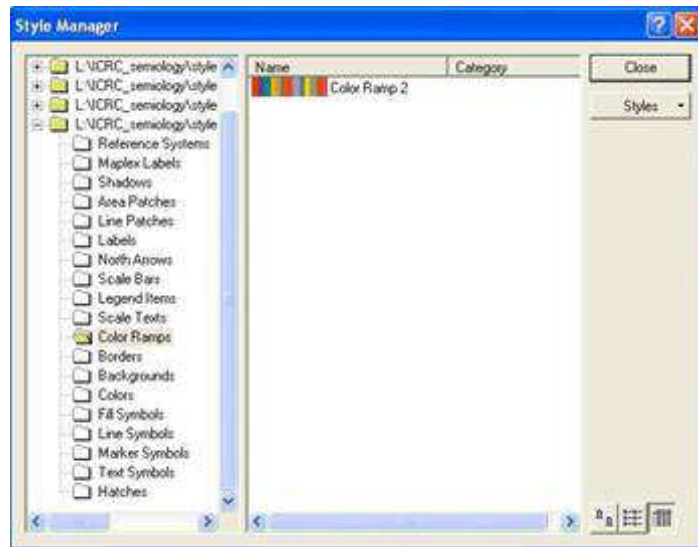
This option is useful if you want to distinguish categories, status:














3. ICRC symbols for delegations:



- ICRC Colour ramp:








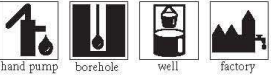











































6.2. Map Specifications

MAP SPECIFICATIONS	
	Background title and reference (R233 / G234 / B235) (C- / M- / Y- / K10)
	Country of interest (R145 / G182 / B124) (C40 / M10 / Y45 / K5)
	Secondary country of interest (R181 / G218 / B164) (C25 / M0 / Y30 / K5)
	Neighbouring country (R234 / G228 / B193) (C8 / M8 / Y20 / K-)
	Water body (R191 / G219 / B223) (C25 / M5 / Y5 / K-)
	ICRC symbols (R255 / G- / B-) (C- / M100 / Y100 / K-)
	ICRC activity area (R241 / G187 / B101) (C5 / M25 / Y55 / K-)
	Specific area, country of interest (R123 / G154 / B105) (C40 / M10 / Y45 / K20)
	Specific area, secondary country of interest (R163 / G195 / B147) (C25 / M0 / Y30 / K15)
	Specific area, neighbouring country (R203 / G188 / B136) (C20 / M20 / Y40 / K-)
	Country borders (R- / G- / B-) (C- / M- / Y- / K100) <i>Thickness: 0.7 pt</i>
	Region borders (R229 / G221 / B144) (C10 / M10 / Y40 / K-) <i>Thickness: 0.7 pt</i>
	Map title Myriad Pro Cond Bold / 20 pt
	Legend Myriad Pro Cond / 8 pt
	Reference Myriad Pro Cond / 7-8 pt
	Country of interest Myriad Pro Cond Bold / 21 pt (Caps)
	City, country of interest Myriad Pro Cond / 14 pt
	Capital, country of interest Myriad Pro Cond / 14 pt (Caps)
	Secondary country of interest Myriad Pro Cond Bold / 15 pt (Caps)
	City, secondary country of interest Myriad Pro Cond / 14 pt
	Capital, secondary country of interest Myriad Pro Cond / 14 pt (Caps)
	Neighbouring country Myriad Pro Cond Bold / 15 pt (Caps)
	City and capital, neighbouring country Myriad Pro Cond / 14 pt
	Water body Myriad Pro Cond Italic / 14 pt (Caps)
	Country regions Myriad Pro Cond Italic / 15 pt (Caps)

- The colour density should always be tested using local printers and photocopiers, and adjusted if necessary.
- Thickness of lines may have to be adapted for presentations using beamers.
- Flexibility of the font size is allowed in the Reference box, according to the volume of text to be introduced, but only one size should be used. The width of each column in the box is also flexible, except for the one containing the Disclaimer, which should always remain aligned with the logo at the top of the frame.
- If the text of the Legend column is too wide, use the option of placing the Legend in a box within the map.
- All text sizes can be adapted according to volume of information.
- Text should not appear on top of lines, to ensure legibility.
- The maps shown serve as samples only and are not considered to be approved versions for content.

6.3. Icons Specifications

ICONS POSITIVE SPECIFICATIONS		
ICRC GENERAL	WATHAB	ECOSEC
 BASE	 WATHAB ACTIVITIES, GENERAL	 ECOSEC ACTIVITIES, GENERAL
 OFFICE	 SAFE DRINKING WATER SUPPLY	 RELIEF INTERVENTION
 SUB-DELEGATION	 hand pump borehole well factory	 THERAPEUTIC/PREVENTIVE NUTRITION
 DELEGATION	 SANITATION AND ENVIRONMENTAL HEALTH	 ELEMENTARY LIVESTOCK SUPPORT
 MISSION	 TRANSITIONAL HUMAN SETTLEMENTS	 VOCATIONAL TRAINING
 REGIONAL DELEGATION	 ENERGY SUPPLY	 FOOD DISTRIBUTION
 BASIC UNIT CARE	 BUILDING REHABILITATION AND RECONSTRUCTION	 EHI DISTRIBUTION
 HOSPITAL	 WATER TRUCKING	 SEEDS & TOOLS
 ICRC-SUPPORTED PROSTHETIC/ ORTHOTIC CENTRE	 ICRC PREMISES	 MICRO-CREDIT SUPPORT
 WAREHOUSE	TYPE OF PROJECT	 GRANTS
HEALTH	 PLACES OF DETENTION	 CROPS
 HEALTH ACTIVITIES GENERAL	 HEALTH FACILITIES	 FISHING
 HEALTH IN DETENTION	 ICRC PREMISES	OTHERS
 FIRST AID/EMS	TARGET POPULATION	 CAPACITY BUILDING
 HOSPITAL CARE	 CIVILIAN POPULATION IN GENERAL	 WEAPON CONTAMINATION
 PHYSICAL REHABILITATION	 IDPs refugees	 INCIDENT
 PHC	 DEPRIVED OF FREEDOM	 DESTRUCTION
 FORENSIC: MISSING PERSONS	 WOUNDED AND SICK	 WEAPONS

6.4. Map samples

