

**Ninth United Nations Conference on the  
Standardization of Geographical Names**

New York, 21 - 30 August 2007

Item 12 (d) of the provisional agenda\*

**Toponymic data files: Automated data-processing systems**

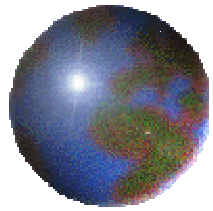
**A Tunisian Toponymic database as a subset of  
the topographic database**

Submitted by Tunisia \*\*

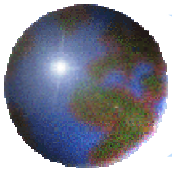
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\* E/CONF.98/1.

\*\* Prepared by Mrs. Naima Friha, Engineer, Deputy Director of Geographic Data Analysis and Cartography at the National Centre for Remote Sensing, Tunisia.

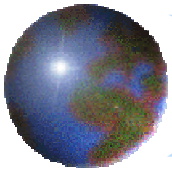


***A Tunisian Toponymic database  
as a subset of the topographic  
database***



# Content

- ☛ **Governmental agencies and private study bureaus working in the field of geomatics,**
- ☛ **Geographical names and the map**
- ☛ **History (dateline)**
- ☛ **Current situation**
- ☛ **Proposed solution**



# GOVERNMENTAL AGENCIES AND PRIVATE BUREAUS (1/2)

In Tunisia the main institutions in the field of geomatic are:

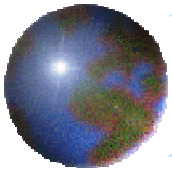
- The Cartographic and Topographic Office (OTC),
- The National Remote Sensing Center (CNT),
- The Hydrographic and Oceanographic Services of the Army,
- Study bureaus.

## ***OFFICE OF TOPOGRAPHY AND CARTOGRAPHY (OTC)***

- 15<sup>th</sup> July 1886: creation of the topographic office.
- 1<sup>st</sup> January 1968: creation of the topographic Division.
- 5<sup>th</sup> January 1970: creation of the topographic Directorate.
- 25<sup>th</sup> December 1970: creation of the Topographic and Cartographic Office (OTC).

### ***Main OTC activities:***

- Cadastre
- Infrastructure works
- Cartography
- Geodesy
- Printing



# GOVERNMENTAL AGENCIES AND PRIVATE BUREAUS (2/2)

## **REMOTE SENSING CENTER (CNT)**

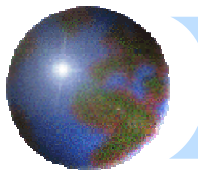
- **1979: creation of the Military Directorate of Geographic and Hydrographic services (DSGHA) ,**
- **11<sup>th</sup> July 1988: creation of the CNT,**
- **January 2004: merger of CNT and DSGHA**
- **Legal status: The CNT is a public institution under the oversight of the Ministry of Defense,**
- **Links: The DG of CNT chairs the boards of directors of the Regional remote sensing center of north African countries (CRTEAN) and the African Organization of Cartography and Remote Sensing (OACT).**

### ***Main CNT activities***

- **Providing spatial geographic information for defence operations and national customers**
- **Participating to national policy related to remote sensing**
- **Acquiring; distributing and processing data related to remote sensing;**
- **Organizing training in geomatic field**
- **Offering services**
- **Contributing to national research projects and ensuring expertises**

## **HYDROGRAPHIC AND OCEANOGRAPHIC SERVICE OF THE ARMY**

**In cooperation with the OTC and CNT , it is responsible of the production of navy charts.**



# GEOGRAPHICAL NAMES AND THE MAP

The geographical name is collected either during the field map validation or by consulting existing maps and documents. Both ways may lead to errors when dealing with toponymy either in spelling or in writing.

**CARTE DE OUED MLIZ** 1/2

Feuille de WAD MLIZ N° \_\_\_\_\_

Echelle au levé : 1/50 000

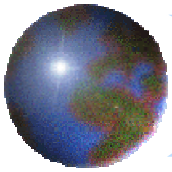
### ETAT JUSTIFICATIF DES NOMS

Communes (par ordre alphabétique)	Page

Noms Elevés	Nombre	Densité au km <sup>2</sup>
1/80 000		
1/50 000	01	
1/25 000		

TOPOGRAPHIE	
Atelier :	M. Amri
du $\frac{03}{03}$ au $\frac{30}{03}$ 2002	M. <u>  </u>
Terrain :	Opérateur M. <u>AMRI</u>
du $\frac{01}{03}$ au $\frac{30}{03}$ 2002	Chef de Brigade M. <u>AMRI</u>
Transects :	
par _____ à _____ le _____	
par _____ à _____ le _____	
par _____ à _____ le _____	

GOUVERNORAT <u>JANDOURBA</u>											
DELEGATION <u>WAD MLIZ</u>											
COMMUNE _____ Habitants (100) <u>10.000</u>											
RENSEIGNEMENTS DIVERS Formes anciennes ou locales Origine, signification, prononciation, etc...	X 6	Y 7	NOM PROPOSE PAR L'OPÉRATEUR 8	NOM RETENU PAR LA COMMISSION de toponymie 9	NATURE de détail 10	CODE détail 11	CODE caract. 1/250 000 12	CODE 1/50 000 13			
دوار عبداللہ	4167	44038	Deuar Abdallah	Dawwār 'Abdallah	Liadit/Habit		113				
هنشير ميرة	456	44034	Henchir Mira	Hänshir Mīra	Liadit/H(AR)		112				
سيدي داندان	456	44032	sidi Dandān	Sīdī Dandān	Maraikat		114				
جبل ماشروم	456	44032	Jbel Machroum	Jbal Mashroum	Jbel		353				
وادي ماجريو	457	44033	Oued Majeria	wād Mājriyya	oued		353				
سيدي صابر	452	44032	sidi Sabar	Sīdī Ṣābir	cramp/maraikat		114				
هنشير الشارح	457	44031	Henchir Echaraa	Hänshir Ash-shāri's	Liadit		233				
الغونتاس	459	44034	El Gountass	Al Gontās	crête		352				
وادي المور	456	44030	O. el Mourra	wād Al Mourra	Talweg		354				
وادي المالغ	457	44029	Oued el Malagh	wād Al Mālāḡ	"		354				
المرغمة	457	44029	El Mreghma	Al Mrāghma	Liadit H CTOUP		118				
جبل ايسرا	456	44025	Jbel es Sra	Jbal Isrā	sommet		352				
عين الحجيلت	457	44029	Ain el Hajla	'Īn Al Hajla	Azn		354				
وادي الطاهر	452	44025	Oued et Taher	wād Al-Ṭāhir	Talweg		354				
كديت المرغمة	458	44028	Kedyit el Mreghma	Kedyit AL Mrāghma	sommet		353				

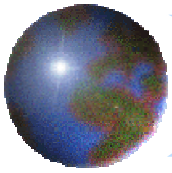


## HISTORY (1/3)

The official toponymy depends of the Home Office; it concerns only administrative centers ; The base is the decret of 21<sup>ST</sup> june 1956 related to republic administrative organization: The majority of the names of geographic entities: rivers, mountains, localities escape to this system; It is via the official cartography cadastre, topographic map that those toponyms are recorded and officialized;

*Since there, was a need for normalization in the field of toponymy, and a public body was created to this effect.*

- The transcription from Arabic to Latin was first seriously considered during the French protectorate in Tunisia when produced maps were mainly ordnance survey maps.
- Many decisions in this field were made on behalf of the Tunisian authorities and the other north African countries by the French military and civilian authorities such as the Military geographic service (SGA) and the National Geographic Institute (IGN) and the Saharian Research Institute (IRS),
- Many transcription systems either similar or complementary were adopted by different organizations,
- As a consequence, there was no common system of transcription
- In 1983 the OTC decided to update its maps using the latin transcription system,
- In January 1983 a Geographical Names Commission was created within OTC
- Many meetings and work shops were then held between OTC and the concerned organizations like the DSGHA and the Center of Economic and social studies and researches (CERES). In order to set up a common cartographic transcription system in compliance with international standards .



## HISTORY (2/3)

### The adopted transcription system:

The Commission decided that the Beyrut system as amended 1972 by the United Nations be adopted taking into consideration the Tunisian dialect:

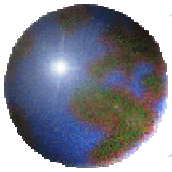
### Standards of transcription :

#### *General rules :*

Because each change of transcription requires a minimal period of time to get familiar with, it was agreed that french transcription had to be maintained between brackets mainly for exonyms where difference in writing and pronunciation was evident:

Examples of exonyms : Binzart(Bizerte), Halq Al Wad (La Goulette), Hammam  
linf (Hammam Lif)...

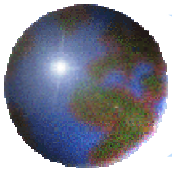




## HISTORY (3/3)

### *Some exceptions :*


- For a given toponym the local dialect has to be considered as the right source of pronunciation even when there is another pronunciation used elsewhere.  
Ex: Bni Kalthoum and not Bin Kalthoum,
- Local pronunciation has to be adopted in case there are foreign names ( Western origin): Hinshir Rikou instead of Hinshir Ricco,
- In case there are two pronunciations for the same name and it is difficult to decide which one to adopt, the pronunciation nearest to literary Arabic is retained: Qasr hlal instead of Qsar Hlal,
- Historical names, namely those referring to ruins like Bulla Regia, Utique, Carthage have to be written the way they used to be,
- Foreign names resulting from the colonization period are changed after checking documentation or cadastre: Al Fahs instead of Potinville; Al Omran instead of Franceville...
- Because of the lack of normalized documentation, names of sites of proven non Arab origin, mainly the Berber ones such as Sidwikich, Tamaghza are written in Arabic characters.
- For the toponyms in neighbouring countries, the adopted UN transcription system for those countries is adopted. Ex Constantine ..




# CURRENT SITUATION

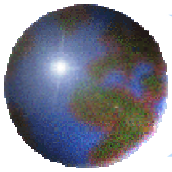
- Different maps with different transcription systems

Example : Korbous

Korbous 1/25.000 

Korbous 1/200.000 

- Old and analog maps
- Analog toponymic database derived from the 1:250.000 map scale in two transcription systems (french , old version beyrut system) 






# PROPOSED SOLUTION

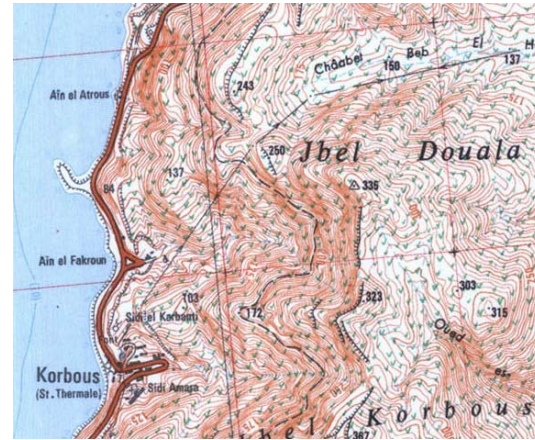
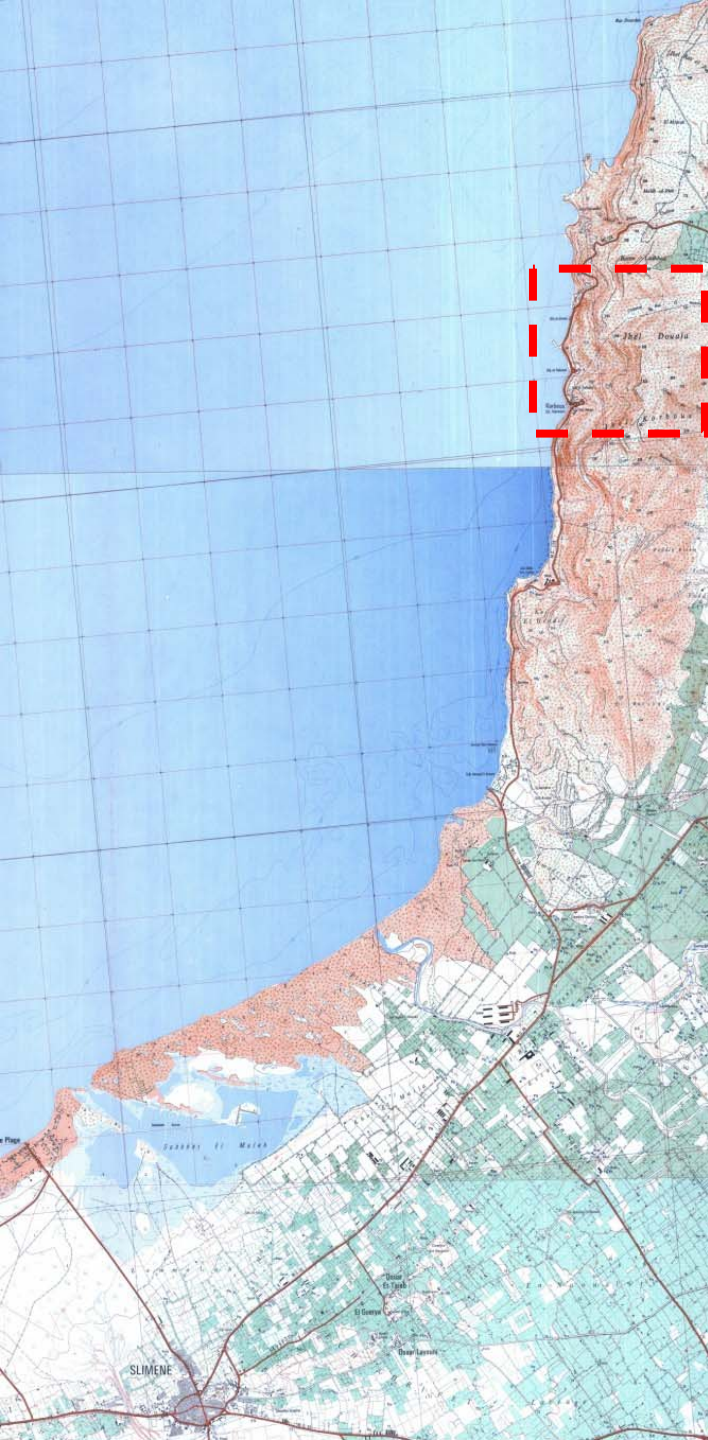
- **Setting up a topographic database using high resolution satellite images,**
- **Setting up a digital toponymic database using the existing one, existing maps and field check**

## **Purpose:**

- **Have current geospatial information that answer all needs**
- **Deriving ordnance survey maps which are the 1:50000 scale for Tunisia,**
- **Deriving bigger scale maps for specific applications**
- **Setting up a unique transcription system toponymic database.**

## **TASKS**

- ✓ **Data conceptual Model** 
- ✓ **Toponyms Capture from different sources (in progress)**
- ✓ **Generic toponyms dictionary ( in progress)** 
- ✓ **Toponymy database overview** 
- ✓ **Automatic translation between transcription systems (in project)**
- ✓ **Web Mapping Application (in progress)**

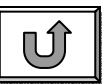


# Korbous 1/25.000

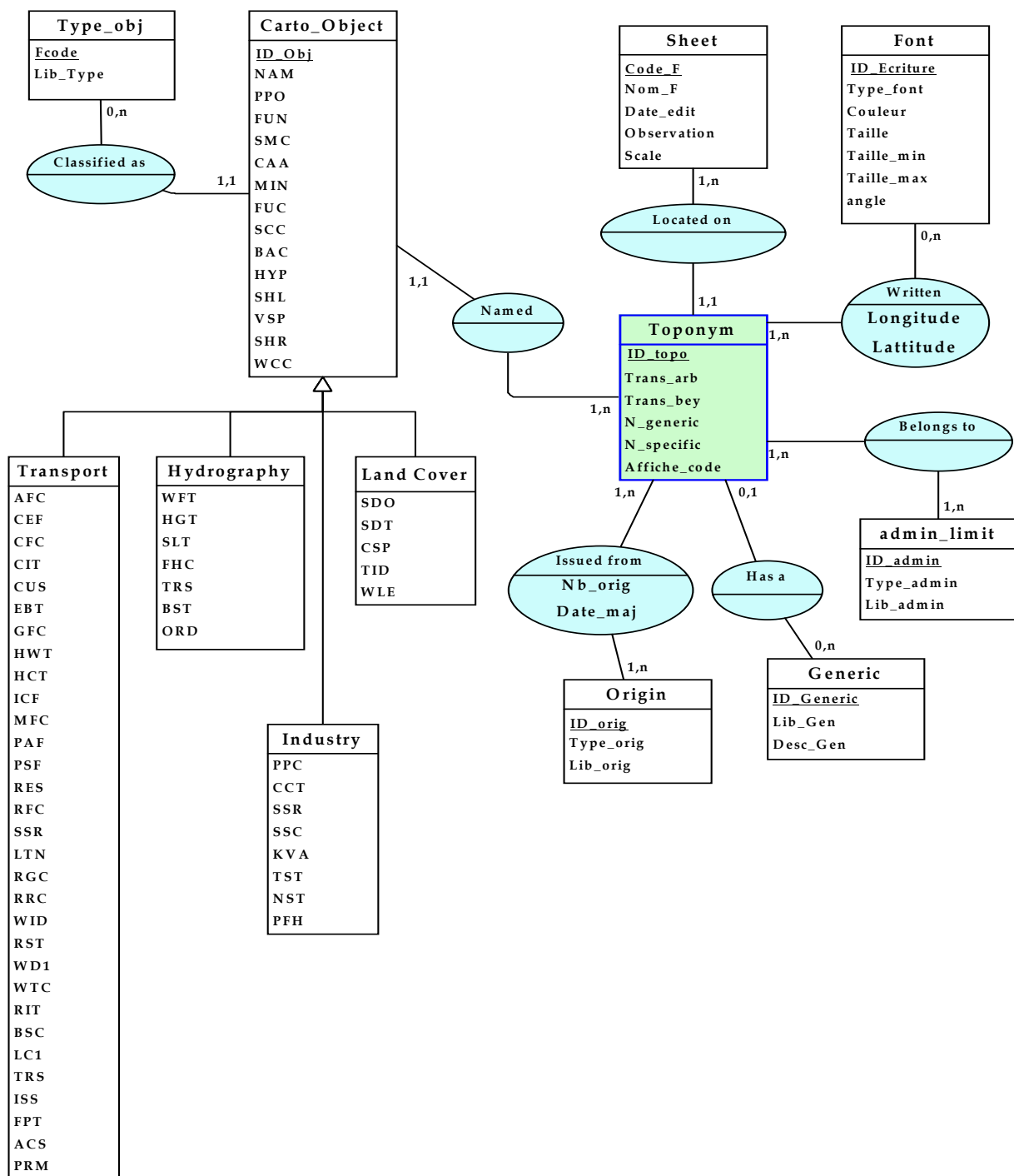




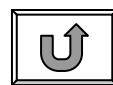
# Korbous 1/200.000





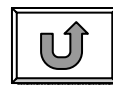


ID	F_CODE	ENTITY	ARABIC_NAME	FRENCH TRANSCRIPTION	GENERIC	SPECIFIC	BEYRUT TRANSCRIPTION	SHEET NAME
1	BH140L	COURS D'EAU	واد زيزان	Oued Zizan	Oued	Zizan	Wād Zizān	BIR MCHERGUA N.O
2	BH140L	COURS D'EAU	واد المالح	Oued Al Malah	Oued	al Malah	Wād Al Mālah	BIR MCHERGUA N.O
3	BH140L	COURS D'EAU	واد العسل	Oued al Abid	Oued	al Asal	Wād al 'ābid	BIR MCHERGUA S.O
4	BH140L	COURS D'EAU	واد سيدي عامر	Oued Sidi Amir	Oued	Sidi Amir	Wād Sīdī 'amir	BIR MCHERGUA S.O
5	BH140L	COURS D'EAU	واد الظلام	Oued Ed_dlam	Oued	edh-dhlam	Wād Ad-dlām	TEBOURBA S.E
6	BH140L	COURS D'EAU	واد نكاي	Oued Nkayi	Oued	Nekaia	Wād Nkāyi'	TEBOURBA S.E
7	BH140L	COURS D'EAU	واد الرمل	Oued Er-rmal	Oued	er Rmel	Wād Ar-rmal	TEBOURBA S.E
8	BH140L	COURS D'EAU	واد الكبير	Oued El kbir	Oued	el Kebir	Wād Al kbīr	TEBOURBA N.E
9	BH140L	COURS D'EAU	واد الزيتون	Oued Ez-zitoun	Oued	az-Zitoun	Wād Az-zīṭoun	BOU 'ARADA N.E
10	BH140L	COURS D'EAU	شعبة الخماس	Shabit El Khammas	Shabit	al Khammasa	Sha' bit Al Khammās	ZAHRIT MADYIN S.E
11	BH140L	COURS D'EAU	واد دبوبة	Oued Dbouba	Oued	Dbouba	Wād Dbouba	DJEBIBINA
12	ZD040P	LIEU DIT NON HABITE	هنشير شقافة	Henshir Shoggafa	Henchir	Chougafa	Hinshīr Shoggāfa	BOU 'ARADA S.E
13	ZD040P	MARABOUT	سيدي بو حسان	Sidi Bou Hassan	Sidi	Bou Hassene	Sidi Bou Hassān	DJEBIBINA
14	ZD040P	SOURCE D'EAU	عين نقرهيفة	Aïn Ngarhifa	Ain	Negrehifa	Ayn Nqarhīfa	DJEBIBINA
15	ZD040P	LIEU DIT HABITE	المنافهة	El Mnaqha			Al Mnāqha	BIR MCHERGUA S.O
16	ZD040P	LIEU DIT HABITE	أولاد علية	Ouled alyya	Ouled	Alaia	Awlād 'alayya	MJAZ AL BAB N.E
17	ZD040P	LIEU DIT HABITE	تونغار	Toungar			Toungār	TEBOURBA N.E
18	ZD040P	LIEU DIT HABITE	دوار القصة	Dowwar El Qasa	Douar	el Guessa	Dawwār Al Qaṣ'a	TEBOURBA N.E
19	ZD040P	LIEU DIT NON HABITE	رافوية السويس	Ragoubit Es-Swisi	Ragoubet	Souissi	Ragoubit As-Swīsi	TEBOURBA S.E
20	ZD040P	LIEU DIT HABITE	فرعة العطنش	Garaet El atash	Garaet	el Atach	Gar'at Al 'atash	TEBOURBA S.E





FRENCH		ARABIC		BEYRUT		CODE
GENERIC	SPECIFIC	SPECIFIC	GENERIC	GENERIC	SPECIFIC	
Aïn	Draham	دراهم	عين	'Ayn	Drāhim	<a href="#">PPL</a>
Bab	El Jazira	الجزيرة	باب	Bāb	Al Jazīra	<a href="#">PPLX</a>
Cap	De Tabarka	طبرقة	رأس	Ra's	Ṭabarqa	<a href="#">PT</a>
Djebel	El fartass	الفرطاس	جبل	Jbal	Al farṭās	<a href="#">HLL</a>
Hadjeb	El Ayoun	العيون	حاجب	Hājib	Al 'Ayoun	<a href="#">ADMD</a>
Fedj	En Naam	النعام	فج	Fājz	An N 'ām	<a href="#">HLL</a>
Ghurt	Al Âbid	العابد	غرد	Ghord	Al 'Ābid	<a href="#">DUNE</a>
Henchir	Ben Âtia	بن عطية	هنشير	Hinshīr	Bin 'Aṭīyya	<a href="#">FRM</a>
kef	El Agueb	العقاب	كاف	kāf	Al 'agāb	<a href="#">PK</a>
Khaoui	Dabdaba	دبدابة	خاوي	Khāwī	Dabdāba	<a href="#">RVN</a>
Majen	Ad-Dabba	الدابة	ماجن	Mājin	Ad-Dābba	<a href="#">RSVT</a>
Mzaret	Ali ben abd en nebi	علي بن عبد النبي	مزارة	Mazārit	'Ali Bin 'Abd an Nbī	<a href="#">TMB</a>
Moungar	El Agueb	العقاب	منغار	Mingār	Al 'agāb	<a href="#">PROM</a>
Orf	Zaytouna	الزيتونة	عرف	'Orf	Az-Zitouna	<a href="#">HLL</a>
Nakhlet	El Menngoub	المنقوب	نخلة	Nakhlit	Al Mangoub	<a href="#">WLL</a>
Oued	Bou Atya	بوعطية	واد	Wādī Bu	'Aṭīyya	<a href="#">WAD</a>
Pont	Du-Fahs	الفحص	قنطرة	Qanṭarat	Al Faḥṣ	<a href="#">PPL</a>
Garât	Abd Allah	عبد الله	قرعة	Gar'at	'Abdallah	<a href="#">SBKH</a>
Sidi	Âmer	عامر	سيدي	Sīdī	'Āmir	<a href="#">TMB</a>
Sidi	fath Allah	فتح الله	سيدي	Sīdī	Faṭḥallāh	<a href="#">PPL</a>



**PPL** populated place

**A city, town, village, or other agglomeration of buildings where people live and work.**

**WLLS** wells

**Cylindrical holes, pits, or tunnels drilled or dug down to depth from which water, oil, gas can be pumped or brought to the surface.**

**FRM** farm

**A tract of land with associated buildings devoted to agriculture..**

**DUNE** dune (s)

**A wave form, ridge or star shape feature composed of sand**

**(sand dune, sand drift, barchan, hairpin, transverse, seif, star, sand ridge, sand hill, etc.)**

**SBKH** sabkha (s)

**A salt flat or salt encrusted plain subject to periodic inundation from flooding or high tides.**

**TMB** tomb (s)

**A structure for interring bodies.**

**TRB** tribal area

**A tract of land used by nomadic or other tribes.**

**SPNG** spring

**A place where ground water flows naturally out of the ground.**

