Qatar's GIS
Cooperation with Local Community

Dr. Mohammad Abd El-Wahab Hamouda
GIS Consultant & Chairman of GIS Coordinators Group
The Center for GIS – State of Qatar

Second High Level Forum on
Global Geospatial Information Management (GGIM)
Exchange Forum with the Geospatial Industry
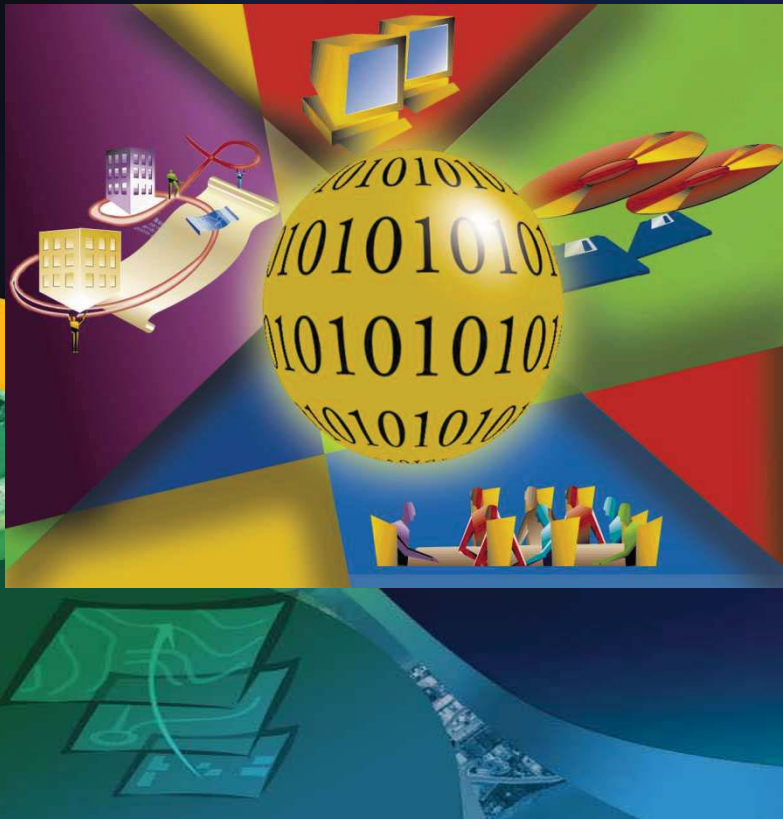Doha, Qatar, 3 February 2013

Introduction

- I would like to thank the UN-GGIM Secretariat, the moderator of this exchange forum, and the members of JBGIS for setting up this forum.

- I also welcome and thank all attendees from organizations, companies and industry representatives.

Most important elements of Qatar's GIS

Since its inception twenty years ago, Qatar had adopted five elements that led to its success:

1. Establishing The Centre for GIS (CGIS)

2. Common Standards

3. Data Sharing

4. Inter-Agency Coordination

5. Nationwide Digital Mapping Program

Prelude

- Qatar had ground-breaking strides utilizing geographic information systems country-Wide.

- Our implementation is sought after by several countries.

- Our GIS setup is as valid as it has always been because its basic elements are well founded and are evolving with new technologies and trends.

National Endeavors with GIS playing a major role

Following are examples of endeavors in Qatar relying heavily on geospatial input:

- Qatar's National Vision 2030
- Qatar National Development Framework (QNDF)
- The Qatar National Master Plan Project (QNMP)
- Qatar Area Referencing System (QARS)
- Transportation Master Plan of Qatar (TMPQ)

Qatar Geoportal

More... | Map | Satellite

Identify

Clear

Minimum Land coverage for commercial in percentage: N/A
Maximum Lot coverage for commercial in percentage: N/A
Front Setback standard for public facilities: 6
Rear Setback standard for public facilities: 4
Side Setback standard for public facilities: 4
Maximum Height restriction for public facilities in meters: 12
Maximum Height restriction for public facilities in number of storeys: G+1/G
Floor Area Ratio for public facilities: 0.8
Maximum Building coverage for public facilities in percentage: 40
Minimum Land coverage for public facilities in percentage: 30
Maximum Lot coverage for public facilities in percentage: 70

X:239497.5222477556 Y:377551.86186940275

100 m

300 ft

Transferring data from geoportal.gisqatar.org.qa...

Legend

Al Khor & Al Wakra Proposed Zoning

Proposed Zoning

Al Khor-AREA UNDER STUDY
Al Khor-C1
Al Khor-C2
Al Khor-C3
Al Khor-C4

Al Wakra City Zoning Plan and Regulations Report November 2008

Regulation	Residential	Public Facilities
These regulations shall apply to: • All new and redeveloped residential uses and public facilities within the Low Density Residential District (R2A) • Lots zoned or re-zoned for residential uses/public facilities within the Low Density Residential District (R2A)		
1.0 USES		
1.1 Permitted Uses	• Single family detached villa housing • Single family attached villa housing • Compounds (with flats) must comply with the latest version of the Compound Regulations for all regulations	• Kindergarten / childcare facilities • Minor infrastructure • Religious institutions • Parks and Open Space
1.2 Prohibited Uses	• All other types of housing • All types of industrial uses • All types of commercial uses • Major infrastructure	
1.3 Conditional Uses	• N/A	• Cultural centers • Barber / Hair Salon • Health Spa • Government offices • Hospitals and health institutions • Libraries • Medical and dental clinics • Primary and secondary schools
1.4 Ancillary Uses	• Car parking garage • Guard house • Majlis • Maids' quarters • Outdoor kitchen • Store rooms	• Car Parking Garage • Electrical substation • Guard house • Refuse area
1.5 Minimum Lot Size	• 400 m² for detached villa housing (minimum 15 m width) • 600 m² for attached villa housing (minimum 20 m width)	• Subject to applicable regulations, if any
1.6 Minimum Lot Size for Redevelopment on Existing Non-Conforming Lots	• 350 m² for Detached Villa Housing (Minimum 15 m width) on existing subdivided lots • 550 m² for Attached Villa Housing (Minimum 20 m width) on existing subdivided lots	• Subject to applicable regulations, if any

Qatar Area Referencing System - QARS

- Created a comprehensive database that serves the requirements of all concerned agencies in Qatar by using GIS to link the new property number with its geographic location and the numbers from other agencies. (QTEL, Electricity, water, PIN Number, etc.).

- This shows that the project is not just installing property number plates.

Qatar Area Referencing System - QARS

- Applications and services resulting from the project are many.

- They include: Security, Traffic and emergency response systems, trade, statistics, education, municipalities, Post and several others.

Cooperation with Industry and Local Community

CGIS provides data, Acquires services and works on joint projects with the following sectors:

- Education and Research institutes
- Private Companies in GIS industry and solution providers
- Semi government organizations and companies

Education and Research Institutes

- Established GIS program at Qatar University.
- Support for research and on premises projects for Qatar University
- Support for research by several universities Located in Qatar.
- Provided data and joint projects with Qatar Science and technology Park.
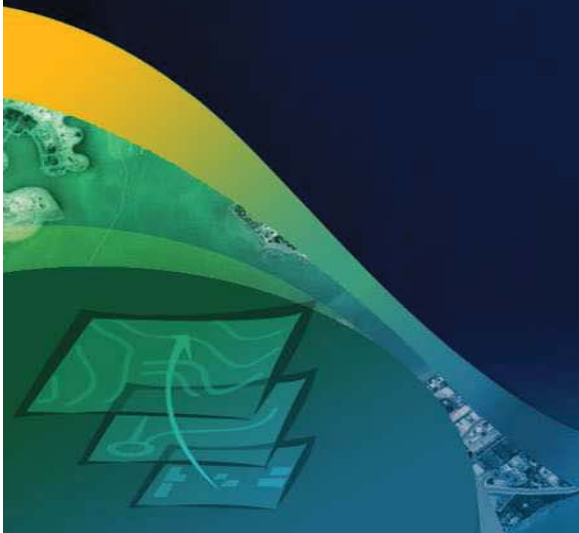
Private Companies in GIS industry and solution providers

- Signed an Enterprise License Agreement with ESRI through its local distributor.

- Working on a joint project for building navigation data with more than one company.

- Acquiring aerial imagery, Satellite images and updates of 3D and vector data through local and international companies/consortiums.

- Establishing CORS network with specialized Surveying and GPS companies.

- Other …..

Semi government organizations and companies

- Cooperation, Providing Data, GIS software Licenses and training to Qatar Rail, Musheireb, Lusail, Barwa, QP, Pearl Qatar, etc.

Areas we are focusing on

- Increased adoption of web services which cuts down cost, increases and diversifies the range of users.

- Increased adoption of mobile applications which delivers geospatial services to the masses   (Al Murshid).

- Utilizing GIS in planning built and natural environments in an integrated process taking into consideration sustainability and resources management.

Thank You