United Nations Spatial Data Infrastructure (UNSDI)

An Initiative of the United Nations Geographic Information Working Group (UNGIWG)

A Humanitarian Perspective Presented by OCHA

Interagency Meeting on Outer Space Activities
27th Session

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Current UN Setting

UN Reform agenda 2006

- Investing in Change
  - Raising UN efficiency & effectiveness
  - UN System-wide Coherence (Development, Humanitarian Assistance & Environment)
  - Comprehensive management reform → 2007

UN Millennium Development Goals - 2015

- Eradicate extreme poverty & hunger
- Ensure environmental sustainability
- Develop a global partnership for development (information & communications technologies)

Global governance

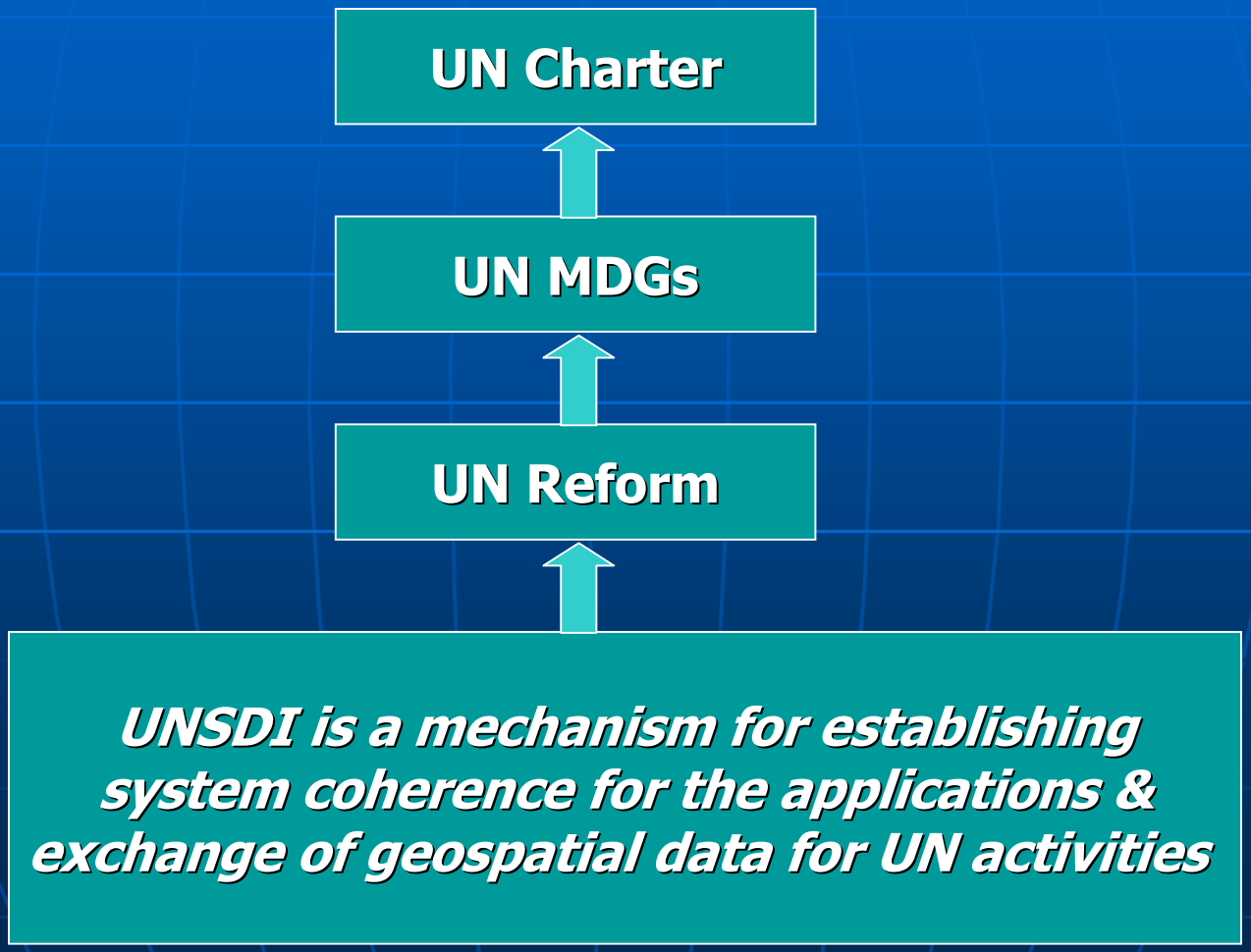
- Countries increasingly work in the context of multi-lateral agreements

UNGIWG

UN Geographic Information Working Group

- Established in 2000 to address common geospatial issues - maps, boundaries, data exchange, standards - that affect the work of UN Organizations and Member States.
- In 2006 consisted of 33 UN entities
- In 2006 had six Task Groups
  - International and Administrative Boundaries
  - Core Geo-Database
  - Remote Sensing
  - Interoperable Services
  - GIS Map Production Guidelines
  - Global Navigation Satellite Systems

Strategic Context for a UNSDI

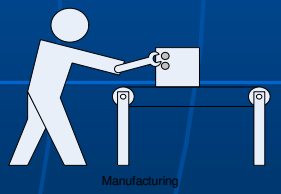


How can a UNSDI help?

spatial data infrastructure

discovery of, ready access to, evaluation & dependable utilization of *geospatial data* is greatly facilitated by *an umbrella of* policies, technologies, data, common standards, standard practices, protocols & specifications

SDIs help organizations & technologies to interact



more efficient use, management and production of geo-spatial data

SDI Axioms

SDIs are about working smarter, not harder.

Re-use:

- re-use of data
- re-use of technical capabilities
- re-use of skills developed
- re-use of intellectual effort and capital

Sharing:

- 'sharing-not-wearing' the costs of people, technology and other shared infrastructure assets, helping to realize more rapid returns on investment

Learning from others:

- Avoiding pitfalls

Key UN business cases

Provision of Spatial Data

- Cartographic data, satellite imagery & GIS services – Peacekeeping, etc.
- Thematic data to support the 'Three Pillars of Sustainability'
- Global Observation & Assessment
- Emergency Response & Disaster Preparedness

Development of Common Data Services

- Cartographic data, satellite imagery & GIS services – Peacekeeping, etc.
- Adoption/development of standards & shared infrastructure to promote interoperability, ease of data access & re-use
- To increase data sharing and re-use internally & for partners

Capacity Building

- To strengthen Member States' abilities to share & utilize spatial data
- To increase UN efficiency & effectiveness

Promotion of Partnerships and Cooperation

- To leverage spatial data access in support of MDGs
- That support capacity building

UNSDI-related Activities of OCHA

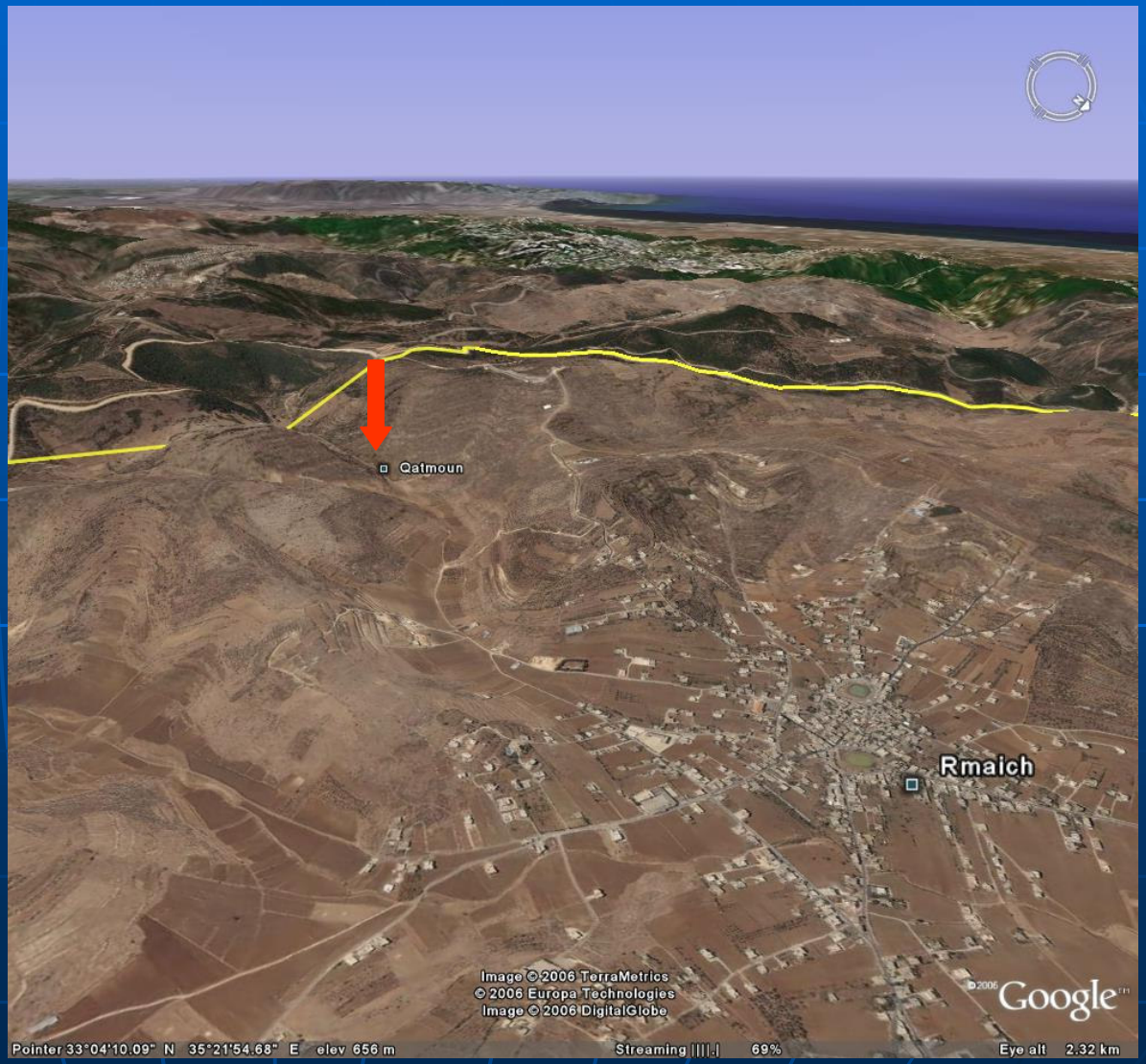
- OCHA and UNHCR will Co-chair UNGIWG in 2007-8.
- OCHA is leading the Humanitarian Reform process with due emphasis on Cluster-based Information Management practices informed by UNSDI.
- OCHA is implementing specific measures to introduce structural elements to facilitate data standards, policies, technologies, data, common standards, standard practices, protocols and specifications that facilitate discovery of, ready access to, evaluation and dependable utilization of geospatial data including satellite imagery and derivative products.

VSAT and Personal ICT Kit Deployments

Site and Size Verification Lebanon HIC

Use Case 1

Site and size verification of settlements in South Lebanon



Public Broadcasting of UXO Sites

Use Case 2

Warning the public about unsafe areas

UNSDI In Action

Now:

UNMAS: collect field data and transmit to HIC

HIC: process incoming data, convert it to KML/KMZ and mail it to "Interested Parties" for visualization using Google Earth.

With UNSDI:

UNMAS: collect field data and post onto the UNSDI humanitarian geospatial data services portal

Any user: Subscribe to the data service and visualize it juxtaposed over an open-standards compliant online mapping services.

Information Management to Support Humanitarian Response Coordination

Humanitarian Information Centers

ReliefWeb