United Nations Geoeraghic Database

Prepared by Mr. Miklos Pinther, Chief, Cartographic Section, LPD/DPI
The United Nations Cartographic Section of the Library and Publications Division, Department of Public Information, is currently looking into establishing a standard United Nations Geographic Database. A significant element of the database will be toponymic information whose primary purpose is to provide the names for the digital compilation of maps at various scales.

The attached concept paper briefly describes the objectives of the database. Presently, a technical proposal is under preparation, which will be submitted shortly for funding. The Cartographic Section seeks comments and guidance from the Group of Experts on Geographical Names, and would like to explore ways to establish a formal liaison for this project.
UNITED NATIONS GEOGRAPHIC DATABASE

Prepared by the United Nations Cartographic Section
For critical review and comments

Background

The United Nations Cartographic Section provides cartographic/geographic services to the UN Secretariat. The Section prepares small-scale illustrative and large-scale stand-alone maps, formulates cartographic standards, and provides clearance for maps published under the UN imprint. With the advance in geographic information technology, the demand for digital maps has increased dramatically along with the demand for geo-referenced data. A significant portion of such data, however, is not readily available. The Section is currently looking into establishing a standard UN Geographic Database to be used system-wide. This concept has been discussed with other UN departments and Specialized Agencies. A working group on geographic information has been formed, and is being expanded Organization-wide, to further formulate this project.

Objective

To develop and maintain a global geographic database consisting of basic cartographic elements and topographic information, which serves as a geo-referenced base for overlaying and exchanging information within the UN system. Such a database must reflect appropriately the views and policies of the United Nations.

Current Problems

1. A global geographic database which depicts uniformly the views and policies of the United Nations simply does not exist.
2. Commercially available databases, such as the Digital Chart of the World, are of varied quality, incomplete and out-of-date.
3. Databases from national governments can be difficult to obtain due to security and copyright issues.
4. Data exchange between various organisational entities of the United Nations is not easily accomplished.
5. Cartographic/geographic information gathered at one agency, is not readily made available to the others.

Description

1. The database is to consist of global geographic data at various scales:
   1.1. Global view (± 1:50 million) depicting international boundaries
   1.2. Country profile view (scale based on the country size)
   1.3. Detailed view of Hot Spots (1:250,000 and up)
2. Layers of geographic data are to include international boundaries, first and second order administrative units, coastline, drainage, elevation, transport networks and settlements. Attribute data associated with these layers are to include geographic names of settlements, administrative units, and major physical features.

3. To satisfy a general need for information on Member States, a series of readily publishable country-profile maps and a world map will also be made available as part of the database.

4. Users, at most United Nations offices world-wide, are to be able to extract data as needed as well as provide editorial inputs and new information. Hence, the database is to be continuously updated and improved.

Implementation

1. The project will be implemented in several phases. As part of the initial phase, the Cartographic Section is looking into the various components of the database structure and design, and is inviting reviews and comments.

2. The Cartographic Section is also interested in establishing collaboration with other database developers, such as the Global Mapping Project, and with national mapping agencies.

3. Several United Nations Agencies and Organs (UNICEF, WHO, UNEP, UNHCR) have reviewed and favourably commented on the concept. It is expected that by the end of the initial phase, they will join the project as partners.

4. The second phase of the project will address costing and funding issues. It is hoped that by the second quarter of 2000, sufficient funds will have been secured to launch the project.

5. The third and fourth phases will deal with database design and development. It is expected that by 2002, the project will reach the first, practical, user access stage.

Benefits

1. By creating a standard UN geographic database, cost-saving benefits will be realised by many departments, Specialized Agencies and other Organs that have a need for a database to support activities such as, route planning for the distribution of relief supplies, deployment of peacekeeping observers, monitoring of refugee movements, and analysis of health, demographic and environmental data.

2. The project will help those developing countries where digital geographic data are not available, by providing them with data for their various national programmes.

3. Connectivity and data sharing are among the key aspects of United Nations reform. Coordination in the gathering and sharing of commonly required data should result in better use of available resources and more efficient operations at considerable savings.

4. The project should strengthen the Organization, increase the effectiveness of many programmes, provide for interagency co-operation, and bring about transparency and global awareness of many fundamental issues.

5. The sharing of geographic data and of cartographic techniques/tools/analysis is postulated as key driver for achieving profitable results and superior cartographic operations at UN Headquarters and elsewhere.
QUESTIONS CONCERNING THE DEVELOPMENT OF THE UNITED NATIONS GEOGRAPHIC DATABASE

COSTS

- what are the major cost drivers
- which costs provide opportunities
- what costs have to be sustained, and how can we sustain such costs
- how can costs be met

CUSTOMERS

- who are the customers
- what do they want
- why do they need our product
- how attractive are our products/services (a) today (b) in the future
- how can we sustain meeting customer needs

PARTNERS

- who are the data partners
- what are the existing data products
- how can data partners respond to customer needs

Contact address:

Miklos Pinther
Chief Cartographer
United Nations
Room L-172
New York, NY 10017

Tel: 1-212-963-8051
Fax: 1-212-963-3742
E-mail: pinther@un.org