



Access to Canadian Geospatial Data

Perspectives on Fees, Access, Standardization and Consistency

**Government of Canada IM Conference
October 2-3, 2006**

Jeff Labonte
Director General
Data Management and Dissemination Branch
Earth Sciences Sector, Natural Resources Canada



Natural Resources
Canada

Ressources naturelles
Canada

Canada

Table of Content



1. What is Geospatial Data?
2. Who disseminates geospatial?
3. Current Practice Fee vs No fee
 - Globally
 - Canada
 - Federal
 - NRCan/ESS
4. The Future
 - Inter Agency Committee on Geomatics

1. What is Geospatial Data



Geospatial:

- data pertaining to the geographic location and characteristics of natural/constructed features and boundaries on, above, below the Earth's surface

Webster's New Millennium™ Dictionary of English

Geospatial = fusion of geography and IT

- collection, management, analysis and integration of geo/location-based data to enable improved decision and policy making for Canadians

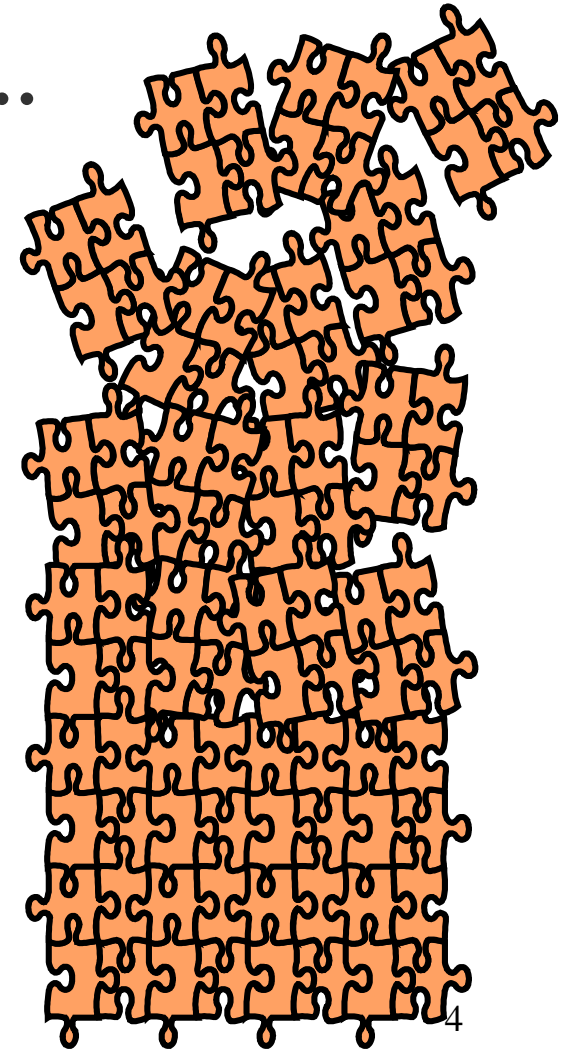
Federal Inter-Agency Committee on Geomatics

Geospatial data and the Federal Landscape



Geospatial in the federal family...

- All federal depts collect and use geospatial data for their mandates
- Federal geospatial spend about \$240M/year
- **Opportunities exist** to share and reuse data and expertise between depts **to minimize costs**
- Basic/framework data are **required by majority of federal depts**
- Solid coordination and collaboration based on – “**coalition of the willing**”



2. Who disseminates geospatial?



- **Government**
 - All levels (federal, provincial, and municipal) involved in the collection/mgmt/analysis of location-based data to fulfill their mandates
- **Private Sector**
 - Value-added redistribution (gov't data)
 - Business operations
 - Niche products

...in the federal system



Inter-Agency Committee on Geomatics (IACG)

- Natural Resources Canada (lead, co-chair)
- Dept of National Defence (co-chair)
- Fisheries and Oceans
- Statistics Canada
- Agriculture & Agri-Food
- Public Safety and Emergency Preparedness
- Environment
- Public Health Agency
- Indian and Northern Affairs
- Public Works and Government Services
- Library and Archives
- Elections
- Treasury Board Secretariat CIO Branch
- Infrastructure Canada
- Parks Canada Agency

3. Current Practice Fee vs No Fee



- Globally:
 - Many governments charge for access to data (Australia/New Zealand, India, Japan, UK, Canada)
 - All nations actually charge a fee for a license to access and use data
 - Charges typically “nominal” to cover handling costs
 - Exceptions - for profit motivated crown corporations
 - Change is underway – many nations moving towards “no fee” licenses to increase usage
 - US context is different - gov’t data considered “public domain” – no fees

Trends Affecting Fee vs Free



- **The Web – less than 10 years old**
 - e.g. in Canada Cost-recovery policy pre-dates the digital and web environment
- **The Google Factor**
 - Public demand for instant and free information
- **The New Security Paradigm**
 - Post 9/11 - tendency towards IT data security/privacy
- **IM in knowledge-based world – towards ‘right to know’ and ‘open information’**
 - IT culture and IM culture need to strike balance

3. Current Practice cont'd



- In Canada:
 - Federal Gov't driven by cost-recovery
 - Licenses data -- based on incremental charges attributed to a select beneficiary or group
 - Science and knowledge vs operations
 - Each Province and Municipal agency sets own dissemination policies
 - Many license for data – notably land parcel and cadastral information
 - Trend towards providing no-fee access via the web grown over last 5 years
 - > 50% now provide no-fee data

Provincial and Territorial Geospatial Data Charges



Other Government	Fee or No Fee
British Columbia	\$
Alberta	\$
Saskatchewan	No fee
Manitoba	No fee
Ontario	No fee
Quebec	\$
New Brunswick	No fee
Nova Scotia	No fee
Prince Edward Island	No fee
Newfoundland and Labrador	No fee
Nunavut (primarily federal origin)	\$
North West Territories (primarily federal origin)	\$
Yukon Territory (primarily federal origin)	\$
United States	No fee

3. Current Practice cont'd



- Trends/Discussion Federally:
 - Need recognised to adopt no fee access to datasets that are considered “universal” (i.e. used by many).
 - Largely viewed as “public good”
 - Technology and Web portals providing no fee access to data sets setting trend
 - Inter Agency Committee on Geomatics (IACG) taking a lead role for federal agencies
 - Issues to solve
 - How to control/fund data maintenance
 - Licensing / digital rights

3. Current Practice cont'd



NRCan / Earth Science Sector (ESS)

- Departmental Access to Knowledge policy
- Sector Information Policy states:
 - “... will facilitate access by staff and clients to ESS information holdings”
 - “... will facilitate access through CGDI (common Internet) services...”
 - “... will aim to provide no fee and unrestricted access to as many of its knowledge assets as possible without charge”
- Current data management activities in ESS geared towards supporting IM policy

NRCan/ESS Data Access Portals



4 Main Data access web sites:

- GeoBase
- GeoGratis
- Atlas of Canada Portal (Toporama 2)
- Centre for Topographic Information



Fed/Prov cooperative – managed by NRCCan

- offers six themes (no fee, unrestricted use)
 - National Road Network
 - Digital Elevation Data
 - Landsat 7 Orthoimages
 - Geographical Names
 - Geodetic Network points information
 - Administrative Boundaries (Prov & Int'l)



GéoGratis

maps satellite imagery tabular data
cartes images satellites données tabulaires

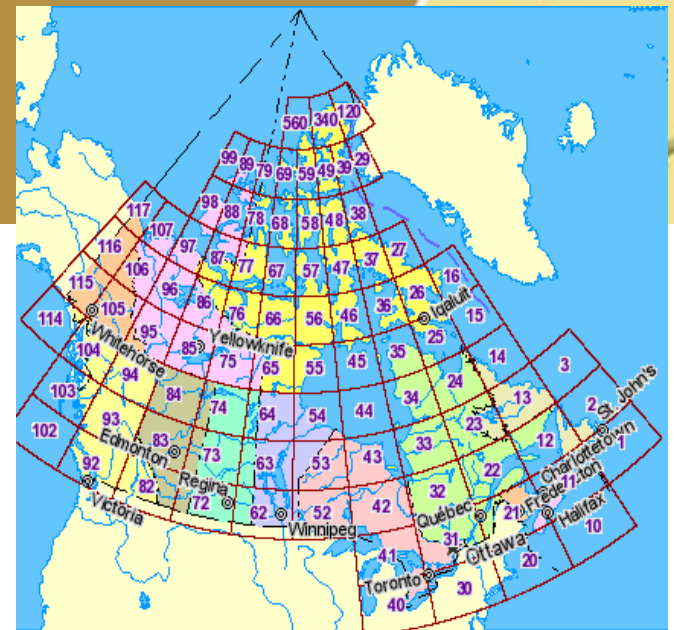
access geographical data
accédez aux données géographiques



Provides geospatial data at no cost

- Orthorectified satellite imagery
- Atlas of Canada / Atlas of North America thematic maps
- Historical and recent land use maps
- National-scale framework data (grouped by theme)
- NATO - Vector Map Level 0 (VMAP0) for Canada
- Ground control points database





Reference maps

- available as JPEG and PDF images (download, free)
- printed maps (purchase from regional distribution centres)

Thematic maps

- available as scanned JPEG and PDF images from archives (download, free)



Centre for Topographic Information

- 7 Data Products
 - Most Fee based with restrictions on usage
- 3 End-Users Licences types
- 5 Commercialisation licenses subject to royalties

Autre données du secteur – various models



- Geological Survey of Canada
 - Seismic monitoring
- Canada Centre for Cadastral Management
 - Canada Lands
 - International Boundary
- Canada Centre for Remote Sensing
 - Geodetic Survey, Canadian Spatial Reference System
 - Earth Observation Data Services

4. The Future



Inter Agency Committee on Geomatics (IACG)

- Coalition of the willing to increase collaborative efforts for federal geomatics activities (15 dept's at table)
- led by an ADM-level Steering Committee
- Efforts aimed at increasing benefits from geomatics investments by federal departments, reducing overlap and duplication (share and re-use data between departments to minimize costs)
- Has developed a Federal Geomatics Strategy and Policy Framework

4. The Future cont'd



- Federal Geomatics Strategy & Policy Framework:
 - Components
 - technical standards
 - **standard data licensing**
 - standardized framework data layers
 - data custodianship & archiving principles
 - **data access**
 - human resources practices
 - procurement of geospatial data software and services
 - communications
 - risk management
 - collaboration models
 - assessment criteria for TB submissions

20





Questions?

Discussion

