



## Geospatial standards and policies for interoperability

Smart phone applications and on-line mapping tools give Canadians almost instant access to a wealth of **geospatial information** – information that is tied to a geographic location. The Internet provides access to more maps and data than ever before but agreed-upon rules for sharing this data are essential for taking advantage of the true potential of this resource. Businesses, researchers, governments and individuals who generate, share or use geospatial information benefit from understanding and adopting standards and policies that allow data to be used for many applications. Natural Resources Canada, through the GeoConnections initiative, works to establish standards and policies to improve the sharing and exchange of geospatial data.

### Standards

Standards specify the content and structure of data. When data content is standardized, information can be accessed, exchanged and used by people and computers more effectively. Software developers use standards to build open software and applications that produce products and services that are compatible technically and that function seamlessly. Standards encourage innovation, improve efficiency, reduce transaction costs and allow compatibility in the marketplace. Standards are necessary for the transfer of geospatial data between computer systems and software, especially on the Internet.

GeoConnections establishes technical standards for the Canadian Geospatial Data Infrastructure. These standards provide consistent specifications for creating, reproducing, updating and maintaining mapping information, such as how data should be structured to represent geographic features and how the information is exchanged between systems.

Many technical barriers to sharing geospatial information are being successfully managed with technology and standards, yet business practices have not always kept pace with the demands of our on-line environment – GeoConnections is helping to bridge this gap as well.

### Operational policies

Operational policies help in the day-to-day business of organizations that collect, manage, disseminate and use geospatial information. Such policies provide business practices for managing legal and administrative requirements such as privacy, intellectual property and licensing as well as advice on technological trends such as cloud computing and Web services. The work of GeoConnections has led to effective operational policies for issues such as data licensing to eliminate barriers to the open exchange of geospatial information and to allow effective and efficient data integration.

Standards and operational policies improve how geospatial information is shared among people, computer systems and businesses. This easy exchange of information or “interoperability” is essential for capitalizing on the vast potential that geospatial information offers. By using standards and policies, users and producers of geospatial information can ensure that data are used consistently to allow timely, informed decisions about society, the economy and the environment.

*Aussi disponible en français sous le titre : Des normes et des politiques géospatiales pour assurer l'interopérabilité*

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