

## *Engaging EO Users*

“Users” of Earth observation (EO) are seen in different perspectives. Each perspective highlights a different way of engaging EO users. They complement each other. Each has its own challenges:

- **As Consumer.** Users are the final destinations for the information products and services derived from space-based EO. Seen this way, users are engaged through product marketing that is tailored to specific viable market segments. Key challenges lie in product design and delivery (including data sets and applications), financing, and persuasion.

- **As Patron.** EO users are the public and private clients who provide the *raison-d'être* and funding for space EO programs; they provide direction for the programs. You engage them by listening to and understanding them, then providing technical services to meet their goals. Challenges include how to learn and respond to what they say they want, how and when they need it, and in what forms, modes, and languages.

- **As Partner.** Users are members of a space EO “community of practice” that cooperates in use and production of information about the earth and activities on it. They are engaged through establishing win-win synergy in multiple dimensions, expanding public and private enterprises in space EO. Challenges include effective consultation, partnering, and capacity-building.

Users have their own views of their relationship with providers of space-based EO. Some potential user groups have established their own processes for engagement, e.g. CISE, the military. Space EO providers should know about these, respect them, and use them where appropriate.

The space EO provider community has already set up some major structures and processes for engaging users.

- In Canada: roles of CCRS, GeoConnections, CGDI, etc. In Europe: ESA's Data User Element
- Internationally: GEO's Sub-group on User Requirements and Outreach, which has Canadian participation, and a Canadian project.

Engaging users entails making the EO products, services and communications “user friendly”. This implies flexibility of use at the user's discretion (the flip side of standardization and interoperability of the basics), understandability, and recognizability. It also entails affordability and competitiveness with other suppliers.

There are different types of users: scientific, commercial and operational (government, IOs NGOs, universities, research institutions, companies) that have different characteristics and technical skills, different data needs (long term – short term, information – data) and use data for different types of applications.

Obstacles: Reluctancy of users to use space-based EO data instead of data from traditional sources. Reasons are unawareness, wrong expectations, perception that access seems complex or expensive (and sometimes this is the case) or space-based information is perceived as being less accurate. Other obstacles are resolution and repeat intervals (too low or too long) for some applications or resistance to adopt pre-defined typologies. Major obstacles are also accessibility and obtainability of data and of course cost.

Use of EO data could be augmented by increasing the level of EO expertise and awareness of potential users as well as improving the understanding of user needs among data providers.

## **Key players:**

Strategically, the space EO community is undergoing a medium to long-term shift: an early emphasis on motivation by national interest and technical capability is being balanced by an emphasis on finding and meeting user needs. This is partly due to financing objectives, and partly due to a developing proliferation of applications for more dispersed users as the technologies mature.

Suppliers: CSA, CCRS-NRCan, DND; GEO; value-adders.

Users: Environment Canada, provincial, territorial, municipal agencies; quasi-governmental bodies; academia, industry, NGOs

## **Issues for the CSA:**

- Achieve and maintain agencies' and users' understanding of the evolving complementary roles of CSA and others in Canada (e.g. CCRS, CGDI) and in other countries (e.g. USA Landsat, ESA, ISRO) vis-à-vis EO users, so they know where to go for what. Avoid confusion.
- Engaging users in ways that are appropriate to Canadian contexts and objectives, while taking advantage of international momentum and opportunities in this area.

## **Related themes:**

All themes are related in that engaging users is necessary in every area of space-related activity, and has represented a significant past challenge.

## **References:**

### ***Basic Information:***

GEO Sub-group on User Requirements Report, March 2004.

### ***Latest update:***

CGDI-GeoConnections <http://cgdi.gc.ca/CGDI.cfm/fuseaction/home.welcome/gcs.cfm> background and news about specific applications as they develop. Their central mandate is to engage EO users, and to support others who do the same.

GeoBase <http://www.geobase.ca/> common reference base map

### ***Closer look:***

BRIGGS David J., BOXALL Simon, SOULAKELLIS Nikos, *Matching demand and supply for EO Data and Information, The Use of EO Data for Policy Support and Environmental Applications in the EU*, a report of a study undertaken as part of the EUFOREO Project, [http://www.cs.telespazio.it/earsce/EUFOREO/EUFOREO\\_WPapers\\_final%202\\_1.doc](http://www.cs.telespazio.it/earsce/EUFOREO/EUFOREO_WPapers_final%202_1.doc)