

(R)evolution in (G)SDI

Being responsible for R&D in Remote Sensing at the Hungarian Ministry of Agriculture, I first met the wider earth-observation community at the conference "Earth Observations and Global Change Decision-Making, 1990: A National Partnership", where the luncheon speaker was Senator Albert Gore. The global change issue gave birth to the "Mission to Planet Earth", which called for collaboration between academia and policy makers. The need for a similar level of co-operation between all nations in Geographic Information Systems and Services was articulated some years later, at launch of the Global Spatial Data Infrastructure (GSDI) initiative.

While US presidential decrees facilitated access to and widest possible use of geospatial information, contributing to more effective and less expensive governance, US industrial players achieved global dominance. In Europe, Delors' "White Book", Growth, Competitiveness and Employment, paved the way for a wider use of novel technologies, including GIS, and the establishment of an umbrella organisation for national GI associations in Europe, EUROGI. The first GSDI Conference in Bonn-Königswinter in 1996 was a joint initiative on the part of enthusiastic experts from all continents. Supported by Hungarian R&TD policy makers, the Hungarian GI association was established in 1994 and has since been an active participant in all EUROGI and GSDI annual assemblies, conferences and working programmes. Besides the political leadership, other driving forces include availability, accessibility, interoperability and (re)useability of core data; the relevant legislation and co-operation frame-works, standards and implementation rules, co-ordination, scientifically sound reference, capacity building, convincing best practices, user involvement and awareness raising.

After the failed GI2000 concept, a new approach was selected in Europe, the environment chosen to be primary beneficiary sector of SDI. The INSPIRE initiative received the high-profile formal support of three European commissioners, Busquin, Walström and Solbes-Mira, and led to the INSPIRE directive, which came into force on 14th May 2007 as the spatial data and information legislation framework of the EU. The universal value of INSPIRE principles and its roadmap for implementation could serve as a model for the rest of the world, and the impact of cultural diversity and readiness are issues intensively addressed by recent academic workshops. Sustainable development, UN Millennium Development Goals, Global Change and the Information Society have become evident target areas for the rapidly emerging SDI capabilities, with as inevitable key elements the EU Global Monitoring of Environment and Security (GMES) Programme and overall GEO(SS) identified SDI and related services.

While the FAO GeoNetwork approach using standards-based open-source tools is acknowledged as a de facto metadata catalogue standard, the UN Geospatial Information Working Group (UNGIWG) has realised the benefit of SDI for UN organisations and member countries. In response it has recently launched a comprehensive vision and implementation strategy for a UN Spatial Data Infrastructure (UNSDI) initiative. Today national agendas within the Digital Earth concept include beside strategies for climate change, energy, national sustainable development framework, and information society, as well as a strategy for SDI implementation.