

GIM INTERNATIONAL INTERVIEWS PAST PRESIDENT JARNO RATIA

GSDI: Twelve Years, Ten Conferences

Jarmo Ratia, CEO, National Land Survey of Finland, left office as president of the Global Spatial Data Infrastructure (GSDI) Association during the tenth conference, held from 25th to 29th February 2008 in Trinidad and Tobago. As past president he remains a member of the three-person executive board. We discussed with him the SGDI mission, its achievements and future.<P>

What prompted the Global Spatial Data Infrastructure (GSDI) concept?

Tens of years ago the value was already understood of collecting data just once and transferring it through a network to other potential users. Considerable savings would thus be achieved. The next innovation was to recognise that almost all data could be related to location. This enabled combining data with the same position from multiple sources. The idea of a Spatial Data Infrastructure (SDI) was born.

How did the global component become embodied within the idea of SDI?

Some farsighted persons realised that SDI was not only national or regional but also global. The first GSDI conference was held in Bonn/Königswinter in Germany in 1996, attended by invited representatives from around the world and from almost all Geoinformation (GI) sectors. The aim was to find opportunities and threats inherent in creating a GSDI, and the creation of a standardised vocabulary was agreed. Also, new concepts were discussed concerning building and using geo-information products and services in a GSDI. The birth of GSDI is often associated with President Clinton's famous Executive Order of 1994, Europe following soon after. As early as 1995 the European Commission started the GI2000 project with the same goal, followed by preparations for and implementation of the INSPIRE Directive, which came into force in 2007.

When did the GSDI Association come into being, what is its mission, and how did you yourself get involved?

After several conferences, it was realised that formalisation was needed. In August 2002 the GSDI Association was registered in Washington DC under US law as a non-profit organisation. The bylaws and operating procedures of the GSDI Association were agreed upon during the eighth conference. Here too, the goals were reaffirmed. Our official mission, like that of all organisations, is both lengthy and detailed. But, in my own words, it would read: *GSDI is a point of contact and effective voice for those involved in developing and advancing spatial-data infrastructure concepts and practises at all levels, whether local, regional or global.* Members may be government and private organisations, academia and individuals who want to promote GSDI. The great benefit of the GSDI Association is that it covers all aspects of the GSDI idea. Nowadays it is recognised as an important global player in the field. Already during the first conference I recognised the idea of GSDI to be one of the most effective tools in rendering administration more effective and cost-effective. I also understood its potential for the private sector in doing business. Since Bonn I have attended all the GSDI conferences, except the fifth.

What is the organisational structure?

The highest decision-making body is the council, on which all full members participate. Conferences take place at twelve- to eighteen-month intervals. The council elects the board, which takes care of business on behalf of the council. Board representation should cover all council interests, and be geographically representative. Board members usually meet face to face during conferences; meanwhile, the board keeps in touch via teleconference, generally once a month. The executive board is entitled to make decisions between board

meetings, and consists of president, president-elect and past president, which posts have since the tenth conference been staffed by Bas Kok, Abbas Rajabifar and myself, respectively.

With which international bodies do you co-operate to achieve your goals?

All other global and regional specialised organisations. These include the International Cartographic Association (ICA), International Federation of Surveyors (FIG), International Society for Photogrammetry and Remote Sensing (ISPRS), International Steering Committee for Global Mapping (ISCGM), Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) and the United Nations Geographic Information Working Group (UNGIWG). Both EUROGI and EuroGeographics participate actively in the work of the GSDI Association. Academia and the spatial-data industry, as well as government bodies are deeply involved in and committed to reaching the aims of the Association. And the GSDI Association is also a member of the Joint Board of Geospatial Information Societies (JBGIS), a coalition of leading international geospatial societies who can speak on behalf of the geospatial profession at international level; its second goal is to co-ordinate activities within the geospatial society and organisations.

What may be said to have been achieved as a result of twelve years and ten conferences?

The achievements are already well known in the GSDI world. *The SDI Cookbook* has been widely used all over the world and is currently being updated. The Knowledge Portal on Geographic Information Knowledge Network was demonstrated at the GSDI-10 meeting. Its goal is to enhance communication and to freely share knowledge among professionals of the global GI community. The GSDI Small Grants Programme for 2006-2007 raised great interest and resulted in almost a hundred proposals from around the world, twenty funded. Among the currently active industry-funded programmes are the ESRI Global Map GSDI Grant Programme and the Intergraph International Grant Programme. The GSDI and SDI *Regional Newsletters* are well known and widely distributed. GSDI has several committees.

What is the role of GSDI in sustainable development?

Sustainable development has, of course, been one of the main topics tackled at several conferences. We have stressed the importance of SDI in political decision-making, the need for a policy and organisational framework, the important role of sustainable development in the Information Society, and lastly, in Chile we talked about this as a necessary tool for reducing poverty. These are all very important issues. GSDI conferences are opportunities to meet and exchange views about implementing and developing spatial-data concepts and practises. Policy-makers at local, regional and global level are provided with an opportunity to interact with a global community fostering spatial-data infrastructure developments.

What do you consider to have been the main achievements of your presidency?

I hope that I have succeeded in making GSDI better known within the GI community. A proof of success is GSDI having joined the Joint Board of Geospatial Societies (JBGS), the co-operative body of global GI organisations such as FIG, ICA and IRSPRS. Dutch Kadaster joined last year, and during the tenth conference there were first-time representations from all the Nordic countries other than Finland, these being Sweden, Norway, Iceland and Denmark. GSDI is a growing idea.

What are the key points, both in terms of policy and business, necessary to make GSDI a success around the world?

Although the GSDI idea is almost revolutionary, it is very difficult to sell to politicians. It is necessary first to teach this concept, starting in elementary schools, and on through every level of education there should be courses in SDI. The business world has already understood the huge opportunities of spatial data. Big IT companies are getting interested in the exploitation of GI. Microsoft, Google, Nokia and Yahoo have joined traditional companies like ESRI and Intergraph in purchasing geospatial data producers for unbelievable sums of money; proof of how enormous are the business expectations. Google is talking about 'neogeographics', and it is obvious that only fast-moving private companies can provide the services and products citizens need. Nevertheless, the public sector will still have an important role in building the infrastructure for GI, which still requires traditional means of geography.

What is the potential role of proper land administration in a well-functioning National GDI?

Land administration and parcel information is an absolutely one-hundred-percent necessary component of SDI. In principle, all basic data should be integrated: reference data, topographic data, administrative borders, traffic lines, buildings, height, land cover etc.

What is the role of SDI in disaster management?

Climate change and rising sea level present challenges, especially for small island nations. SDI cannot change the climate or prevent water from rising, but spatial information and related technologies play a crucial role in disaster management. It is a major challenge to guarantee that spatial information is accessible, reliable, complete, accurate and up to date. There is a worldwide understanding that an

effective SDI is an indispensable tool, not only for disaster management, but also for sustainable exploitation of natural resources and monitoring of the effects of climate change; in other words, for ensuring sustainable development. Disaster management is not possible without SDI.

Many developing countries lack the facilities to join in GSDI. How might they bridge the gap?

We are deeply aware of this problem, and our Developing Countries Fund enables participation of representatives from developing countries in our conferences. This does not, however, solve the problem of membership: a common one facing all global organisations. We are working on how to solve it.

What should, in your opinion, be the focus of attention for GSDI as an organisation over coming years?

This question should better be addressed to the new president, Bas Kok, but in my view GSDI is still a baby of the GI specialist and mapmaker. We should continue to concentrate on raising awareness of the benefits of SDI. Our strong membership representation of surveying, mapping and GIS professionals should be enhanced with a particular focus on boosting the user community. We need potential users as members. People active in the environmental field are a group of users coming our way, but where are the health and marine people, geologists, sociologists, social welfare people, and so on? And the companies mentioned above should also become members. The investments involved here are so huge that it remains to be seen if they can create some kind of de facto SDI. In saying this I am convinced that the traditional way of constructing SDI will also be needed in the future. What we really need is co-operation and Public Private Partnerships. Now, more than ever, spatial information is needed in our changing world, and hence also the need for the GSDI Association.

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GSDI Mission

The GSDI Association promotes international co-operation and collaboration in support of local, national and international spatial-data infrastructure developments that allow nations to better address pressing social, economic and environmental issues. It is an inclusive, non-governmental, non-profit-making international federation of organisations, companies and individuals, formed exclusively for educational, scientific and research purposes.