eSDI-Net+ Best Practice Workshop for UK and Ireland

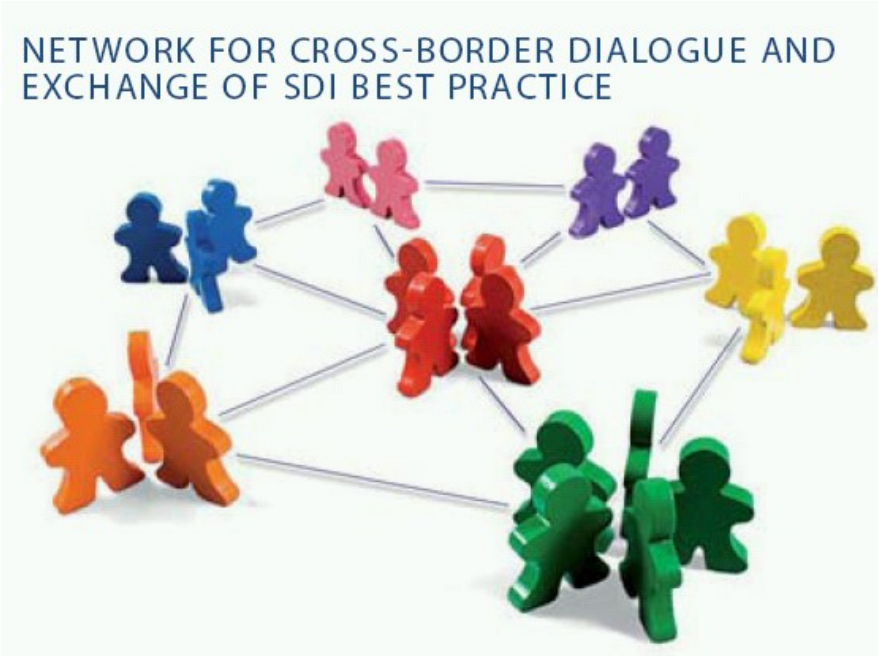
Wednesday 11th February 2009

The Foresight Centre, Liverpool

Organised by

RSW GEOMATICS LTD

In conjunction with Prof Ian Masser
Supported by AGI, IRLOGI, EUROGI



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Wednesday 11th February 2009
The Foresight Centre, Liverpool, www.foresightcentre.co.uk/location.html

Aim: **To review registered 'sub national' SDIs in the UK & Ireland and identify best practices and common issues. The results will be widely publicised and also reported to the eSDI-Net+ project for deciding the criteria for their evaluation process for the Best Practice Awards during 2009.**

Registration	from	09.30
Introduction	**Robin Waters**, RSW Geomatics	10.00
eSDI-Net+ Overview	**Joachim Rix**, eSDI-Net+	10.10
eSDI-Net+ WP2 Best Practices	**Bruce McCormack**, EUROGI	10.30
SDI Typology	**Prof Ian Masser**	10.40
UK/Irish progress	Robin Waters, **Gearoid O Riain**, IRLOGI	11.00
Coffee		11.20
Best Practices – 'Unconventional' SDIs (Atkins, Atlantis, EDINA, ISDE, MEDIN, NLPG/NSG)	SDI Reps (max 10 mins each)	11.35
Group Discussion & report*	by table	12.30
Lunch		13.15
Best Practices – 'Conventional' SDIs (Dudley, Fingal, GeoHub NI, Forth Valley, S. Dublin)	SDI Reps (max 10 mins each)	14.00
Group Discussion & report*	by table	14.45
Tea		15.30
Panel & conclusions	Chaired by **Rob Walker**, AGI	15.45
Close		16.30

*Tables of 6 will be asked to report back in a structured way on the best practice presentations – to validate the assessments and bring out similarities or differences across the different SDIs. A set of questions will be posed for discussion!

The Panel will be chaired by Rob Walker (AGI) and include Prof Ian Masser, Joachim Rix (eSDI-Net+ project leader), Bruce McCormack (EUROGI), Cameron Easton (Scottish Government) and Bill Oates (Welsh Assembly Government)

Contact Robin Waters, RSW Geomatics Ltd, robin.waters@rswgeomatics.com

Not one but many different sorts of spatial data infrastructures: some comments on the presentations made at the eSDI-NET+ Workshop

Prof. Ian Masser

There are clear parallels between the Spatial Data Infrastructure (SDI) concept and other forms of infrastructure. These are typically defined as the basic facilities, services, and installations needed for the effective functioning of society. They include transport and communications systems, water and electricity services as well as public institutions including hospitals, schools, post offices, and prisons.

However, most definitions of spatial data infrastructures are rather general by comparison with these other services. For example, it is typically argued that a spatial data infrastructure is 'the means to assemble geographic information that describes the arrangement and attributes of features and phenomena on the Earth. The infrastructure includes the materials, technology, and people necessary to acquire, process, and distribute such information to meet a wide variety of needs ' (National Research Council 1993, 16).

Similarly, the latest revision of the US Office of Budget and Management's Circular A-16 (OMB 2002) defines a national SDI as ' the technology, policies, standards, human resources, and related activities necessary to acquire, process, distribute, use, maintain, and preserve spatial data.'

Surprisingly, neither of these definitions mentions the role that government plays in creating SDIs. Yet Masser (2007) argues that 'the overriding objective of SDIs is to facilitate access to the geographic information assets that are held by a wide range of stakeholders in both the public and the private sector in a nation or a region with a view to maximizing their overall usage. Coordinated action on the part of governments is required to achieve this objective.'

However, this definition does not specify what is meant by the term 'government.' It suggests that SDIs can be developed at different levels of government as in the eSDI-NET+ website definition, 'Since the range and diversity of GIS applications is tremendous the full potential of this positive impact of GIS can only be realised if the necessary spatial data infrastructures (SDIs) are implemented at the respective local, national, and transnational levels.'

Nevertheless, a number of other questions remain unanswered. For example, the above definitions mention 'a wide range of stakeholders' and 'a wide variety of needs' but do not go into detail about what constitutes 'wide' in either case. This raises further questions about their nature and scope. For example, does a corporate organisational structure that brings together the spatial data that is held by different departments within a public organisation, constitute a SDI? Similarly, is an organisational structure whose membership is restricted to meeting the spatial data requirements of one or more levels of government without reference to other sectors, a SDI? And, is an organisational structure that meets the spatial data needs of a limited number of thematic users a SDI?

It can be argued with some justification that all these organisational structures constitute SDIs if they satisfy the requirements specified in the definitions given above. The diversity of SDI forms can be seen from the UK SDIs presented at the eSDI-NET+ workshop. A clear distinction can be made between SDIs that are being developed to meet a range of administrative needs and those that are focussed on a particular theme. GeoHub Northern Ireland is a good example of the former in that it is essentially a sub national version of a national SDI. It is also worth noting that Northern Ireland is bigger than several EU member states such as Luxembourg and Malta. A good example of a thematic SDI is the South Wales Fire and Rescue Service which focuses on emergence responses in ten local authority areas.

However, there are also considerable variations within each of these categories. Unlike Northern Ireland and Forth Valley which span a number of local authorities, Dudley is essentially a corporate SDI that spans various departments within a single local authority. Similarly, EDINA provides an on line service to a very large number of academic users whereas the South Wales Fire and Rescue Service meets the specific needs of a small number of users. This suggests that a further distinction can be made in both cases between SDIs that serve limited needs and those that have a wide range of potential users.

On the basis of this distinction and the previous distinction between general administrative and thematic applications the presentations at the workshop might be categorised as follows

Administrative

Multi agency:	Forth Valley, Northern Ireland
Single agency:	Dudley, South Dublin

Thematic

Multiple users:	EDINA, ISDE, MEDIN, NLPG/NSG
Limited users:	Atlantis, Fingal, Atkins PUSH, South Wales

It should be noted that there are variations even within these four categories, particularly with respect to the thematic SDIs. For example, the NLPG/NSG stands out from the others in this category in that it is concerned with the creation and maintenance of core/framework data as defined in INSPIRE Annex I. EDINA serves a primarily academic community while MEDIN is designed to serve a wide range of both public and private sector users. It must be recognised that the classification still contains some ambiguities. For example, the Fingal DataHub is primarily a local authority activity but it has been classified as a thematic application because its scope seems to be quite limited.

It should also be noted that very few of the applications describe themselves as SDIs even though most of them are hosted by government agencies of some kind and meet the needs of different stakeholders. The case of the Forth Valley GIS also raises an interesting question as to when a fully developed GIS that integrates data from various sources and meets the needs of a variety of users becomes a SDI. This question has also featured prominently in several other workshops organised by members of ESDI-NET+ and also in the presentations made at the European regional SDI workshop last year that was organised by the Joint Research Centre (http://sdi.jrc.it/ws/Advanced_Regional_SDIs/).

References

Masser, I., 2007. *Building European spatial data infrastructures*, Redlands: ESRI Press.

National Research Council, 1993. *Toward a coordinated spatial data infrastructure for the nation*, Mapping Science Committee, Washington D.C: National Academy Press.

Office of Management and Budget, 2002. *Coordination of Geographic Information and Related Spatial Data Activities*, *Circular A-16 Revised*, Office of Management and Budget, Washington DC: Executive Office of the President.