

## Welcome

Dave Lovell, conference director, welcomed all 178 delegates to Cambridge. Opening proceedings, he stated that all NMAs are undergoing continuous change. The conference theme ("National mapping – shaping the future") can be interpreted in two ways:

1. mapping shapes the future as it underpins national development – a crucial role of NMAs
  2. the way in which NMAs shape their own role, and balance the requirements to be seen as public sector agencies with any
- Both interpretations were likely to be explored during the course of the conference.

## Vanessa Lawrence addressed the conference

Geography is important to decisions, whether at the local, national or international scale.

Challenges to NMAs include:

- A lack of awareness of the potential of geography to decision-makers
- Increased globalisation
- Resources for pan-national data
- Changes in the way mapping is commissioned and funded
- Widening user communities

The profile of geographical information has successfully been raised with senior politicians; for instance, at the 2002 UN conference in Johannesburg.

Vanessa then outlined some of the changes which have occurred at Ordnance Survey GB during the last 4 years. These include:

- increasing efficiency by re-evaluating existing operations and embracing the opportunities presented by electronic service delivery
- working more closely with partners
- increasing customer focus
- re-engineering products to make them fit for future requirements
- working more closely with government to improve relations and increase use of Ordnance Survey data
- international cooperation. At the European level, working in the INSPIRE initiative

## 1999 Conference resolutions

Updates were provided on the resolutions passed at the 1999 conference.

### Resolution from the GSDI Steering Committee

Ian Masser (GSDI) provided an update. He noted the following developments:

1. Capacity building. ESRI had supported 100 projects under a GSDI programme since 1999. Intergraph had set up a similar programme at the OGIS meeting in Budapest in 2002.
2. The World summit on sustainable development had been a landmark in the recognition of global mapping. An action plan was agreed which puts mapping in an important place.
3. New institutional structures. GSDI is transforming itself to become an independent, formal association funded by subscriptions. It will change with effect from the GSDI 7 meeting in Bangalore in February 2004.

### Resolution from the Workshop on Aid and Development

Session 1: Introduction and welcome

Robin Waters updated the conference on behalf of RICS. The RICS Foundation has funded research in 2002 which investigated the sustainability of geomatics and mapping in developing economies.

The following positive developments were occurring:

- Evidence of Global & Regional SDI Initiatives
- Availability of GPS equipment & accurate signals
- WWW – access & knowledge – but not everywhere
- Progress in international small scale mapping
- Some evidence of donor co-operation (spatial data, emergency products)
- Some governments mandating data cataloguing and sharing
- Regional information exchange – e.g. SDI Africa

However, the following barriers still exist:

- Demise of hypothecated (ring fenced) GI funding
- Lack of direct support for basic SDI
- Little evidence of 'sustainable' approach to maps & SDI
- Lack of cross departmental co-operation or data sharing
- Evidence of data 'silos' & restrictive practices
- NMAs unwilling (or not resourced?) to think beyond immediate priorities

These issues are not unique to developing countries, however:

- Perception that satellites have solved everything?!
- EU CAP regulation is bypassing some NMAs in Europe
- Many NMAs slow to respond to new markets/requirements or technology
- Strong vested interests (e.g. military, cadastres, lawyers, gov. depts)
- Registers of data (metadata?) MUST be encouraged
- And co-operation is often difficult!

### **Resolution from the Caribbean delegates**

Trevor Shaw (National Land Agency, Jamaica)

Progress had been made towards the aim of collaborating, building and sharing a GI infrastructure for the Caribbean to support regional and world efforts.

Jamaica will host surveyors from the Cayman Islands in August.

Trinidad and Tobago will talk about data sharing

Jamaica took part in a workshop on standardisation of geographical names in Germany in 2002

Other achievements since 1999 include:

- The Cayman Islands have published an official atlas from their land information system database; street addressing is available online, and licensed surveyors can access archives.
- Jamaica has created a national calibration network for GPS and other devices; surveyors have been trained; National Grid to WGS84 transformation has been developed; a jointly funded land administration system has been introduced and populated with 30,000 parcels; a new electronic land registration system developed; an 8-station GPS network has been established to cover the island.

Efforts are intensifying to achieve objectives.

### **Resolution from the Closing Session**

Neil Ackroyd (Ordnance Survey Great Britain) recognised that there was the potential for contention on signal frequencies used by GPS, as they are also used for satellite navigation. Although representations were made by NMAs in 2001, firm conclusions were not reached and it was noted that this issue should continue to be observed closely.

**Martien Molenaar presented the keynote address “The future of framework data: moving away from map sheets”**

NMAs have many issues to consider, including:

- New role – as information providers. Close involvement of users is important if products are to meet their increasingly demanding requirements.
- Tools. IT, not production lines, will be the key enabler in the future. New (private sector) players can enter the market more readily as access to data becomes more straightforward. Private sector companies will innovate, e.g. by providing 3D animations
- A change in culture from supply-led to demand-driven is occurring
- New methods need to be applied. This will allow data products to be given different representations for different applications.
- New technology will be needed, both to capture and maintain data and also to deliver it to users.

New policies are here – or coming. NMA structures will need to change appropriately to ensure survival. Change will be continuous: a dynamic external environment will require a dynamic NMA.

**General discussion**

**Mike Jackson (QinetiQ, UK)** believed that navigation for individuals is more complex than for vehicles, and asked whether it would be possible to provide the different underlying structures required for the different applications.

**Martien Molenaar** replied that requirements for personal mobility from business users (primarily in the field of data capture) are well known. The general public have different requirements. It is likely that 3D representations will be required, including thematic and possibly internal views of buildings, and the market for personal mobility for private users is some way off.

**Ravi Gupta (GIS Development, India)** asked about the demand for new services, and the way in which NMAs have been able to respond. Are private sector partners responding more effectively to market requirements?

**Martien Molenaar** replied that NMAs frequently use processes defined 50 years ago which were appropriate for producing standard products. Many NMAs cannot keep up with the rapid progress in working practices. Private sector competitors use new technologies (including high resolution imagery) products, which may have standards that are not appropriate for NMA purposes but are still fit for purpose. NMAs need to consider whether their response should be to produce new products or continue with the traditional ones – and be aware that it takes time to make changes.

**Haim Srebro (Survey of Israel)** saw a time when everyone would have access to position, especially in urban areas, and wondered whether 3D applications would develop for land registration and other fields.

**Martien Molenaar** believed that there was no reason why location applications should not already be in mobile phones – the technology is already available. The challenge for NMAs is to ensure that they are collecting the right data, and structuring it appropriately.