

# A Discussion on SDI in the UAE

## Seminar on Spatial Data Infrastructure

GIS Development and the Military Survey Department of the United Arab Emirates (UAE) presented a Seminar on Spatial Data Infrastructure in Abu Dhabi, UAE, on Feb. 12, 2006. Invited speakers from Australia, Canada, India, Malaysia and the United States shared the challenges they have faced developing and implementing a Spatial Data Infrastructure (SDI).

By Daniel Shannon



GITA's Executive Director Bob Samborski.

Spatial Data Infrastructure, all presenters had compelling cases for why an SDI is required. According to Major General M Gopal Rao, Surveyor General of India, an SDI will 'save time, effort and money in finding data' and will 'avoid unnecessary duplication.' Host and keynote speaker Brigadier General Khalifa Al Romathi pointed to 'better outcomes through improved economic, social and environmental decision making' while others cited standardisation and support for the development of the geospatial industry itself.

The need for government leadership appeared to be the consensus opinion. The role of government in the establishment of a Spatial Data Infrastructure does not, however, preclude or diminish the focus on the private sector. Both the general public and industry are expected to benefit when doing business within the framework of a fully realised SDI. Indeed, Canada's vision of Spatial Data Infrastructure specifically focuses on enabling 'value-added commercial activities.'

### Economic Benefits

But will private industry wait? Virtually all of the six nations represented in Abu Dhabi highlighted economic benefits as a primary objective of their SDI. However, they also spoke of efforts that have taken decades, and some that are expected to take just as long. In the world of information technology, this is a long time to spend defining ontology. More to the point, Ravi Gupta, Editor-in-

Chief of GIS Development reminded us of the following: "Development of a state-endorsed online spatial data system is still a distant dream in the Internet age for most developing and emerging countries." This is not to say that there is either a public or a private sector solution. As General Khalifa stated: "A partnership between government and the private sector needs to be developed to realize the benefits of SDI."

### Urgency

Growth of the geospatial technology industry is prompting the organisations in attendance in Abu Dhabi to move quickly, and the sense of urgency only builds as volumes of legacy data grow. The acquisition of geospatial data is accelerating, and any major re-definition of spatial framework will have a major impact. For example, Dr. Taib's paper articulated the challenges of implementing the GDM2000 datum and the difficulty in applying such changes to the catalogues of data built upon what is now obsolete datum. This is an issue particularly for early adopters of GIS—those who have built the largest catalogues of data on early frameworks. Global economic growth will place a premium on being able to effectively deploy and manage traditional infrastructure. This was put in the spotlight recently with the controversy surrounding the transfer of U.S. port management contracts to Dubai World Ports. The financial community has also acknowledged this trend, as evidenced by the creation of new 'Infrastructure Funds'. In the same way, exponential growth of geospatial data and applications will challenge our ability to move spatial data seamlessly across markets and jurisdictions. How well we fare may depend upon how the global geospatial community delivers on the promise of an SDI.

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### Parallel

Many speakers drew a parallel between traditional infrastructure and SDI, and the setting couldn't have been more appropriate. The Emirates of Abu Dhabi and Dubai provide stark visual examples of the demands being placed on infrastructure in the face of the massive growth occurring in the region. The Geospatial Information & Technology Association (GITA)'s Executive Director Bob Samborski spoke on the organisation's research into return on investment for geospatial technology implementations. Several of his observations were germane to the discussion on Spatial Data Infrastructure. Particularly relevant was the assertion that sound financial analysis is fundamental to any investment in geospatial technology, and that those investments must support business objectives.

### SDI Necessary?

While it is difficult to quantify the value of something as large and overarching as a