



Map Middle East 2005: Report

The lively and wonderful city of Dubai played the perfect host to all the participants of the first annual Middle East conference on Geospatial Information, Technology and Applications 'Map Middle East 2005'. Organised by GIS Development (India), Dubai Municipality (UAE) and CSDMS (India) the event was held from April 23 to 25, 2005 at Al Bustan Rotana Hotel.

Under the theme of 'Geospatial Information and Knowledge Economy' the event fulfilled the need for a regional forum in the geospatial domain. The stakeholders - academia, researchers, students and the industry - shared their experiences and explored arenas for future geospatial collaboration.

The participants witnessed speeches from top decision makers, from widely acclaimed members of the academia and prominent researchers. The speeches showcased the role played by geospatial technology in the development of the Middle East region. The conference highlighted the need for firmly placing 'geospatial knowledge' at the heart of economic agenda of the regional nations. The participants at the event called for developing a GIS that reaches out to the general public.

The event was supported by six Gold Sponsors (Intergraph, BAE Systems, Bentley, Rolta, Global Scan Technologies, and ESRI), and three co-sponsors (Military Survey Department, UAE; Space Reconnaissance Centre, UAE; Town Planning Department, Al Ain City, Government of Abu Dhabi).

The conference was attended by 622 delegates from the entire Middle East region - UAE, Kingdom of Saudi Arabia, Oman, Qatar, Bahrain, Yemen, Kuwait, Iran, Iraq, Lebanon, Jordan, Egypt, Sudan, Syria - as well as from countries such as USA, Switzerland, The Netherlands.

There were three plenary sessions (Geospatial Information and Knowledge Economy, SDI: International Initiatives, Technology Trends), two keynote sessions (Large Scale Mapping, GIS and SDI in the Middle East), three workshops (Mobile Mapping Systems, GIS and the Law, GPS).

Inaugural Ceremony

The inauguration started with the chanting of holy words from the Holy Quran in a packed hall of over 450 people, followed by a spectacular short curtain raiser film on Map Middle East 2005. The occasion was graced by Er. **Hussain Nasser Lootah**, Assistant Director General, Dubai Municipality.

He welcomed the participants in the Inaugural session with his lively speech and set the tone for the three-day conference.

Addressing the inaugural session of Map Middle East 2005 Mr. Lootah said, "If GIS is to make a lasting and sustainable contribution to development in the region, the need for indigenous control of the technologies is of paramount importance."

He further informed the august gathering of the importance being given to geospatial information in the region. He said the region has now taken it as a mission to build GIS systems that reach out to the general public. He talked about his dream to install a functional Spatial Data Infrastructure for the region, which everybody would access, work upon and add to.

Also speaking on the occasion Prof. Emeritus Gottfried Konecny from the University of Hannover in his speech said the main goal of geoinformation development is sustainable development. M P Narayanan, President, CSDMS, in his speech praised the development in the Middle East region and further added that the region is geared to be the next destination for knowledge economy and technical leadership.

The inaugural session ended with a warm vote of thanks by **Eng. Mohammed Al Zaffin**, Director, Dubai GIS Center, Dubai Municipality, UAE. He invited all participants to discuss, deliberate and enjoy the three days of conference.

Plenary Sessions

I) Geospatial Information and Knowledge Economy

This was the first plenary session on the first day. The session was chaired by **Er. Hussain Nasser Lootah** of Dubai Municipality and had three key presentations. **Dr Terrence J Keating**, Vice President, Intergraph Mapping and Geospatial Solutions was the first to speak. He stressed on the need for large-scale mapping, development of geospatial services and creating the link between economy and GI. He elaborated on the techniques and concepts involved with these tools. His emphasis was on the importance of fast changing urban development and the need to map these changes for better monitoring.

The next speech was of **Prof. Dr. Ir. Martien Molenaar**, Rector, ITC, The Netherlands, who gave a well-applauded speech that covered the need for adequate training and research required in geospatial domain. He spoke in futuristic tones where the concept of different tools in a single platform, and multiple users having multiple accesses to projects would be a common thing. He emphasised on the role of spatial data infrastructure and what really makes a SDI. **David Coleman**, Professor and Dean of Engineering, New Brunswick University spoke next where he elaborated on the techniques and concepts involved with geospatial tools and its relation to an economic setup of a region.

II) Spatial Data Infrastructure: International Initiatives

The second plenary session touched upon the important topic of Spatial Data Infrastructure and

through the four crucial talks addressed its international perspective. The session was chaired by Brigadier Khaliffa Al-Romaithi, Director, Military Survey Department, UAE. The four main presentations were of Ms. Vanessa Lawrence, Director General and Chief Executive, Ordnance Survey, UK; Major General M Gopal Rao, Additional Surveyor General, Survey of India (his paper was presented by Brig. Manoj Tayal, Director, Survey Training Institute, Hyderabad, India); Milan Konecny, President, International Cartographic Association; and Li Deren, Academician Professor, Wuhan University, China.

Vanessa Lawrence spoke about the manner in which any mapping organisation should progress to reach the formation of spatial data infrastructure. Her focus was on a judgmental combination of managerial, technical and social aspects. It is a time-consuming affair and hence steadfastness and patience is a key aspect, she emphasised. Milan Konecny spoke next talking about the manner in which the discipline of geo-informatics and related technologies have developed over the years. He mentioned about the work happening in Europe and various other places and gave some directions in which the geospatial movement should shape up in the future. Prof Li Deren spoke about developments in the geospatial arena in China and the various SDIs shaping up in the Asian region.

III) Technology Trends

The third plenary was on technology trends of the industry. The plenary touched upon developing frameworks for integrating various systems. It showcased the latest technological developments, case studies and offerings.

The key speakers were David Maguire, Director Products, ESRI; Albert Godfrind, Oracle Corporation and Mark Reichardt, President, Open Geospatial Consortium.

Keynote Session

I) Large Scale Mapping

This important keynote session was chaired by Maj Gen. Eng Saliem M Khalifeh, Director General, Royal Jordanian Geographic Centre, Jordan and had four important presentations. Stewart Walker, Director of Marketing, Geospatial eXploitation Products, BAE Systems was the first to speak and mentioned about the manner in which detailed and accurate data is becoming the need of the hour and large scale mapping becoming increasingly indispensable, whatever be the application.

Philip Arsenault, Vice President, Business Development, Optech Inc. presented next on the emerging trends in photogrammetry and LiDAR and the cutting edge potential such technologies have in addressing the needs of the day. Karsten Jacobsen, Professor, University of Hannover gave a short and insightful speech in which he mentioned that research and development in the field of large scale mapping and its seamless use is an important area in the coming years.

Eng. Mohammed Al-Zaffin, Director, Dubai GIS Center, UAE spoke finally where he talked about the manner in which the Dubai GIS Center is meting out the geospatial needs of the area through its various innovative programmes and services. He also mentioned about the upcoming needs of the Center and welcomed ideas for collaboration.

II) GIS and SDI in the Middle East

Eng. Mohammad Al-Zaffin, Director of GIS Centre, Dubai Municipality chaired this important session and there were four key speakers from the region. The first speaker was Zul Jiwani, President, Orion Technology who spoke at length of the manner in which the well known GIS system of Kuwait was established over a period of time with interesting examples of issues, challenges, apprehensions and weaknesses that were addressed.

Brig. Khaliffa Al-Romaithi, Director, Military Survey Department, UAE spoke next on various manners in which the military and the civilian of the region have worked on these technologies and today are in a position to take on advanced applications on every front. He also spoke of the needs of the region.

Major General Eng. Saliem M Khalifeh, Director General, Royal Jordanian Geographic Centre, Jordan had the next paper. His paper was presented by Eng. Khalil Almaharmeh. He spoke of the SDI initiatives in Jordan and its current status.

Technical Sessions

Eleven Technical Sessions on themes such as Mobile Mapping, Social Utility, Internet GIS, GPS, Environment, Digital Photogrammetry, Municipal GIS, Remote Sensing and Image Processing, SDI, GIS Applications, Transportation were held during the conference. There were 80 paper presentations during the technical sessions in the three days.

The Technical Sessions were chaired by eminent personalities like Dr. I V Muralikrishna, Jawaharlal Nehru Technical University, India; Abdullah M Al Garni, King Saud University, Saudi Arabia; Eng. Walid A Molla, Space Research Institute, Saudi Arabia; Saeed Khalfan Al Dhaheri, Director, General Emirates Identity Authority and many others.

Workshops

Three workshops were also organized during the conference. The first workshop was on 'GIS and the Law' by George Cho, Associate Professor (GIS and the Law), University of Canberra, Australia; the second workshop was on Mobile Mapping Systems by Dr. Naser El-Sheimy, Associate Professor, Canada Research Chair in Mobile Multi-sensor Geomatics systems; and the third one was on 'GPS' by Dr Muneendra Kumar, Chief Geodesist (Retired), US National Geospatial-Intelligence Agency.

EXHIBITION

An important attraction of the event was the state-of-the-art exhibition. Spanning over an area of around 1,500 sq. m, the exhibition of Map Middle East 2005 was quite a success with 30 exhibitors displaying their latest offerings in the first conference of its kind in the Middle East region. National and international organizations representing the government, the academia and the private sector displayed their services and products.

Exhibitor's List

1) BAE Systems 2) Sokkia; 3) Space Imaging Middle East; 4) Kampsax India Pvt Ltd 5) Mapinfo; 6) PCI Geomatics; 7) Bentley; 8) Aero Map Technology Systems; 9) Al Ain Town Planning Department, Abu Dhabi 10) Definiens Imaging; 11) ESRI; 12) Alrabiah AEROMETREX Associates; 13) Optech Inc. 14)

Spot Image UAE; 15) Military Survey Department, UAE 16) Informap; 17) Rolta; 18) ITC; 19) Geomatec; 20) PROGIS Software AG 21) Global Scan Technologies; 22) Speck SpatialTech; 23) Maps Geosystems; 24) Trimble; 25) UAE University 26) Intergraph Middle East 27) Transport Hi-Tech Consultants; 28) Iran Geological Survey; 29) Dubai Municipality; 30) Department of Science & Technology, Government of India

VALEDICTORY: EMERGENCE OF THE REGIONAL FORUM

The 3-day high profile participation in Dubai with representations from across the whole Middle East region corroborated the need, significance and role of such conclaves. Map Middle East 2005 emerged as the perfect regional forum for sharing of experiences and for deliberating upon future collaborations among all the stakeholders in the geospatial domain in the Middle East region.

AGAIN IN 2006

In view of its success, which can be gauged from the large number of paper presentations, exhibits, participation from the government and the industry, it was unanimously decided by the organizers to again hold the conclave in 2006 in Dubai itself from March 26-29. The announcement for Map Middle East 2006 was made at the closing ceremony by Eng. Mohammed Al Zaffin, Director, Dubai GIS Center.

AWARDS

The following awards were given to the winners during the closing ceremony:

Best Exhibitor

FIRST: Intergraph

SECOND: Rolta

THIRD: Dubai Municipality

Best Papers

FIRST: 3D GIS Data Acquisition using VISAT - A Mobile Mapping System

Dr. Naser El-Sheimy, University of Calgary, Canada

SECOND: The GIS Digital Basemap project at Dubai GIS Centre

Christopher Lueken, GIS Centre, Dubai Municipality

THIRD: Automatic Extraction of Tents during Haj from Airborne Images

Abdulatif Alharthy, Dr. Nabeel Koshak, Umm Al-Qura University, Saudi Arabia

Best Poster

Applied Single GPS point statistical analysis to geometric correction of digital satellite imagery

Ahmed S. Massasati, The Ministry of Presidential Affairs, Department of Water Resource Studies, UAE