

**ISO/TC 211 Geographic information / Geomatics  
Newsletter No 2                      October 2003**



**Revival of CEN/TC 287  
Geographic information**

**Comité Européen de Normalisation**

**EUROPEAN COMMITTEE FOR  
STANDARDIZATION**

CEN/TC 287 was operational from February, 1992 until September, 1999. It became dormant when ISO/TC 211 absorbed the European Programme of Work. As much of the original ISO/TC 211 Programme of Work has resulted in the publication of International Standards. CEN/TC 287 will decide how to adopt and apply these ISO standards to Europe.

To start the activities of CEN/TC 287 again, a meeting for all interested parties on national and European level will be organized on:

**November 10 - 11, 2003**

**Nederlands Normalisatie-instituut (NEN)  
Vlinderweg 6  
2623 AX Delft  
The Netherlands**

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**Please contact before October 17, 2003.**

**At this meeting, it will be decided if the CEN/287 draft business plan is ready to be submitted for approval by the CEN/BT.**

**NEN has nominated Dr. Henri J.G.L. Aalders as Chairman, CEN/TC 287**



**Draft Agenda:**

**Scope  
Liaisons  
Programme of Work  
Proposed Working Groups:**

**CEN/TC 287/WG 1 - Coordination, maintenance and harmonization  
CEN/TC 287/WG 2 - INSPIRE  
CEN/TC 287/WG 3 - European profiles**

**ISO/TC 211 Presentation - Mr. Olaf Ostensen, Chairman, ISO/TC 211**

**National reports on which (pre) standards are implemented and where**



**ISO's movers and shakers thrash out core issues in**

**standards development**

Some 140 committee officers, principally Chairs, from throughout the world attended the **2nd ISO conference for technical committee and subcommittee chairs on 5-6 June in Geneva, Switzerland**, to examine ISO's long-range strategy and a whole series of initiatives to increase the alignment between ISO's technical work and the market requirements for them. While thousands of ISO standards provide benefits to business, government and society, the people responsible for their development largely remain in the background. This conference provided the right forum for them to bring to the open the challenges and successes of their work, while providing the ideal platform for a lively exchange of views on the recent strategic initiatives undertaken by the organization's Council and Technical Management Board (TMB) and the needs of the standards makers and other social partners. These concerned three "theme" areas: **Global relevance in ISO technical work; Inclusiveness / exclusiveness/cooperative standards development, and Time to market.**



ISO Secretary-General Alan Bryden set the scene of why there was a paramount need for networking between ISO

technical committee (TC) and subcommittee (SC) Chairs: "Approximately 35 000 technical experts on loan from business, industry, government, academia, consumer organizations and other bodies take part each year in the development of ISO standards," he said. "Each working day, there are some 17 ISO technical meetings taking place around the world. Between meetings, the experts continue the standards' development work by correspondence - increasingly by means of new information and communications technology (ICT tools). The system is extremely decentralized and the leaders of one committee rarely have the opportunity to exchange views and experiences with their counterparts from other committees."

When summing up the conference, Mr. Bryden said: "I think that what has been shown during these two days and demonstrated again is the solidarity that exists between the three constitutive elements of the ISO system, and if one is weak, the system is weak: first, of course, the experts under the leadership of our technical committee and subcommittee Chairs, then the ISO members, and finally, naturally, the Central Secretariat. So we have gathered a lot of food for thought and action for the three constitutive elements."



[ 2nd ISO conference for TCs & SCs chairs ]



August 7, 2003

## ***INCITS Approves Three Real-Time Locating System Standards***

International Committee for Information Technology Standards (INCITS) - Washington, DC – The International Committee for Information Technology Standards (INCITS) has approved three new standards that define two Air Interface Protocols and a single Application Programming Interface (API) for Real Time Locating Systems (RTLS) for use in asset management. INCITS Technical T20 developed the INCITS 371 series of standards over a two-year period; the American National Standards Institute (ANSI) approved all three in the series as American National Standards within one week of approval by INCITS' Executive Board.

"Everyone on the Technical Committee recognized the huge business value of establishing a standard for RTLS technology," said T20 committee chairman Larry Graham, Global Manager of Manufacturing Technologies, General Motors Corporation. "We have no doubt that this standard will encourage widespread adoption of wireless location systems as the technology has already been proven to deliver tremendous bottom line cost savings for enterprises around the world."

T20 vice chairman, Tony Cataldo, who is Manager of Network Engineering and Network Operations for Ford Motor Co., added: "With real-time locating system applications running in many of the Ford factories worldwide, we were already big believers in this technology, but it was critical that a standard be developed. Now, with an international standards body backing the technology, I would expect a flood of new end users in a variety of industries—from automotive (and related) to retail to health care. With a standard in place, we will all collectively benefit from reduced infrastructure costs and increased efficiencies across the supply chain."



"As the world's leading provider of wireless solutions for tracking and managing assets, I fully expect that by supporting this technical standard WhereNet will accelerate economies of scale driven by orders from a host of new customers, partners and infrastructure providers," said Dan Doles, CEO, WhereNet. "Unlike RFID technology that has been plagued by proprietary systems that often result in integration bottlenecks, RTLS technology will now operate under a universal standard and be easily implemented across highly dynamic and complex supply chains."

#### Overview of INCITS 371 series

**INCITS 371.1:2003, Information Technology – Real Time Locating Systems (RTLS) - Part 1: 2.4 GHz Air Interface Protocol.** This document establishes a technical standard for radio frequency beacon systems that operate at an internationally available 2.4-GHz Band frequency and that are intended to provide approximate location (3m) on a regular basis (several times a minute). The standard is generally applicable to applications in which assets need to be tracked throughout extensive areas that are within range of a permanent reader infrastructure. A typical application might involve the monitoring of vehicles through a multi-station assembly line or within a delivery yard.

**INCITS 371.2:2003, Information Technology – Real Time Locating Systems (RTLS) - Part 2: 433-MHz Air Interface Protocol**

This document establishes a technical standard for radio frequency beacon systems that operate at an internationally available 433-Hz Band frequency and that are intended to provide presence and location data for assets that have RTLS tags affixed. The standard is generally applicable to applications in which assets need to be tracked through zones within areas that are within range of a permanent reader infrastructure. A typical application might involve the monitoring of mobile assets within a military installation.

**INCITS 371.3:2003, Information Technology – Real Time Locating Systems (RTLS) - Part 3: Application Programming Interface**

This document defines the Application Programming Interface (API). To be fully compliant with this standard, RTLS must comply with either Part 1 or Part 2. An API is a boundary



across which application software uses facilities of programming languages to invoke services. These facilities may include procedures or operations, shared data objects, and resolutions of identifiers.

#### About INCITS

INCITS [ <http://www.incits.org> ] is the primary U.S. focus of standardization in the field of Information and Communications Technology (ICT) encompassing storage, processing, transfer, display, management, organization, and retrieval of information. As such, INCITS also serves as the American National Standards Institute's (ANSI) Technical Advisory Group for ISO/IEC Joint Technical Committee 1. JTC 1 is responsible for international standardization in the field of information technology. INCITS is accredited by ANSI and operates under its rules, designed to ensure that voluntary standards are developed by the consensus of directly and materially affected interests.



### ***Pre-ICC workshop on implementing standards for geographic information in Africa – and follow up activity***

A workshop, jointly organised by EIS-AFRICA and USGS/EDC, was held on 10 August 2003, preceding the International Cartographic Conference, in Durban, South Africa. Over 40 participants, from 13 countries, 8 of which were African, listened to a variety of presentations and then identified some initial steps towards standardized geographic data.

Presentations focussed on the standards being developed by ISO's Technical Committee for geographic information, TC 211, especially the metadata standard, followed by African experiences in implementing standards – geodetic referencing, land cover classification, participation in Global Map, national standards development. Through



## ***Developing countries appreciate ISO's new initiatives***

ISO Bulletin - September 2003 by Maureen P. Mutasa, Chair of DEVCO (ISO Committee on developing country matters), and Director General, Standards Association of Zimbabwe



Globalization has moved at an alarming pace and, for some of us in developing countries, it has caught us unprepared. Globalization has changed the way we live. It has also changed the business environment in which we operate. Previously closed and protected economies such as ours are now a playing ground of intense competition. Companies are closing down because they cannot face up to the challenge. With globalization has come the changing role of standardization. Standardization now plays a key role in trade facilitation, especially regional and international trade.

Standardization not only assists in the creation of a domestic market; it also increases international competitiveness. Standardization is an excellent means of technology transfer to developing countries, assisting them in overcoming technology gaps and in becoming better integrated into the global economy. International Standards are key to improving developing countries' access to global markets. Through standardization, developing countries can reduce poverty, realize economic growth, reduce economic dependence on developed countries and improve human welfare through health and safety.

For a standard to be truly international and have global relevance, it must take into account the needs of all stakeholders without exception. It must therefore be derived from a global think tank with global knowledge and global viewpoints. International standardization bodies therefore have to nurture developing countries by creating a conducive environment for developing countries to participate in international standardization work - an environment of inclusiveness rather than of exclusiveness, an environment where developing countries have a voice, can influence and are involved throughout the standardization process.

We in developing countries not only welcome but appreciate ISO's current initiatives on collaboration

discussions, measures to support standards developers and implementers were identified, as well as actions at both the technical and organisational level. One of the decisions was that there should be sustained follow-up activities, such as the organisation of awareness workshops at conferences and other events, such as Africa GIS '03. A workshop focussing on standards has been incorporated into the Africa GIS '03 programme.

[ [ICC-Stds-Wkshp-Rpt](#) ] Link to Agenda & presentations [ <http://www.eis-africa.org/standardsws.htm> ]

Following the ICC workshop, a Standards Stakeholders Workshop was convened by the Department of the Surveyor General in Harare, Zimbabwe on 4 September 2003, at which, amongst others, the actions suggested at the pre-ICC workshop were discussed. Those who attend agreed on the need to bring more organisations on board with respect to standardization efforts. For more information on these activities in Zimbabwe, please contact Enias Chinjekure, e-mail: [ [echinjekure@dsg.co.zw](mailto:echinjekure@dsg.co.zw) ] .

Submitted by Dr. Liz Gain [ [egavin@csir.co.za](mailto:egavin@csir.co.za) ]

Hans Knoop, Co-Chair, ISO/TC 211 Advisory Group on Outreach and Dave Danko, ISO/TC 211 Metadata Project Leader represented ISO/TC 211 at this workshop. EIS Africa and USGS/EDC jointly developed a Geospatial Data Standards Questionnaire. [ [USGS-EIS-Stds-Questionnaire](#) ]



## **Report on the Survey for Establishing Standards for Geospatial Data in Kenya**

The GSDI website [ <http://www.gsdi.org> ] has an extensive report done by Mr. Kubasu, Highland Surveyors Licensed Land Surveyors & Geomatic Consultants [ [highland@africaonline.co.ke](mailto:highland@africaonline.co.ke) ]. It has a description of ISO/TC 211 and also includes its own national standards survey.

[ [Kenya Survey Report](#) ]



and twinning. We note with interest the collaborative initiatives with international and major standards

developing organizations, as we think it is through such initiatives that we can avoid conflicting and competing standards in the global marketplace and instead have only one standard being used internationally.

We further note with great interest the progress with the twinning arrangements. In order to arrange for the implementation of twinning arrangements, the ISO/DEVCO Secretariat has requested member bodies in developing countries to indicate whether they wish to participate in twinning arrangements and if so, to indicate the capacity in which they wish to take part in ISO standardization work through twinning. There are three possible capacities, namely: by nominating a vice chairman; by twinning with a secretariat and by twinning with a participating (P) member to ensure that developing countries' needs are taken into account by the committee. Once the specific wishes of developing countries' member bodies are known, the ISO Central Secretariat in consultation with the concerned committee secretariats will endeavour to ensure that appropriate twinning arrangements are implemented.

Requests for twinning arrangements have started to come in. We believe that these twinning arrangements, if implemented, will enhance the participation of developing countries and, at the same time, bring even more value to ISO's standards.

As developing countries, we must exploit standardization to our maximum benefit and make a difference to the quality of our lives. This we can achieve by actively and effectively participating in international standardization work. Making the international standardization environment conducive for developing countries' participation is a critical success factor.



Germany will host the ISO/TC 211 Plenary meeting in Berlin, Germany at the DIN (Deutsches Institut für

Normung ) facility from October 30 – 31, 2003.

Beyond the normal working group meetings (October 27 – 29, 2003) associated with the ISO/TC 211 Plenary, the German technology exhibition will open in conjunction with the Monday evening reception. During Wednesday afternoon, the ISO/TC 211 Advisory Group on Outreach will sponsor a Class A Liaison Seminar as well as the Standards in Action Workshop. We are all looking forward to the Dinner on Thursday evening. On Friday, DIN & the Advisory Group on Outreach will co- sponsor a Standards Tutorial at the DIN facility. This is primarily intended to educate and train the German users of geographic information and technology. Dr. Hans Knoop, German Head of Delegation and his team, as well as the DIN staff, are to be congratulated for their tireless efforts to ensure another very successful week of ISO/TC 211 working group & Plenary meetings.



Standards Workshop - Digital Earth Conference, Brno, Czech Republic, September 21 – 25, 2003

The 3rd International Symposium on Digital Earth September 21-25, 2003 Brno, was a very well-organized international conference centered on the theme - Digital Earth: Information Resources for Global Sustainability. There were more than 250 attendees from over 34 countries. Some people came - not only in support of this concept but to also support Milan Konecny, the conference organizer and newly elected President, International Cartographic Association.

Preetha Pulusani, Intergraph Mapping and Geospatial Solutions, gave a well-focused opening plenary on Enabling Interoperable SDIs for Sustainable Development. The intellectual content for the conference was provided by Professor Michael Blakemore with his discourse on data.



**Alessandro Annoni, JRC, chaired the very informative session on European Spatial Data projects which focused on INSPIRE. Ed Parson, Ordnance Survey, UK, presented very interesting and innovative technical approaches in the organizational marketing and**

**sale of spatial data.**

**Ravi Gupta's presentation on "ICTS for the Underserved Communities" dramatically demonstrated the power of GIS technology used by common people at the local level. Jeannie Foust, ESRI, gave the passionate plenary address and plea for the Digital Earth in terms of the United Nations Millennium Development Goals (MDG) and conducted an excellent ESRI Workshop on Technical Approaches to the Digital Earth featuring a fascinating new product called ArcGlobe.**

**The Standards Workshop, co-sponsored by ISO/TC 211, Geographic information / Geomatics and the Open GIS Consortium (OGC) was considered by many - to have the highest attendance of all the sessions.**

**Some people are somewhat skeptical of the viability of Digital Earth initiative. The International Symposium on Digital Earth has occurred every two years as just an international conference without a real agenda and plan of action. There are now plans for the International Symposium on Digital Earth to incorporate into an entity called - International Society on Digital Earth (ISDE). Hence, the triad of international initiatives / conferences Global Mapping, GSDI, and Digital Earth may want to consider how to coordinate, cooperate, or even consolidate.**

**The President of the Digital Earth Steering Committee is Yongxiang LU, China and Secretary General, Huadong GUO, China [ hdguo@cashq.ac ], Professor and Deputy Secretary General, Chinese Academy of Sciences.**

**The next International Symposium on Digital Earth will take place in Tokyo, Japan in March 2005. ISO/TC 211 & the OGC have already been invited to conduct a Standards Seminar at this symposium.**