

Interorganisational Activities

- CEOS - Committee on Earth Observation Satellites
 - CIPA - International Committee for Architectural Photogrammetry
 - COPUOS - UN Office of Outer Space Affairs - Committee for the Peaceful Uses of Outer Space
 - ISB - International Society of Biomechanics
 - ISO - International Standards Organisation
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Committee on Earth Observation Satellites (CEOS)

Lawrence W. Fritz, ISPRS President

CEOS was created in 1984, in response to a recommendation from a Panel of Experts on Remote Sensing from Space, under the aegis of the Economic Summit of Industrialised Nations Working Group on Growth, Technology and Employment. This group recognised the multidisciplinary nature of satellite Earth observation and the value of co-ordinating international mission plans. CEOS has since established a broad framework for co-ordination across all civil space-borne Earth observation missions. Its objectives are:

- to optimise benefits of space-borne Earth observations through the co-operation of its participants in mission planning and in the development of compatible data products, formats, services, applications and policies;
- to serve as a focal point for international co-ordination of space-related Earth observation activities;
- to exchange policy and technical information to encourage complementarity and compatibility of observation and data exchange systems.

As a result of the 11th Plenary of CEOS in Toulouse, November 1997, ISPRS formally became an Affiliate (now Associate) Member of CEOS. CEOS at its 12th Plenary in Bangalore, India, November 1998 changed its membership categories from Members, Observers, and Affiliates to two categories, Members and Associates. CEOS Members are governmental organisations that have civil space-borne Earth observation programs which are currently operating. Associates are governmental organisations that have either a civil space-segment activity under development or are international scientific non-governmental bodies having significant programmatic activities which support CEOS objectives.

The objectives of CEOS and ISPRS are quite compatible and their activities are synergistic. CEOS has two active Working Groups. The WG on Calibration and Validation (WGCV) addresses sensor specific calibration/validation and geophysical parameter/derived products validation. It is chaired by Dr. Alan Belward (JRC, Ispra) who is also ISPRS WG I/1 Co-Chairperson. Similarly, Prof. Ian Dowman, ISPRS Commission II President is Chairperson of the WGCV Terrain Mapping Subgroup. The CEOS WG on Information Systems and Services (WGISS) aims to facilitate data and information management and services for users and data providers by addressing Earth observation data capture, description, processing, access, retrieval, utilisation, maintenance, and interoperability. The WGISS Chairperson is Dr. Takashi Moriyama

(EORC/NASDA, Tokyo) who is also ISPRS WG I/5 Chairperson. With this excellent mix of leadership, the inter-co-ordination between ISPRS and CEOS WGs is off to a good start.

A major objective of CEOS is the development of an Integrated Global Observing Strategy (IGOS) to support the scientific, operational and research communities. Ultimately, the IGOS is envisioned to be a joint product of all groups involved in the collection and analysis of both space-based and in-situ data. It is working to realise a comprehensive strategy for global observations through a partnership with the Global Climate, Global Ocean and Global Terrestrial Observing Systems, their intergovernmental sponsors; IGFA for Global Change Research, IGBP, WCRP and others.

A standing CEOS Secretariat is maintained by ESA, NASA/NOAA, and STA/NASDA. Annually a different Member is selected for the CEOS Chairmanship. The chairing host organisation supports the annual CEOS Plenary which is held in November each year. During 1998 the CEOS host was the Indian Space Research Organisation (ISRO) under the Chairmanship of Dr. K. Kasturirangen, ISRO Director. At the 12th Plenary, 19 Actions were initiated, one of which is for ISPRS to co-ordinate with CEOS Secretariat for the conduct of private industry forum activities. In 1999 the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) will host CEOS under the Chairmanship of Dr. Tillmann Mohr, EUMETSAT Director. For further information, readers are encouraged to visit the CEOS Home Page at: .

CIPA (International Committee for Architectural Photogrammetry)

by Peter Waldhäusl, Austria, President of CIPA

and Robin Letellier, Canada, Vice-President of CIPA

This report summarises the activities of CIPA in 1998.

After its Symposium in Goeteborg 1997, where many decisions have been made for new statutes, the Committee met for its Annual Meeting 1998 in Granada, Spain, from 15 - 17 March. During this meeting the Committee tried to shift the points in direction of an active future. Communication and co-operation will be based mainly on the internet.

Expert Groups have been established within a framework for open dialogue between ISPRS experts and related technologists on the one side and ICOMOS experts as the users on the other. It is possible now that all interested experts included in the CIPA's mailing list will establish contact with each other to discuss proposals and problems via internet. This framework fulfils the basic requirement of the ICOMOS "Eger-Principles", which say that no qualified expert should be excluded from participation in any of the ICOMOS Committees.

Chairpersons for five application areas of ICOMOS and five technology fields of ISPRS witnessed the dialogue, answered questions, initiated discussions and recommended applications and developments. But they also filter the dialogue to find out actual problems and good proposals. Their reports will be forwarded via two co-ordinators to the Expert Advisory Board which consists of all CIPA chairpersons and

co-ordinators. The experts will communicate via intranet and prepare the topics for the Executive Board. Thus the Executive Board can decide on well prepared agenda points for the Annual Meetings.

The permanent Working Groups of CIPA will work on defined, planned and well-managed subjects in defined areas. Its tasks are primarily not the development of new methods, but the adaptation of developed methods to the practical needs of the users, testing and comparison of methods and location of its weak points, simplification and specialisation according to given requirements. The non-permanent Task Groups will work on one specific task each within a specified period of time. The former Working and Task Groups will continue their work but with more concentration on specified aims. The new chairpersons will be nominated after elections by the Group Members. Young scientists with outstanding qualifications shall be encouraged to become a chairpersons. For details of CIPA and the present programme of the Working Groups see: <http://cipa.uibk.ac.at> On one of CIPA's web-pages a diagram explains the new structure of CIPA Boards, its Members, and the framework for world-wide internet dialog of experts. The new statutes of CIPA to define the above structure and will be ready for adoption early in 1999.

National and Committee Delegates to CIPA

The Call for National Delegates was successful; 15 countries have already sent letters of appointment. Ten more countries will follow soon. But the other ICOMOS National Committees and ISPRS National Member Societies are kindly requested to nominate their Delegates. It will be necessary also to install Committee Delegates connecting the other ICOMOS Committees with CIPA. They shall provide information about special needs and benefits of CIPA's technology. The Delegates Advisory Board will meet biennially during the CIPA Symposia, but the Delegates are permanently integrated into the expert dialog via internet.

Symposium of ISPRS Commission V in Hakodate, Japan, 1998

Many CIPA affiliates participated in the ISPRS Symposium of Commission V in Hakodate in June 1998. 53 (32% of all) Hakodate papers concerned questions related to CIPA's needs:

- Recording, documentation and management
- Heritage Information Systems
- Precise professional photogrammetric methods
- Simple and cheap photogrammetric methods
- Means for measuring from photographs
- Digital cameras and image processing
- Project presentation and visualisation of 3D-models
- Museum objects
- Virtual Reality and Virtual Environment

These excellent activities promise that interesting methods ready for use will be recommended also at the forthcoming CIPA Symposium in 1999.

Working Group Reports

Working Group Reports have been postponed to next year's report which will be presented after the CIPA Symposium and after the General Assembly of ICOMOS in Mexico 17 - 23 October 1999. CIPA will be at this meeting, as well as at the ISPRS Congress in Amsterdam in 2000. In the meantime the interested reader may directly contact CIPA's Working Groups via internet.

Next CIPA Symposium

It will take place the first time in South America, in the Pernambuco Convention Centre in Recife and in Olinda, Brazil, October 3-6, 1999, at the same time as the Brazilian Congress of Cartography. Suzanna Cruz Sampaio, President of ICOMOS Brazil, is the XVII CIPA Symposium Director at:

CIPA Symposium Secretariat, Sociedade Brasileira de Cartografia, Av. Presidente Wilson 210, 7 andar, CEP 20030-021, Rio de Janeiro- RJ- Brazil, Fax: +55 21 262 2823 , E-mail: sbc@rio.com.br, <http://www.rio.com.br/sbcgfsr>

Abstract submission for peer review by 31 Jan. 1999, note of acceptance before 31 March 1999, the full manuscripts are requested before 30 June 1999.

The Symposium in Brazil will be an unforgettable event!

UN Office of Outer Space Affairs - Committee for the Peaceful Uses of Outer Space (COPUOS)

ISPRS has established close working relations with COPUOS, and one member of Council attends the Science and Technology (S&T) Sub- Committee Meeting in February and the COPUOS Committee meeting in July of each year, where statements on behalf of ISPRS are made.

On 25 April 1997 a Memorandum of Understanding (MoU) between the Office of Outer Space Affairs (OOSA) and ISPRS was signed between Dr Jasentuliyana and President Fritz of ISPRS. In summary, the terms of the MoU commits both parties to:

- Promote and conduct activities of mutual interest to the UN Space Applications (UNSA) of OOSA
- Jointly aim to sponsor an event annually
- Jointly coordinate schedules, events, topics and/or specialist needs in pre-planning related activities
- Jointly seek financial support and identify specialists and lecturers for UN led events which require photogrammetric, remote sensing and Geographic Information Systems expertise
- Have ISPRS incorporate formal opportunities within the framework of UNSA to be included in the quadrennial ISPRS Congress and the relevant Quadrennial ISPRS Commission Symposia and Working Group activities
- Request ISPRS to provide scientific and technological expertise through reviews, evaluations and recommendations on space- related matters of remote sensing

The OOSA and ISPRS will pursue these terms of reference within their own budgets. ISPRS welcomes the signing of this agreement, and will do all within its resources to ensure that the terms of the agreement are fulfilled.

From 19-31 July 1999, The Office of Outer Space Affairs will hold the 3rd major space applications conference, UNISPACE III in Vienna Austria. In preparation for this conference, regional preparatory conferences have been held in various locations around the world. ISPRS held a special session devoted to aspects of UNISPACE III in Budapest Hungary, during the Commission VII Symposium in September 1998.

ISPRS will sponsor three of the 30 sessions in UNISPACE III Conference. They are as follows:

- A seminar "Environment and Remote Sensing for Sustainable Development" in cooperation with NASA
- A workshop on Remote Sensing for the Detection, Monitoring and Mitigation of Natural Disasters" in cooperation with EARSeL
- ISPRS workshop on "Resource Mapping from Space"

International Society of Biomechanics (ISB)

The major event in 1998 was the organization and conduct of the Fifth International Symposium on the 3-D Analysis of Human Movement of the ISB Technical Group on 3-D Analysis of Human Movement, Chattanooga, Tennessee, USA, 2-5 July. The conference was attended by 80 delegates. The organizers accepted our proposed Keynote Speaker Dr. Pascal Fua, who gave a paper on "Realistic Human Body Modeling". Proceedings of the Symposium have been published including 43 technical contributions. A list of contents and ordering details can be found under www.utc.edu/Human-Movement/3-d/proceeds.htm. The next meeting is planned for the year 2000 at the University of Cape Town, South Africa. Local organizer will be Kit Vaughan. For more information about the TC please contact www.utc.edu/Human-Movement/index.htm

International Standards Organisation (ISO)

The ISO is a worldwide federation of national standards bodies, comprising 118 members (85 Member Bodies, 24 Correspondent Members, 9 Subscribing Members), one from each country. ISO international standards are developed in agreement between Member Bodies. A committee draft is given to an ISO Technical Committee (TC) for discussion. After consensus in the TC, the central secretariat of ISO emits a Draft International Standard (DIS). The drafts include the voting results from all respective countries. Final voting by all ISO Member Bodies and the final version has to be agreed to by at least 75% of the voters.

International Organisations such as ISPRS may be granted liaison status (Category A or B) with an ISO TC, ISO Subcommittee or ISO Working Group. Category 'A' liaison gives right to full participation, whereas 'B' liaison is to be kept for information only.

ISPRS Liaison and Representatives

ISPRS has had liaison status on the following ISO committees.

ISO/TC 20 'Aircraft and Space Vehicles'
ISO/TC/20/SC14 'Space Systems and Operations'

Category B liaison

ISPRS Representative - ISPRS Commission I

ISO/TC20/SC13 'Space Systems and Information Transfer Systems'

ISPRS Representative Dr H. Ziemann

ISO/TC 42 'Photography'

- WG 03 Sensitometry, Image Measurement and Viewing'

- WG 05 'Physical Properties and Image Permanence of Photographic Materials'

- WG 12 'Lens Quality Characteristics

- WG 18 'Electronic Still Picture Imaging'

Category A Liaison

ISPRS Representative Commission I

ISO TC/172 'Optics and Optical Instruments'

ISO/TC172/SC1

Category B Liaison

ISPRS representative Dr Hartmut Ziemann

ISO/TC172/SC9 'Electro optical systems'

Category B Liaison

Dr Manfred Schroeder

ISO TC/211 'Geographic Information/Geomatics'

Category A liaison

ISPRS representative Professor Dieter Fritsch (Germany), Commission IV President

Report on ISO/ TC 211 Geographic Information Standards

In 1994, ISO formed a Technical Committee (TC) to work standardization within the field of geographic information. The TC was designated TC 211 - Geographic Information. A consensus was reached for a free-standing TC. Otherwise, a new group of standardizers would have to take on the additional structures and rules of JTC1, the Joint Technical Committee between ISO and IEC which oversees IT standards development.

Prior to the formation of ISO/ TC 211 a void existed for international de jure standards for the geographic information market. This void was filled by a significant number of groups working in various domain areas or specific generic fields. The majority of these groups ensure that their sector of interest is represented by maintaining a liaison status with ISO / TC211. Despite difficulties (e.g., the rapid developments in all fields of technology) the TC has the opportunity to influence policy makers.

If the present workplan of ISO/ TC 211 has any single characteristic, it must be that it is 'definitive' - in the sense that it seeks to distill all the knowledge in the field into relatively simple clusters that can be uniquely defined

The primary work product of TC 211 is the development of an International standard, ISO 15046 - Geographic Information. The purpose of ISO 15046 is provide standardization in the field of digital geographic information that is to establish a structured set of standards for information concerning objects or phenomena that are directly or indirectly associated with a location relative to the Earth. TC211 has 20 identified work items, each expected to result in an international standard as illustrated below.

This set of standards specifies methods, tools and services for data management (including definition and description), processing, analyzing, accessing, presenting

and transferring such data in digital/electronic form between users, systems and locations. Additionally, ISO 15046 links to complementary standards for information technology and data where possible and provides a framework for the development of sector-specific applications using geographic data.

Table 1.1 ISO 15046 Programme of Work

Parts of ISO 15046 Geographic information	WD	CD	CD2	DIS	FDIS	IS
1- Reference model 2000-	96-	98-	98-	99-	99-	
	03	01	12	06	12	03
2- Overview 2000-	96-	98-	99-	99-	2000-	
	09	07	01	07	01	04
3- Conceptual schema language	96-	98-	99-	99-	NA	NA
	01	11	05	09		
4- Terminology 2001-	96-	99-	NA	2000-	2000-	
	09	12		05	11	02
5- Conformance and testing 2000-	96-	98-	98-	99-	99-	
	09	04	10	05	11	04
6- Profiles 2000-	96-	98-	99-	99-	2000-	
	09	12	06	12	06	09
7- Spatial schema 2000-	96-	98-	99-	99-	2000-	
	10	12	06	12	06	09
8- Temporal schema 2000-	96-	98-	99-	99-	2000-	
	03	11	04	10	04	07
9- Rules for application schema 2000-	96-	98-	99-	99-	2000-	
	09	12	05	11	05	08
10- Feature cataloguing 2000-	96-	98-	98-	99-	99-	
methodology	09	0498-	11	05	11	04
11- Spatial referencing by 2000-	97-	98-	99-	99-	2000-	
coordinates	12	11	04	10	04	07
12- Spatial referencing by 2000-	96-	98-	99-	99-	2000-	
geographic identifiers	03	05	01	07	01	04
13- Quality principals 2000-	96-	98-	98-	99-	99-	
	03	04	11	05	11	04
14- Quality evaluation procedures 2000-	96-	98-	99-	99-	2000-	
	09	10	04	10	04	07
15- Metadata 2000-	96-	98-	99-	99-	2000-	
	03	07	02	08	02	05
16- Positioning services 2000-	97-	98-	99-	99-	2000-	
	09	12	06	12	06	09
17- Portrayal 2000-	96-	98-	98-	99-	99-	
	09	05	12	06	12	03
18- Encoding 2000-	96-	98-	99-	99-	2000-	

19- Services 2000-	09 96-	12 99-	06 99-	12 2000-	06 2000-	09
Technical report 99-01	09 98-	03 NA	09 NA	03 NA	09 NA	12 NA
Profiles and functional standards	07					
Technical report 99-04	98-	NA	NA	NA	NA	NA
Imagery and gridded data	11					

Legend:

WD - Working Draft

CD - Committee Draft

CD2 - Committee Draft (for vote)

DIS - Draft International Standard

FDIS - Final Draft International Standard

IS - International Standard

ISO 15046 standards are structured into five groups as follows:

- Framework and Reference Model - Reference Model, Overview, Conceptual Schema Language, Terminology, Conformance and Testing
- Geospatial Data Models and Operators - Spatial/Temporal subschema, Spatial operators, Rules for application schema
- Geospatial Data Administration - Cataloguing, Geodetic reference system, Indirect reference system, Quality, Quality evaluation procedures, Metadat
- Geospatial Services Positioning services, Portrayal of geographic information, Services, Encoding
- Profiles and Functional Standards - Profiles

Web Site: For more information pertaining to ISO/TC 211 please visit our World Wide Web-server at the following URL address: <http://www.statkart.no/isotc211/>

Calendar of upcoming plenaries: For further information concerning the following plenaries.

Meeting	Time	Place
ISO/TC211, 8th	1999-03-04/05	Vienna, Austria
ISO/TC211, 9 th	1999-09-29/30	Kyoto, Japan
ISO/TC211, 10th	2000-03-09/10	South Africa
ISO/TC211, 11th	2000-09-28/29	USA