



INTERNATIONAL CARTOGRAPHIC ASSOCIATION

University of Architecture, Civil Engineering and Geodesy

FINAL PROGRAMME

1ST INTERNATIONAL CONFERENCE ON CARTOGRAPHY AND GIS

January 25-28, 2006
Borovets, Bulgaria

UNDER THE AUSPICES OF THE RECTOR OF UNIVERSITY OF ARCHITECTURE, CIVIL ENGINEERING AND GEODESY
ASSOC. PROF. DR. PENIO PENEV

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Tuesday, JANUARY 24, 2006

Arriving in Sofia and transport transfer Sofia-Borovets

Lion Hotel, Borovets

11:00 a.m. – 7:00 p.m. Registration

Wednesday, JANUARY 25, 2006

Lion Hotel, Borovets

09:00 a.m. Registration

Conference hall

9:30 a.m. OPENING CEREMONY of the 1st Conference on Cartography and GIS

Greetings:

- Assoc. Prof. Dr. Penio Penev, Rector of the University of Architecture, Civil Engineering and Geodesy
- Assoc. Prof. Dr. Milan Konecny, President of ICA
- Greetings by Members of Government

Official award for the best drawing in the Barbara Petchenik Children's World Map Competition, 2005 – Bulgarian winner 12-year-old Diana Hadjiiska by the ICA President

10:30 a.m. Keynote speech 1

1	Milan Konecny	Cartographical Perspectives in SDI World	CZECH REPUBLIC
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11:00 a.m. Coffee Break

GIS TECHNOLOGIES AND RELATED DISCIPLINES

11:30 a.m. – 1:30 p.m. Plenary Session 1

Chairs: Dr. Georg Gartner, *Austria* and Assoc. Prof. Dr. Slavejko Gospodinov, *Bulgaria*

2	Georg Gartner	From Mobile Internet Mapping towards Ubiquitous Cartography	AUSTRIA
3	H. Polat Dalkiran, I. Oztug Bildirici	Establishing Turkish National Geographical Database and Data Integration Problems	TURKEY
4	Jose Martínez-Llario, Eloina Coll	GIS Analysis Using Different Spatial Databases	SPAIN
5	Lucian Zavate	Delivering Data Using Map Servers	ROMANIA
6	Anna Sinitsina	Estimation of Economic Efficiency by Using of the Automated Control System Traffic (ACST), Constructed with Application of GIS –Technologies	RUSSIA
7	Evgenia Karadjova	Achievements in GIS in Bulgaria	BULGARIA

5:00 p.m. – 6:20 p.m. Plenary Session 2

Chairs: Dr. Eloina Coll, *Spain* and Assoc. Prof. Peter Penev, *Bulgaria*

8	Neli Dimitrova, Stefan Georgiev, Liliana Smilenova	Technology for Creating Maps of Sofia Municipality in ARCGIS	BULGARIA
9	Katya Mileva, Antonia Tzarnelova, Liliana Smilenova, Maksimiliana Emilova	Mapping Urban Territory in Scale 1:5 000	BULGARIA
10	Eloina Coll, Jose Martinez	SIGMUN: A GIS Project of Local Government	SPAIN
11	Vladimir Plsek, Karel Sukup	Aerial Imaging as a Data Source for 3D Geospatial Databases	CZECH REPUBLIC

8:00 p.m. Welcome Reception

Thursday, JANUARY 26, 2006

9:00 a.m. - 9:30 a.m. Keynote speech 2

12	Jerry Johnson	ESRI Developments in Cartographic Systems	ESRI EUROPE
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9:30 a.m. – 11:10 a.m. Plenary Session 3

CARTOGRAPHY AND GIS IN EDUCATION

Chairs: Dr. José Jesús Reyes, *Hungary* and Dr. Rufino Perez, *Spain*

13	José Jesús Reyes Nuñez	A GIS Site for Hungarian Pupils	HUNGARY
14	Pérez, Rufino	New Challenges in Teaching Cartography and GIS in Engineering Environment	SPAIN
15	Julian Stanchev	Approaches for Active Learning of Aviation	BULGARIA

16	Kira B. Shingareva, Tatyana Pletneva	Specialists in Geographical Information Systems Cartographic Mars GIS	RUSSIA
17	Daniela Angelova	Educational ICT with GIS for Geography Culture Development at Secondary School	BULGARIA

11:10 a.m. Coffee Break

11:40 a.m. – 1:20 p.m. Plenary Session 4

Chairs: Prof. Ewa Krzywicka –Blum, *Poland* and Ulrich Boes, *Bulgaria*

18	Jerry Johnson	Using GIS visualization for Education	ESRI EUROPE
19	Janis Balodis, Marina Tarasenko, Janis Strauhmanis	System of Cartographic and GIS Study Subjects at the Department of Geomatics Riga Technical University	LATVIA
20	Milan Konečný, Zbyšek Podhrázká, Zdeněk Stachoň, Kateřina Tajovska	Multimedia Textbook of Cartography and Geoinformatics	CZECH REPUBLIC

SDI: CULTURAL AND SOCIAL ASPECTS

21	Pascal Dubourg-Glatigny, Estelle Alma Maré	“Inter se nulli fines”: The Khoi in Seventeenth-century European Representations of the Land at the Cape of Good Hope	FRANCE / SOUTH AFRICA
22	Růžena Zimová	Historical Military Mappings of the Czech Lands – Cartographic Analysis	CZECH REPUBLIC

1:30 p.m. Meeting of Commission on Gender and Cartography, chair Prof. Ewa Krzywicka –Blum

5:30 p.m. – 7:30 p.m. Plenary Session 5

ECOLOGY

Chairs: Prof. Dr. Kira Shingareva, *Russia* and Dr. Karel Stanek, *Czech Republic*

23	Vladimír Brůna, Kateřina Křováková	Interpretation of Stabile Cadastre Maps for Landscape for Landscape Ecology Purposes	CZECH REPUBLIC
24	Ivan Tcholeev, Anton Popov, Anton Filipov, Stelian Dimitrov, Alexander Kotsev	Relief Visualization for the Needs of Geoecological Analysis in Southwest Bulgaria	BULGARIA

EARLY WARNING AND RISK MANAGEMENT

25	Aleksandra Podolskaya, Dmitry Yershov	Development of Geoinformation Technology of the Forest Enterprises and Air Divisions Borders Updating for the Forest Fire Monitoring System Tasks	RUSSIA
26	Petr Kubicek, Karel Stanek	Dynamic Geovisualization in Emergency Management	CZECH REPUBLIC
27	Serdar BİLGİ, Cengizhan İPBÜKER	Creating Basic Topographic-Spatial Object Model for ITU- ACDIS	TURKEY
28	Ivan Kunchev	The New Role of the Spatial Application Server to Manage and Distribute Information about Crisis	BULGARIA

FRIDAY, JANUARY 27, 2006

9:00 a.m. Keynote speech 3

29	Ulrich Boes	Digital South-East Europe – New Technology and New Challenges	BULGARIA
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9:30 a.m. – 11:50 a.m. Plenary Session 6

ELECTRONIC ATLASES

Chairs: Prof. Dr. Takashi Morita, *Japan* and Assoc. Prof. Dr. Janis Strauhmanis, *Latvia*

30	A.Rozentale, J.Strauhmanis	Project of the Electronic Atlas of Latvia	LATVIA
31	Hristo Assenov	Digital Atlas MaxInfo® Pro	BULGARIA
32	Joanna Bac-Bronowicz, Halina Klimczak, Ewa Krzywicka –Blum	The Interactive System of Regional and Global Population Maps of Under Represented Groups	POLAND

MAP DESIGN AND PRODUCTION

33	Nikolaos Karanikolas, Peri Lafazani, Myron Myridis, Dimitrios Ramnalis	Thessaloniki by Night: A Digital Cartographic Tour	GREECE
34	Takashi Morita	Historical Position of “Ubiquitous Mapping” in Cartographic Studies of the ICA	JAPAN
35	A. Ozgur Dogru, Necla Ulugtekin	CAR Navigation MAP Design in Terms of Multiple Representations	TURKEY
36	Nikolaos Karanikolas, Dimitris Sarafidis	Tourist Cartography on the Internet, A Proposal for the City of Thessaloniki	GREECE

11:50 a.m. Coffee Break

12:20 p.m. – 14:20 p.m. Plenary Session 7

CARTOGRAPHIC VISUALIZATION

Chairs: Dr. Tomaž Podobnikar, *Slovenia* and Prof. Dr. George Valev, *Bulgaria*

37	Aydin Ustun, I.Oztug Bildirici, H. Zahit Selvi, Alpav Abbak	An Evaluation of SRTM3 DTM Data: Validity, Problems and Solutions	TURKEY
38	Dariusz Dukaczewski	Entities – Cartotropic Method of Selection of Static and Dynamic Variables for Temporal Cartographic Animations	POLAND
39	Tomaž Podobnikar, Domen Smole, Klemen Zakšek	Enhancing the Usability of Digital Elevation Data	SLOVENIA
40	George Valev, Temenoujka Bandrova	Presenting the Globe with a Regular Polyhedron	BULGARIA
41	Kira.B.Shingareva, B.V.Krasnopevtseva	Updating and Upgrading of the Database on the Planetary Nomenclature	RUSSIA
42	Dušan Djordjević, Dimitris Ballas, Dimitris Dranidis	Spatial Microsimulations of the Balkans	GREECE

7:00 p.m. Gala Dinner

Visiting of attractive folk-style house in Bulgarian village (with tavern), dinner – no limit of meals and drinks

SATURDAY, JANUARY 28, 2006

9:00 a.m. Keynote speech 4

43	Katalin Tóth	INSPIRE – First Steps towards the Environmental Spatial Data Infrastructure in Europe	EC, Joint Research Centre, Ispra
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CARTOGRAPHIC VISUALIZATION

9:30 a.m. – 11:10 a.m. Plenary Session 8

Chairs: Assoc. Prof. Dr. Necla Ulugtekin, *Turkey* and Assoc. Prof. Dr. Veneta Kotseva, *Bulgaria*

44	Alexandra Stadler, Mirjanka Lechthaler	Cross-Media Publishing over the Scales	AUSTRIA
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45	Ekaterina Podolskaya	Russian Scientific Researches on Map and Space Generalization	RUSSIA
46	Veneta Kotseva	Analysis of Regions' Maps of States from European Union Included in Volume "Regions: Statistical Yearbook 2004" of EUROSTAT	BULGARIA

GPS TECHNOLOGIES

47	İbrahim Yılmaz, İbrahim Tiryakioğlu, Fatih Taktak, Murat Uysal	Using RTK GPS Method in Creation of Digital Terrain Models	TURKEY
48	Martinez José Carlos, Sanz Jorge Gaspar, Eloína Coll	Resolution of a Geostatistic Study Case with Free Software	SPAIN

11:10 a.m. Coffee Break

REMOTE SENSING TECHNOLOGIES

11:40 a.m. – 1:20 p.m. Plenary Session 9

Chairs: Assoc. Prof. Dr. Lena Halounova, *Czech Republic* and Dr. Tammy Kwan, *Hong Kong*

49	Danail Evtimov	GCP Specification in Map Updating Using High Resolution Satellite Imagery	BULGARIA
50	Lena Halounová, Veronika Tesařová	GIS and Aerial Photographs for Change Detection Around New Highways in the Czech Republic	CZECH REPUBLIC
51	Rumiana Vatsseva	Land Cover Mapping in the Southern Bulgarian Black Sea Coastal Zone Using Remote Sensing and GIS	BULGARIA
52	Elena Cherepanova	GIS Database Model as an Effective Tool for the remote monitoring managing	RUSSIA
53	Stoyan Nedkov, Mariyana Nikolova, Timo Kumpula	Land Cover Classification in Sinite Kamani Natural Park Using Satellite Images	BULGARIA

1:30 – 2:00 p.m. Closing ceremony

2:30 p.m. Visiting of Tzar Palace in Borovets

POSTERS

Wednesday, JANUARY 25, 2006

11:30 a.m. – 1:30 p.m. Plenary Session 1

1	Ivan Tcholeev Maria Vodenska	Spatial Analysis of the Tourism Potential in Bourgas District	BULGARIA
2	Maria Asenova, Ilko Dobricov	GIS Application in Multifunctionalization in Multifunctional Forest Management	BULGARIA
3	Gergana Antova	Rapid Precise Mapping with 3D Laser Scanning	BULGARIA
4	S.S. Durduran, A. Erdi, C.T.Okka	Historical and Cultural Resource Determining and Monitoring with GIS: the Example of Konya in Turkey	TURKEY
5	Susanne Bleisch, Marion Werner, Joël Fisler	Creative Commons Licensed e-Learning Materials for Cartography and GIS Education	SWITZERLAND

Thursday, JANUARY 26, 2006

9:30 a.m. – 11:30 a.m. Plenary Session 3

6	Penka Kastreva	Cartography and GIS for Geographers at South-West University	BULGARIA
7	Petar T. Penev	Structure and Realization of Electronic Atlases	BULGARIA
8	Lyubomir Filipov, Boris Davidkov	Development of Network Data Model for Urban Transportation System in GIS	BULGARIA

9	Silvia Kirilova, Nikolaj Najdenov	Environment for the City of Plovdiv, Bulgaria GIS Application for Risk Assessment in a Water Crisis Situation	BULGARIA
10	Ivan Kunchev	Emergency Response Solutions – What to Bear in Mind?	BULGARIA

FRIDAY, JANUARY 27, 2006

9:00 a.m. – 11:00 a.m. Plenary Session 6

11	Angel Lukanov	Mapping of Gully Network and its Dynamics in the Strajata Ridge	BULGARIA
12	Petar T. Penev	Internet GIS and Internet Mapping	BULGARIA
13	Boiko Kolev, D. Michalev, D. Zhivkov, N. Miteva	The Geographic Information System of Soil Resource Using for Sustainable Agriculture Realization	BULGARIA
14	Anastas Nikolov Madzharov	Applying Corrections from the Theoretical Model of the Geoid when Differential Mode of GPS is Used in Landing	BULGARIA
15	Stanislav Vasilev	Cartographical Symbolic	BULGARIA

FRIDAY, JANUARY 27, 2006

11:30 a.m. – 1:30 p.m. Plenary Session 7

16	Stanislav Vasilev	A New Theory of Signs in the Cartography	BULGARIA
17	Nikolaj Najdenov, Hristo Tomov	Automated Mapping of Dynamic Linear Segmented Data From Road Network	BULGARIA
18	Yuri Tsenkov	GPS Navigation Solutions	BULGARIA
19	Bernardo Lizama Rivas	Catchment Parameterisation for Runoff Models Utilising GIS Technologies	BULGARIA
20	Israel Adepoju Adeyinka	Cartography and African Society	NIGERIA
21	Anastas Nikolov Madzharov, Stefan Savov Biliderov	The Influence of the Free Air Anomaly over the Stability of the Vertical Channel in Strapdown Inertial Navigation System (SINS)	BULGARIA
22	Nur'deen Akinshola Shopeju	Cartography as Life	NIGERIA
23	J. P. Fernandes, N. Guiomar, A. P. Soares, E. Tcherkezova, N. Neves	GIS Geometries in LACOPE - Landscape Development, Biodiversity and Co-operative Livestock Systems in Europe	PORTUGAL/ GERMANY
24	T. G. C. VIEIRA; H. M. R. ALVES; V. C. O. SOUZA; M.A. Bertoldo	Assessing Changes, in Space and Time, of Coffee Lands of the State of Minas Gerais in Brazil	BRAZIL
25	Díaz Manso, José Marcial	Methodological Aspects of Land Cover Cartography in a Very Complex Landscape	SPAIN
26	H. M. R. Alves; T. G. C. Vieira; V. C. O. Souza; M. A. Bertoldo; H. Andrade	Geotechnologies for the Assessment of the Relationships between Coffee and Environment of Agroecosystems of the State of Minas Gerais in Brazil	BRAZIL
27	Zamorano Chico, C; Valdés, J.J; Pou Royo, A; Espiago González, J.	Uncertainty Analysis of the Urdaibai Biosphere Reserve Management Cartography, by Means of Relational Structures in 3D Virtual Reality Space	SPAIN
28	Alexander V. Kurpichev	The Concept of Information System On Results of the Soviet and Russian Space Programs	RUSSIA
29	Evgeniy Lazarev	Using the Venus Database for Planet Surface Morphometric Investigations	RUSSIA

Table Schedule

Time	Tuesday	Wednesday	Thursday	Friday	Saturday
9:00	Transportation: Sofia – Borovets; Registration	Registration	KS2	KS3	KS4
9:30		Opening ceremony	PS3 – oral PS3 –posters Exhibition	PS6 - oral PS6 –posters Exhibition	PS8 - oral Exhibition
10:00		KS1	Coffee Break	Coffee Break	Coffee Break
10:30		PS1 – oral PS1 –posters Exhibition	PS4 - oral Exhibition	Coffee Break	PS9 - oral Exhibition
11:00		CGC meeting	PS7 - oral PS7 –posters Exhibition	Closing Cer	
11:30				Visiting of Tzar Palace	
12:00		PS2- oral Exhibition	PS5 - oral Exhibition		
12:30					
13:00					
13:30					
14:00					
15:00					
16:00					
17:00					
17:30					
18:00					
18:30					
19:00				Gala Dinner	
19:30					
20:00		Welcome Reception			
20:30					
21:00					
22:00					
23:00					

KS - Keynote speech PS - Plenary Session

EXHIBITIONS:

1. Technical Exhibition
2. Cartographic Exhibition
3. Retrospective Exhibition Barbara Petchenik Children's World Map

Conference place

Rila is the highest mountain in Bulgaria and the Balkan Peninsula (Moussala peak - 2925 m).

Another name of this magnificent mountain is "The Water Mountain". There are the springs of three big Bulgarian rivers: Marica, Iskr and Mesta. Rila has more than 140 brilliantly blue lakes. With its forests, mountain peaks, lakes, valleys and rivers, Rila is an ideal place for hiking, mountain climbing and skiing.

Only 70 km from the Bulgarian capital Sofia there is a beautiful mountain ski resort – Borovets, situated at 1350 m above sea level on the northern slopes of the Rila Mountain.