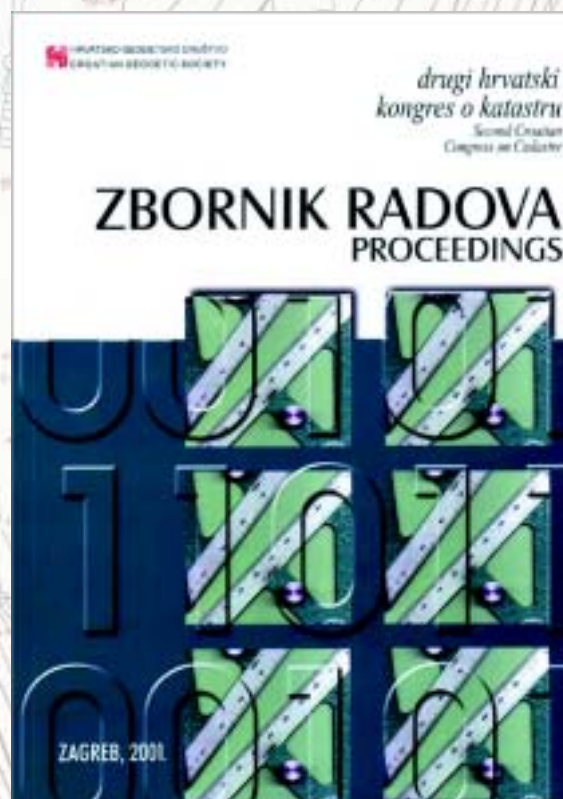


## *Second Croatian Congress on Cadastre*

**Zagreb, 24-24 October, 2001**

In Zagreb, in the hotel "Opera", the *Second Croatian Congress on Cadastre* was held from 24th till 26th of October 2001 under the sponsorship of the Government of the Republic of Croatia and organised by the Croatian Geodetic Society. Among more than 400 participants present at the opening of this geodetic gathering there were: Božo Kovačević, minister of the Environmental Protection and Spatial Management and the representative of the Government of the Republic of Croatia, Marijan Ramušćak, the representative of the Supreme Court of the Republic of Croatia, Milan Bandić, mayor of the City of Zagreb, Željko Bačić, director of the State Geodetic Administration, Jure Radić, president of the Croatian Engineering Association and member of Parliament, Tomislav Bašić, dean of the Faculty of Geodesy, Damir Delač, president of the Croatian Chamber of Architects and Civil Engineers, Ivica Mikičić, president of the Geodesy Engineers Class in the Chamber and representative of the World Bank.

In the period of four years, from the First Croatian Congress on Cadastre there has been a number of laws passed that indicated the need for a new gathering to be organised that would be dedicated to the same problems. Cadastre had fulfilled till the year 1990 the functions that were determined by the *Law of Geodetic Survey and Real Estate Cadastre*, and they served first of all for the purpose of cadastre income taxation. The function of the cadastre as the basis for land registry was neglected. The *Law of Ownership and other Real Rights*, *Law of Land Registry* and the *Law of State Survey and Real Estate Cadastre* make the function of cadastre far more greater significance in the protection of ownership. The process of privatisation connected with the process of the determining the ownership, as well as the changes of many laws have placed cadastre and land registry into the centre of economic, but also political events. Through various technological solutions cadastre has along with a part of official



cartography grown into the bearer of land information systems.

After the usual procedure of opening and welcoming speeches of the congress guests, the director of the State Geodetic Administration, Željko Bačić held an introductory report titled *Goals and Tasks of Cadastral and Geodetic System in the Republic of Croatia*.

After the welcoming cocktail, the work started organised according to topics. There were 44 papers presented with 77 authors and co-authors participating in the work on them, geodesists, lawyers, judges, information experts.

## *Drugi hrvatski kongres o katastru*

**Zagreb, 24-26. listopada 2001.**

U Zagrebu je u hotelu "Opera" od 24. do 26. listopada 2001. pod pokroviteljstvom Vlade Republike Hrvatske, a u organizaciji Hrvatskoga geodetskog društva, održan *Drugi hrvatski kongres o katastru*. Na otvaranju toga geodetskog skupa bilo je više od 400 sudionika, među kojima svakako treba spomenuti: Božu Kovačevića, ministra Ministarstva zaštite okoliša i prostornog uređenja i predstavnika Vlade Republike Hrvatske, Marijana Ramuščaka, predstavnika Vrhovnog suda Republike Hrvatske, Milana Bandića, gradonačelnika grada Zagreba, Željka Bačića, ravnatelja Državne geodetske uprave, Juru Radića, predsjednika Hrvatskoga inženjerskog saveza i saborskog zastupnika, Tomislava Bašića, dekana Geodetskog fakulteta, Damira Delača, predsjednika Hrvatske komore arhitekata i inženjera u graditeljstvu, Ivicu Mikičića, predsjednika Razreda inženjera geodezije u komori, te predstavnike svjetske banke.

U četverogodišnjem razdoblju, od Prvoga hrvatskoga kongresa o katastru, doneseno je niz zakona koji su iskazivali potrebu organiziranja novoga skupa, posvećenoga istoj problematici. Katastar je do 1990. godine ispunjavao funkcije određene *Zakonom o geodetskoj izmjeri i katastru nekretnina*, koje su ponajprije služile prikupljanju poreza na katastarski prihod, dok je funkcija katastra kao podloge za zemljišne knjige bila zanemarena. *Zakon o vlasništvu i drugim stvarnim pravima*, *Zakon o zemljišnim knjigama* te *Zakon o državnoj izmjeri i katastru nekretnina* funkciji katastra daju bitno veći značaj u zaštiti vlasništva. Proces privatizacije, povezan s procesom utvrđivanja vlasništva, kao i promjene mnogih zakona, smjestili su katastar i zemljišnu knjigu u središte gospodarskih ali i političkih zbivanja. Kroz različita tehnološka rješenja katastar je, zajedno s dijelom službene kartografske građe, nositelj zemljišnih informacijskih sustava.

Nakon uobičajene procedure otvaranja i pozdravnih riječi gostiju kongresa, ravnatelj Državne geodetske

uprave Željko Bačić održao je uvodno izlaganje s temom *Ciljevi i zadaci katastarsko-geodetskog sustava u Republici Hrvatsko*.

Nakon koktela dobrodošlice započeo je rad po određenim temama, u kojima su izložena 44 rada, u izradi kojih je sudjelovalo 77 autora, odnosno koautora geodeta, pravnika, sudaca, informatičara.

Kongres je omogućio da se na jednome mjestu nađu sudionici procesa preobrazbe evidencije nekretnina, kako iz znanstvenih i državnih institucija, tako i iz neposredne geodetske djelatnosti, te da argumentiranim, sadržajnim i raznolikim raspravama dadu svoj prinos boljitku geodetske struke i znanosti.

Zbornik radova otisnut je na 310 stranica prije početka kongresa, nosi oznaku ISBN 953-97081-2-5, naklada mu je 500 primjeraka. Sastoji se od predgovora i sadržaja te od 37 radova na hrvatskom jeziku s naslovom, sažetkom i ključnim riječima na engleskome. Urednici zbornika uložili su veliki trud da bi uspjeli u stručnom i tehničkom oblikovanju zbornika. To je iznimno značajno, jer nakon održanoga kongresa zbornik ostaje sačuvan kao njegovo ogledalo. Čitav je zbornik objavljen i na CD-u. Sudionicima su također podijeljeni materijali Državne geodetske uprave, vezani uz radove u sklopu teme A i teme B.

S kartografskoga gledišta, zanimljiv je veći broj radova, a kartografija je na kongresu bila zastupljena i dodatno, nizom kartografskih vizualizacija pri izlaganjima radova i s više od 30 različitih tematskih kartografskih prikaza u zborniku radova.

Dio sudionika kongresa bio je počašćen pozivom u palaču Dverce na prijam kod gradonačelnika grada Zagreba Milana Bandića. Za sve sudionike kongresa bila je organizirana svečana, zajednička večera. U Kristalnoj dvorani hotela "Opera" pjevalo se i plesalo u opuštenom i neformalnom raspoloženju do ranih jutarnjih sati.

**THEME 1****NEW TECHNOLOGIES AND THEIR IMPACT ON CADASTRE***Moderator Prof. Dr. Nedjeljko Frančula*

- M. Solarić: Development of Satellite Geodesy and its Application in Geodesy  
 D. Špoljarić: Application of GPS Devices in the Cadastral Office Slavonski Brod  
 D. Medak, B. Pribičević: Practical Usage of the Geoid in GPS-Processing  
 V. Cetl, M. Roić, H. Matijević: The Transformation of Co-ordinates in Cadastre  
 M. Husak: Digital Cadastral Map Maintaining Using Cadastral Geographic Information System  
 Z. Galić: Distribution of Geospatial Data Using Internet Technology – Project WebKIS-S

**THEME 2****SURVEY METHODS AND DATA PROCESSING***Moderator Assist. Prof. Dr. Damir Medak*

- S. Frangeš, R. Župan: Processing of Cadastral Data Needed in Tourist Cartography  
 I. Ivšić, I. Sukić-Majstorović: Digitised Cadastral Plans at the Territory of the County Vukovar-Srijem and their Maintenance in the Process of Running the Boundary Points Cadastre  
 P. Nikolić, Z. Modrinić: Protection, Reconstruction and Maintenance of Cadastral Plans with the Program “Katozor”  
 V. Strahonja: Production of Land Register Data Base and Target Architecture of Land Register and Cadastral Information Systems  
 I. Mihalec, N. Sokolović: Computation of Cadastral Plot Areas in Cadastral Survey Procedure  
 Lj. Ivšić-Susovski: Neighbour’s Rights – Regulation of Boundaries

**THEME 3****REGULATIONS, NORMS, STANDARDS AND TERMINOLOGY***Moderator Dr. Siniša Mastelić Ivić*

- B. Pribičević, I. Mikičić: Chamber and Licenced Engineers of Surveying  
 D. Kontrec: The EDP-Land Register and Forming of the United Land Database  
 S. Vukadinović, F. Ambroš: Flat Freehold – Connection between Cadastre and Land Registry  
 B. Fučkan Držić: Uniformity of Professional Terminology  
 V. Antonović: New Paradigm of Cadastral Plot  
 I. Lesko: Real Estate Cadastre in Bosnia and Herzegovina

**THEME 4****COMMUNAL INFORMATION SYSTEMS, HISTORY***Moderator Assist. Prof. Dr. Stanislav Frangeš*

- M. Roić, S. Mastelić Ivić, H. Matijević: Modern Utility Cadastres – “as Built”  
 Z. Kapović, I. Rukavina, M. Roić: Bridge Cadastre – Database  
 F. Ambroš: Historical and Development Review of Telephone Lines Cadastre  
 V. Slivac, F. Ambroš: Some Problems in Establishing Rights Protection of Supply Lines  
 B. Kanajet, D. Oštrek: Cadastral Service  
 D. Oštrek, B. Kanajet: On Barometer and Map Symbol  
 B. Kanajet: Time Keeping Box

**TEMA 1****UTJECAJ MODERNIH TEHNOLOGIJA NA RAZVOJ KATASTRA (NEW TECHNOLOGIES AND THEIR IMPACT ON CADASTRE)**

*Voditelj prof. dr. sc. Nedjeljko Frančula*

- M. Solarić: Razvojni put satelitske geodezije do njezine primjene u katastru  
D. Špoljarić: Primjena GPS-uređaja u katastru (Naša iskustva-postupci izmjere)  
D. Medak, B. Pribičević: Praktična upotreba plohe geoida pri obradi GPS-mjerenja  
V. Cetl, M. Roić, H. Matijević: Transformacija koordinata u katastru  
M. Husak: Održavanje digitalnog katastarskog plana u geografskom informacijskom sustavu katastra zemljišta  
Z. Galić: Distribuiranje geoprostornih podataka Internet tehnologijom – Projekt WebKISS

**TEMA 2****POSTUPCI IZMJERE I OBRADA PODATAKA (SURVEY METHODS AND DATA PROCESSING)**

*Voditelj doc. dr. sc. Damir Medak*

- S. Frangeš, R. Župan: Obrada katastarskih podataka za potrebe turističke kartografije  
I. Ivšić, I. Sukić-Majstorović: Digitalizirani katastarski planovi na području Vukovarsko-srijemske županije i njihovo održavanje kroz vođenje katastra koordinata međnih točaka  
P. Nikolić, Z. Modrić: Zaštita, obnova i održavanje katastarskih planova programom “KATOZOR” (Put do digitalnog plana)  
V. Strahonja: Izgradnja baze zemljišnih podataka i ciljna arhitektura informacijskih sustava zemljišne knjige i katastra nekretnina  
I. Mihalec, N. Sokolović: Računanje površina katastarskih čestica u postupku katastarske izmjere  
Lj. Ivšić-Susovski: Susjedska prava – uređenje međa

**TEMA 3****PROPISI, NORME, STANDARDI I TERMINOLOGIJA (REGULATIONS, NORMS, STANDARDS AND TERMINOLOGY)**

*Voditelj dr. sc. Siniša Mastelić Ivić*

- B. Pribičević, I. Mikičić: Komora i ovlaštene inženjeri geodezije  
D. Kontrec: EOP zemljišna knjiga i stvaranje jedinstvene baze zemljišnih podataka  
S. Vukadinović, F. Ambroš: Etažno vlasništvo – spona katastra i zemljišne knjige  
B. Fučkan Držić: Ujednačenost stručnih pojmova  
V. Antonović: Nova paradigma katastarske čestice  
I. Lesko: Katastar nekretnina u Bosni i Hercegovini

**TEMA 4****KOMUNALNI INFORMACIJSKI SUSTAV, POVIJEST (COMMUNAL INFORMATION SYSTEMS, HISTORY)**

*Voditelj doc. dr. sc. Stanislav Frangeš*

- M. Roić, S. Mastelić Ivić, H. Matijević: Moderni pogonski katastri - “As built”  
Z. Kapović, M. Roić, I. Rukavina: Katastar mostova  
F. Ambroš: Povijesni i razvojni osvrt na katastar telefonskih vodova  
V. Šlivac, F. Ambroš: Neki problemi uspostave imovinsko-pravne zaštite vodova  
B. Kanajet, D. Oštrek: Katastarska služba  
D. Oštrek, B. Kanajet: O barometru i kartografskom znaku  
B. Kanajet: Kutija za čuvanje vremena

**State Geodetic Administration: THEME A****DEVELOPMENT OF CADASTRAL AND GEODETIC SYSTEM IN THE REPUBLIC OF CROATIA***Moderator Marko Cigić*

D. Pahić: Real Estate Cadastre

M. Bosiljevac: New Geodetic Datum of the Republic of Croatia

I. Landek: Introduction of Official Map Projections of the Republic of Croatia

Z. Krpeljević: Licensing System for Performing State Survey and Real Estate Cadastre Jobs

M. Alilović: Performing State Survey and Real Estate Cadastre Jobs – Inspection

D. Pahić: Central Spatial Unit Register in GIS Environment

**State Geodetic Administration: THEME B****INTERNATIONAL TECHNICAL COOPERATION OF THE STATE GEODETIC ADMINISTRATION***Moderator Marinko Bosiljevac*

J. van Hemert, Z. Medić: Cadastre Pilot Project Babina Greda

B. Leonard, D. Pahić: Cadastre Pilot Project Labin

R. Baldvin, S. Zekušić: Geoinformation Systems – Integration Means in the European Union

J. Price: Cadastre and Land Register Modernisation Project

**THEME 5****BOUNDARIES, CADASTRE'S REFERENCE SYSTEM***Moderator Dr. Boško Pribičević*

R. Solarić: Epicontinental Belt Border between the Republic of Croatia and the Republic Italy

A. Tonšetić, Z. Štefan, B. Kanajet: Map of Zagreb Diocese

A. Sošić: Cadastre of Istria

M. Lapaine, D. Tutić: Cadastre and the Change of the Official Map Projection

A. Bilajbegović: Network Reference GPS Stations – Sign-Post to Croatia towards the Most Lucrative Centimetre Accuracy in Geodetic Works

A. Bilajbegović: Virtual Reference Stations and Centimetre Accuracy of Heights

**THEME 6****CADASTRE AND GIS***Moderator Prof. Dr. Miljenko Lapaine*

I. Remeta, R. Paj: Digital Orthophoto – Application Possibilities

D. Šiško, J. Veselić Bruvo, V. Cetl: Digital Spatial Plan – Part of Spatial Information System

D. Butorac, M. Baučić: Existing Croatian Base Map 1:5000 (HOK) as One of the Cartographic Sources for Spatial Databases

J. Unger, L. Domšić, I. Mićurin: Role of Cadastre in the Development of GIS, the Experience of Koprivnica and Đurđevac

T. Duplančić Leder: GIS Serving to the Sailing Safety

**Državna geodetska uprava: TEMA A****RAZVOJ KATASTARSKO-GEODETSKOG SUSTAVA U REPUBLICI HRVATSKOJ****KATASTAR NEKRETNINA**

*Voditelj Marko Cigić, dipl. ing.*

D. Pahić: Katastar nekretnina

M. Bosiljevac: Novi geodetski datum Republike Hrvatske

I. Landek: Uvođenje službenih kartografskih projekcija Republike Hrvatske

Z. Krpeljević: Sustav ovlaštenja za obavljanje poslova državne izmjere i katastra nekretnina

M. Alilović: Obavljanje poslova državne izmjere i katastra nekretnina - inspekcija

D. Pahić: Središnji registar prostornih jedinica u GIS okruženju

**Državna geodetska uprava: TEMA B****MEĐUNARODNA TEHNIČKA SURADNJA DRŽAVNE GEODETSKE UPRAVE**

*Voditelj Marinko Bosiljevac, dipl. ing.*

J. van Hemert, Z. Medić: Katastarski pilot projekt Babina Greda

B. Leonard, D. Pahić: Katastarski pilot projekt Labin

R. Baldivin, S. Zekušić: Geoinformacijski sustavi – sredstvo integracije u Europskoj uniji

J. Price: Projekt modernizacije katastra i zemljišnih knjiga

**TEMA 5****GRANICE, REFERENTNI SUSTAV KATASTRA (BOUNDARES, CADASTRE'S REFERENCE SYSTEM)**

*Voditelj dr. sc. Boško Pribičević*

R. Solarić: Granica epikontinentalnog pojasa između Republike Hrvatske i Republike Italije

A. Tonšetić, Z. Štefan, B. Kanajet: Karta zagrebačke nadbiskupije

A. Sošić: Katastar Istre

M. Lapaine, D. Tutić: Katastar i promjena službene kartografske projekcije

A. Bilajbegović: Umrežene referentne GPS postaje – putokaz Hrvatskoj prema najrentabilnijoj centimetarskoj točnosti u geodetskim radovima

A. Bilajbegović: Virtuelne referentne postaje i centimetarska točnost visina

**TEMA 6****KATASTAR I GIS (CADASTRE AND GIS)**

*Voditelj prof. dr. sc. Miljenko Lapaine*

I. Remeta, R. Paj: Digitalni ortofoto – mogućnost primjene

D. Šiško, J. Veselić Bruvo, V. Cetl: Digitalni prostorni plan – dio prostornog informacijskog sustava

D. Butorac, M. Baučić: Postojeća Hrvatska osnovna karta 1:5000 (HOK) kao jedan od kartografskih izvornika za prostorne baze podataka

J. Unger, L. Domšić, I. Mićurin: Uloga katastra u razvoju GIS-a, iskustvo Koprivnice i Đurđevca

T. Duplančić Leder: GIS u službi sigurnosti plovidbe

*Zdravko Kapović, Stanislav Frangeš*

The Congress has made it possible for the participants in the process of real estate transformation to meet at one place coming from scientific and state institutions, as well as from direct geodetic activity, and to give their contribution to the welfare of geodetic profession and science through well-reasoned, comprehensive and diverse discussions.

The Proceedings were printed on 310 pages before the beginning of the Congress (ISBN 953-97081-2-5), with the edition of 500 copies. It consists of foreword and the contents of 37 papers in Croatian with the title, abstract and key words in English. The editors have invested a great effort and have succeeded in obtaining good results in professional and technical preparation of the Proceedings. It is exceptionally important because after the Congress the Proceedings remain as its reflection. The participants were also given the material

by the State Geodetic Administration connected with the papers within the frame of the themes A and B.

From the cartographic point of view it is interesting to point out that there was a greater number of papers in this respect, and cartography was represented at the Congress additionally as well by a number of map visualisations during the presentation of papers and in more than 30 various thematic cartographic presentations in the Proceedings.

A part of the Congress participants was also honoured by the invitation to the reception organised by the mayor of the City of Zagreb, Milan Bandić. For all Congress participants a festive dinner was organised. In the Crystal Hall of the hotel "Opera" dancing and singing continued till the early morning hours in a relaxed and informal mood.

*Zdravko Kapović, Stanislav Frangeš*

## *17th Electoral Meeting of the Remote Sensing and Photointerpretation Scientific Council in the Croatian Academy of Sciences and Arts*

In the palace of the Croatian Academy of Sciences and Arts (HAZU) the 17th electoral meeting of Remote Sensing and Photointerpretation Scientific Council in HAZU was held on 11 December 2001. The chair of the meeting was Prof. Dr. Matko Bogunović, the president of the Council. The meeting started with commemorating the academician Petar Krešimir Čolić, former president of the Council, with a minute of silence. The last meeting of the Council was held more than two years ago, due to the illness and then the death of the academician Čolić. The Council was addressed by the representatives of HAZU, the academicians Kaštelan and Meštorv. In their speeches they supported and praised the work of the Council, pointing out especially the publishing of the monograph by Prof. Dr. Marinko Oluić *Photographing and Researching the Earth from Space*, the first work of that extent in Croatia, and of the new issue of Bulletin.

The meeting was continued by the lecture *Application of Remote Sensing in Humanitarian Demining* held by Prof. Dr. Milan Bajić and Prof. Dr. Hrvoje Gold. The lecturers informed the participants with the fact that 500 km<sup>2</sup> of Croatian territory is still mined, and even 4000 km<sup>2</sup> is regarded as suspicious area. They explained briefly the structure of the objects covered with mines,

the organisation of counter-mine activity in Croatia, the dynamics of demining and the number of mine victims. HAZU has formed a group of experts that should give a scientific contribution to the demining problem. In the lectures there were also two projects described lasting for almost 3 years: "Aircraft Minefield Area Reduction (ARC)" and "Space and Airborne Mined Area Reduction Tools (SMART)". In both projects data gathering is completely digital, and modern digital cameras have been used for observing. In the project SMART, apart from observing the reflected energy from the Earth's surface, there are also radar observation used penetrating even below the surface. The lecture was completed with the conclusion that the analysis of the obtained data will result in making a judgement about the applicability of such demining research and that we finally have resources to be used for researching in other domains due to these projects and the collaboration with the institutions from other countries. The question was then raised whether a mine can be discovered in such a way followed by the reply that it cannot, but it was only an attempt expected to bring the solution of the problem.